Defence Capability
Development Handbook
2012

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Feedback on the Defence Capability Development Handbook is welcome. Readers are invited to make comment, including proposals for amendment to the content of the handbook. Comments are to be directed to:

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Foreword

The *Defence Capability Development Handbook* (DCDH) 2012 is a guide to the Capability Development body of knowledge and processes for Defence. It builds on the foundation laid by the *Defence Capability Development Manual* (DCDM) 2006 and takes into account the capability development initiatives of the Strategic Reform Program (SRP), Government's response to the 2008 *Defence Procurement and Sustainment Review* and the ongoing Capability Development Improvement Program (CDIP).

The Australian Government is responsible for making decisions on how billions of dollars of taxpayers' money is spent in acquiring the capabilities needed to defend Australia and its interests now and in the future. To aid Government in making these decisions, it is critical that Defence provides robust, considered and timely advice through a transparent and accountable process. This decision-making process must support the strategic imperative to deliver capability on time and on budget, as delays in the Capability Development process invariably incur strategic, financial and workload costs that are detrimental to Defence's ability to meet its objectives.

To meet this imperative the DCDH is regularly updated to capture evolutionary changes to the Capability Development process which results in better guidance to Capability Development practitioners and improved definition of the Capability Development process. The main focus of the guidance is to provide information, through a robust yet flexible process so that Capability Development Group staff can make informed and timely decisions. Projects evolve throughout the Capability Development process and as information matures and a refined number of options are considered in more detail. The Capability Development process also ensures that a consistent chain of accountability and decision making is evident.

The Capability Development process is undergoing a period of change through various initiatives and reviews within the CDIP. The DCDH 2012 reflects and incorporates the major changes that have occurred to date. As part of this change, the DCDH is also being transferred into Defence's formal administrative policy framework and will be re-released in 2013 as the *Defence Capability Development Manual (DCDM)*. The DCDH 2012 does not, therefore, contain the full spectrum of changes that will be forthcoming in the DCDM.

To support the continuous improvement of Capability Development processes, I encourage you to provide comment and feedback on this Handbook and thank those who have contributed to its development to date.

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Preface

Overview

The Defence Capability Development Handbook (DCDH) provides Defence personnel and relevant stakeholders with an understanding of Capability Development within the Capability Systems Life Cycle (CSLC). It describes the processes that support Government approval of new capability proposals, and explains the considerations for developing the documentation required to obtain and implement Government's decisions and achieve project deliveries.

Scope

Capability Development is primarily conducted through the Major Capital Acquisition Program ('Majors') and the Minor Capital Acquisition Program ('Minors'). The DCDH describes the core processes for the capability development of the Majors program within Capability Development Group (CDG), with references to additional guidance provided throughout the handbook. The DCDH does not describe the Minors program, the Whole- of-Government ICT Two Pass Review Process for Information Communication Technology projects, or the Major Capital Facilities Program; or other 'non-Major' Acquisition programs within Defence.

Strategic Reform

Underpinning this handbook is the need for CDG to maintain a focus on increasing the efficiency and effectiveness of Defence through ongoing strategic reform. This means continuing to: improve the links between strategic guidance and capability; improve long-term cost forecasts for capability; increase rigour in requirements setting; improve management of Defence Capability Plan (DCP) funding; and reduce the cost of major equipment procurements.

Needs Phase

To understand the Needs Phase, the DCDH should be read in conjunction with *The Strategy Framework* to provide an end-to-end picture of the capability needs and requirements development process.

Acquisition Phase

To understand the Acquisition Phase, the DCDH should be read in conjunction with the Defence Materiel Organisation's Acquisition and Sustainment Manual which details the Defence Materiel Organisation's role in the acquisition and sustainment of capability.

Tailoring the Handbook

The processes outlined in this handbook are presented to enable Capability Development across a spectrum of capabilities and technologies and should be tailored for specific projects (in consultation with, and the approval of, relevant stakeholders and committees). Defence has a wide range of complex projects, and the Capability Development process is not a 'one size fits all' approach. The reader therefore needs to consider the context of individual projects when applying the Capability Development process.

CDG staff should note that while tailoring the process is encouraged, it might be seen as an attempt to circumvent the rigour required by Government for Major projects (and incur increased scrutiny or delays) if undertaken without the understanding, approval or agreement of all stakeholders.

CDG staff are encouraged to use initiative when undertaking the Capability Development process - noting that this initiative must be balanced with the discipline needed for a rigorous development process. Decisions require that documents containing quality information be developed and agreed by all key stakeholders. However, producing documents is not the outcome sought by the DCDH - producing decision-quality advice at the right time to achieve Government approval is! In developing the relevant documents, Project Managers should strive for accuracy, brevity, clarity and timeliness of delivery.

Methodology

The primary role of the DCDH is to provide guidance on Capability Development activities, rather than guidance on 'how to' manage a project. However, to improve the conduct of CDG's core business, this handbook and the forthcoming Defence Capability Development Manual (DCDM) will incorporate best practice project management methodologies to complement the Capability Development processes.

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Introduction to Capability Development

Section 1-1 - The Concept of Capability

What is Capability?

1.1.1.   Military capability is crucial to the defence of Australia against direct armed attack and to protect our national interests. Maritime, land, air and information capabilities provide Australia with the capacity to meet our strategic interests through the ability to act independently, lead military coalitions and make tailored military contributions. It is important that Australia maintains a regional strategic military capability advantage in order to deter conflict, allow us to prevail in conflict if deterrence fails, and to minimise our casualties and materiel losses.

1.1.2.   In the Defence context, capability is the capacity or ability to achieve an operational effect. An operational effect may be defined or described in terms of the nature of the effect and of how, when, where and for how long it is produced

The Fundamental Inputs to Capability

1.1.3.   Achieving a capability requires more than purchasing equipment. A capability is provided by one or more systems, and is made up of the combined effect of multiple inputs. The inputs are known as the Fundamental Inputs to Capability (FIC) and are described in Australian Defence Doctrine Publication 00.2 *Preparedness and Mobilisation*. Understanding FIC enables Defence to better understand and manage the whole-of-life workforce and funding implications of a new capability.

1.1.4.   Capability is therefore viewed as the effects provided by a 'system' of interlocking and interdependent FIC, comprised of the following:

a.   **Personnel**. Personnel inputs to capability include consideration of recruiting, conducting individual training, and developing and retaining the necessary people with appropriate core skills to meet Defence needs. Personnel includes all people within Defence, both military (permanent and Reserves) and civilian. In developing capability proposals, projects must clearly define what workforce (from Defence and industry[1]) will be required when, and with what competencies and skill sets.

b.   **Organisation.** Organisation is the appropriate personnel establishment, balance of competencies and structure to accomplish Defence tasks and to ensure appropriate command and control. This provides the underpinning structure for Defence.

c.   **Collective training.** Collective training applies across combined, joint, single-service and unit levels. To optimise performance, organisational elements must undertake a comprehensive and ongoing collective training regime validated against the preparedness requirements for operations, derived from Government guidance.

d.   **Major systems.** Major systems include significant platforms, fleets of equipment and operating systems designed to enhance Defence's ability to engage military power. Major systems are core components of capability, and often comprise systems of principal items in their own right, or equipment which regularly requires more detailed reporting and management.

e.   **Supplies.** Supplies must be available for units and force elements to conduct the necessary training activities and ongoing administrative tasks required for an

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[1] Noting that industry is an element of the Support FIC, not Personnel, but is mentioned here for completeness.

operational level of capability. Stocks must be able to be supplied within readiness notice to achieve the operational viability period and ongoing sustainment of tasks required by the operational preparedness requirement. This may necessitate the holding of reserve stocks where provisioning lead times are beyond the readiness notice.

f.   **Facilities and training areas.** Facilities include buildings, structures, property, plant, equipment, training areas, civil engineering works, base support areas and associated through-life maintenance and utilities necessary to support capabilities, both at the home base and at deployed locations. Training areas include any area of land, sea, undersea or air that may be designated for military manoeuvres or simulated wartime operations involving planning, preparation and execution, carried out for the purpose of training and evaluation. Training areas may contain a variety of ranges within their boundaries. Ranges include all air, land and/or sea areas used for Defence live-firing weapons practices, tests or operations. Training areas also contain facilities and infrastructure that support training.

g.   **Support.** Support includes infrastructure and services that are integral to the maintenance of Defence effort in Australia and worldwide to support deployed Defence capability. It includes, but is not limited to, training/proficiency support; supply support, movement and transport; infrastructure support; garrison and other shared services support; housing, relocations and family support; health support; research and development; communications and information technology support; and administrative services. Agencies that could provide support include:

(1)   other Defence outputs (eg Navy, Army, Air Force, Intelligence);

(2)   Defence output enablers (eg Defence Support and Reform Group (DSRG), Chief Information Officer Group (CIOG), etc);

(3)   owner support agencies;

(4)   civil/private industry/contractors;

(5)   other Government agencies (eg AusAID and Emergency Management Australia); and

(6)   international support base agencies.

h.   **Command and management.** Command and management includes the responsibilities, defined command and control mechanisms, doctrine, security, processes and procedures to enhance the military effectiveness of Defence. Command and management underpins Defence's operating and management environments through enhanced command and decision-making processes, procedures and management reporting avenues. Command and management processes at all levels are required to plan, apply, measure, monitor and evaluate the functions an agency performs, with due cognisance of risk assessment and subsequent risk management.

1.1.5.   **Providing Fundamental Inputs to Capability.** A full assessment of the contribution required by each FIC element to ensure the delivery of a fully developed capability cannot be the responsibility of a single Service or Group. Each Service and Group therefore has a role to play in the provision and management of FIC. These responsibilities are defined in the Joint Project Directive (Joint PD), which is issued by the Secretary, Department of Defence (SEC) and the Chief of the Defence Force (CDF) following First and Second Pass Approval for each project in order to provide clear lines of accountability. Ultimately, the Capability Manager (CM) (refer to paragraphs 1.6.14 – 1.6.19 below) or Joint Capability Authority (JCA) (refer to paragraphs 1.6.19 – 1.6.22 below) is responsible for ensuring an integrated view of the delivery of capability across the Department of Defence and the Defence Materiel Organisation (DMO).

1.1.6.   The key considerations for each FIC element are discussed further in the Additional Guidance on Fundamental Inputs to Capability..

Section 1-2 - The Capability Systems Life Cycle

1.2.1.　　　The Capability Systems Life Cycle (CSLC) (figure 1-1) is used to visualise the life of capability systems from the identification of a need (ie an existing or arising capability gap) to the acquisition of a physical capability system which is operated and supported until disposal. Colloquially, this life cycle is known as 'cradle to grave' approach. The CSLC is the basis for Defence's strategy-led Capability Development process, beginning with the development of a simple statement of user need that is developed into a capability solution for acquisition, introduction into service, operation and sustainment. The life cycle is completed with disposal of the Capability System.

Figure 1-1: The Capability Systems Life Cycle

1.2.2.　　　The Defence CSLC is therefore divided into the following phases (which typically have some degree of overlap):

a.　　　**Needs**. User needs are developed to address identified capability gaps. These gaps are derived from consideration of strategic guidance, threat assessments, current and future operational concepts, future technology, current and emerging force structure and current or potential threats. Government endorses the need to address the identified gaps by approving the inclusion of a capability project, with an indicative budget provision, in the Defence Capability Plan (DCP). Chapter Two provides more information on the DCP.

b.　　　**Requirements**. DCP projects are progressively transformed from an initial, broad consideration of possible capability options to address an identified need into well-defined and costed solutions through a two-pass approval process. Net whole-of-life workforce numbers and budgetary provisions to acquire, operate and sustain the capability solution are also developed, as are considerations of all FIC elements. Chapters Three and Four provide more information on the First Pass and Second Pass milestones respectively.

c.　　　**Acquisition**. The Government approved capability solution is acquired or established by the DMO, or other acquisition agency, and entered into operational service by the CM/JCA. Chapter Five provides more information on CDG's role in the Acquisition Phase.

d.　　　**In-Service**. The CM/JCA operate, support and manage the capability solution, and make any changes to individual FIC elements that are required to operate and sustain the capability. The In-Service Phase is covered in various Service and support Group documents. Requirements for the In-Service Phase are described in the Support Concept (Requirements Phase) and later in the Integrated Logistics Support Plan (Acquisition Phase).

e.　　　**Disposal**. Major systems, and other materiel elements of the capability system, are withdrawn from service (which is usually a process rather than an event) and are disposed of or redeployed, depending on the nature of the individual capability. The Disposal Phase is also covered in various Service documents, and disposal requirements are described in the Support Concept and the Integrated Logistics Support Plan.

Section 1-3 - Capability Development

1.3.1　　　　Capability Development describes those activities involved in defining requirements for future capability, principally during the Requirements Phase of the CSLC (figure 1-2).

Key Tenets of Capability Development

1.3.2　　　　The aim of Capability Development is to develop and maintain the most **operationally effective** and **cost-efficient** mix of capabilities required to achieve Government's strategic objectives. To achieve this outcome within the required timeframes, the Capability Development process must balance the requirements of being rigorous and robust, yet simple and manageable.

1.3.3　　　　The following key tenets provide the basis of Defence's approach to Capability Development, and must be addressed by all proposals submitted to Government for an investment decision on behalf of the Australian people:

a.　　　　**Discipline.** A disciplined approach that reflects the intent and robustness of the entire process.

b.　　　　**Choice.** Government must be provided with genuine, discernible and affordable capability options from which to make an investment decision.

c.　　　　**Time.** Proposals must be put to Government in sufficient time to permit a considered decision to be made without a gap in the Australian Defence Forces capability.

d.　　　　**Joint and Whole-of-Government.** Every proposal provided to Government must consider its relationships to, and impact on, the broader force structure and, where appropriate, Whole-of-Government requirements.

e.　　　　**Collaboration and transparency.** Proposals are developed collaboratively across Defence, and where appropriate, other Government agencies. This is achieved through an understood and agreed path that engages the appropriate stakeholders at the right time and highlights risks and issues concerning capability proposals at the earliest opportunity. This approach ensures that all elements of the investment decision are considered and are visible to Government.

f.　　　　**Executable and sustainable.** The capability options put to Government must be able to deliver the agreed capability baseline, within scope, schedule, budget and workforce allocations, and be able to be sustained within Defence's resource boundaries.

g.　　　　**Security and diversity of supply.** Capability options must consider the sources of supply and support for the capability in credible contingencies.

h.　　　　**Risk managed.** Every proposal must ensure that Government is aware of the risk it accepts in making an investment decision. Risks must be actively identified, analysed, evaluated, treated and monitored to ensure that Government has a defensible and sound evidence base to support decision making and the allocation of resources.

i.　　　　**Value for money.** Value for money is the core principle underpinning Australian Government procurement, and requires a comparative analysis of all relevant costs and benefits of each proposal throughout the CSLC (ie whole-of-life costing).

j.　　　　**Documented decisions.** A documented decision trail must be developed and maintained so that future decision makers understand the decision, trade-offs and agreements made to achieve the desired outcomes. It is also a critical element of accountability.

Chapter 1 – Introduction to Capability Development

1.3.4   Supporting these capability tenets is CDG's focus on supporting ongoing strategic reform across all areas of Defence in a time where 'cost-conscious' decisions are expected by Government.

Section 1-4 – Managing the Portfolio – The Defence Capability Plan

1.4.1.　　The Defence Capability Plan (DCP) is the Unapproved Major Capital Investment Program (UMCIP). It is managed as a portfolio of projects. Figure 1-2 describes the program and sub-program segmentation.

1.4.2.　　This program management approach is reflected in the organisations structure within Capability Systems Division of Capability Development Group (CDG). In particular, the older model of allocating a single Desk Officer to a project has transitioned to a model where Project Managers are part of a team, which, when required, includes contracted cost estimation and/or scheduling expertise delivering a sub-program of projects. This approach better enables the management of projects in the context of programs and the portfolio, ensures appropriate expertise and leadership is focussed, and enables a better utilisation of resources.

Programs	Sub-Programs
Aerospace	• Aerospace Battlespace Management
	• Aerospace Training
	• Air Combat
	• Air Mobility
	• Aircraft Survivability
	• Integrated Aerospace Systems
	• Rotary Wing
	• Surveillance, Reconnaissance and Response
Integrated Capability	• Force Level Electronic Warfare
	• Intelligence and Geospatial
	• Network Application
	• Network Infrastructure
Maritime	• Amphibious and Maritime Support
	• Intelligence and Geospatial
	• Littoral Warfare
	• Submarine Systems
	• Surface Combatant
	• Surface Combatant Systems
Land	• Joint Support
	• Land C3
	• Land Combat
	• Land Support
Combined Arms Fighting Systems	• Land Combat Vehicle System
Future Submarines	• Future Submarine

Table 1-2: Program Management

Section 1-5 - The Capability Development Process in Outline

The Needs Phase - Entry to the Defence Capability Plan

1.5.1.   The purpose of strategic assessment and Capability Development activities in the Needs Phase is to minimise strategic risk while exploiting strategic opportunities consistent with Government's priorities.

1.5.2.   The Needs Phase considers strategic guidance, articulates appropriate capability goals, develops programs and plans that show how the organisation will be transformed in the future and assesses the performance of the planned force against future threats. The planned force is developed, in part, through a mix of individual projects that are entered into the DCP. For each individual project, the Needs Phase will shape a definitive user need, which will be developed by the CM or the JCA. The definitive user need serves as the basis for defining the project's capability requirements. The definitive user need is expressed through the Capability Needs Statement for a DCP project.

1.5.3.   In considering the information to be provided on entry to the DCP, the Chief CDG (CCDG), drawing on the outcomes of the Force Structure Review (FSR) and Defence Planning Guidance (DPG), will coordinate the development of capability, cost, schedule, workforce and risk information that is as accurate as possible for presentation to Government.

1.5.4.   The DCP is prepared by CDG, in consultation with other Defence Services and Groups, and approved by the National Security Committee of Cabinet (NSC). The Defence Capability Investment Committee (DCIC) will endorse the capability proposals and recommend any changes to the DCP before it is provided to Government for approval. Defence capability committees may endorse proposed changes to the DCP, but they are not given effect until they are approved by the Government.

1.5.5.   The Needs Phase is covered in detail in Chapter Two.

1.5.6.   **Classification of a Project that Modifies an Existing Platform.** Projects may be established to modify existing platforms or capabilities as a result of one (or more) of the following factors:

a.   external regulatory requirements;

b.   internal technical requirements;

c.   integration (including interoperability) requirements; and

d.   capability enhancements or deficiency remediation.

1.5.7.   Classifying a DCP project in accordance with the above factors will assist in the future management of the project.

The Requirements Phase – Requirements Development and Achieving Government Approval

1.5.8.   The Requirements Phase takes DCP projects and refines them to the stage where a new capability can be acquired. This is achieved through a two pass decision process where the key milestones are First Pass approval and Second Pass approval. The Chief Capability Development Group (CCDG) is responsible for the Requirements Phase.

1.5.9.   **Objective of the two pass process**. The primary objective of the two pass process is to give Government sufficient visibility of, and control over, the Capability Development process with enough information, and in adequate time, so it can make an informed and deliberate decision on each project.

1.5.10. **Capability requirements**. Requirements are used to define what the proposed capability solution is required to do. The engineering standard EIA-632 Processes for Engineering a System, defines a requirement as:

> *"… something that governs what, how well and under what conditions a product will achieve a given purpose."*

1.5.11. Developing relevant and detailed requirements is one of the more challenging aspects of Capability Development. If not done well, it is likely to result in a wrong or unsuitable capability being acquired. The Requirements Phase therefore includes the creation of Capability Definition Documents to support progression through Defence committees to Government approval.

1.5.12. **Capability Definition Documents (CDD)**. To provide a basis for the development of the capability proposal for Government, Capability Systems Division Project Managers (CS Div PMs) - those who are responsible for managing individual projects) develop, incorporate and summarise the required capability via the CDD, which comprise:

a. an Operational Concept Document (OCD);

b. a Function and Performance Specification (FPS); and

c. a Test Concept Document (TCD) or Early Test Plan (ETP)[2].

1.5.13. The CDD are a subset of the CDG Project Document Suite (PDS). The PDS is document suite developed by a project and inform the development of a business case for each option. More detail on the PDS at First Pass and Second Pass, including CDD requirements, is provided in Chapters Three and Four.

1.5.14. **Capability proposals**. The capability proposal and its supporting documentation, defines the requirements for each FIC element of the capability system and *inter alia,* identifies the cost, workforce requirements and risks or issues for each option. It is important to note that while CDG has overall responsibility for the capability proposal, some documents are developed by the relevant CM/JCA and enabling Groups.

1.5.15. **Defence committees.** High level internal Defence committees review and endorse the options to be considered by Government at First or Second Pass. This review provides a corporate view (ie 'Whole of Defence') on capability proposals before they are submitted to Government for approval. The outcome of these committees is a 'Whole-of-Defence' recommended proposal for Government approval at First and Second Pass.

1.5.16. The committees, and their roles, are:

a. **Project Initiation and Review Board (PIRB).** The Chair is CCDG. The PIRB formally begins the Requirement Phase of a DCP project. Among other things, it provides confirmation of the strategic need and project scopes that were identified in the Needs Phase, and confirms and commits the resources required from CDG, the CM/JCA and the Acquisition Agency to achieve Government Approval.

b. **Capability Gate Review Board (CGRB).** The Chair is Head Capability Systems. The CGRB reviews the PDS and endorses the capability proposal the basis for developing the Ministerial or Cabinet Submission (MINSUB or CABSUB) to be provided for Government consideration and approval. CGRB is generally the last opportunity for significant risks and issues to be raised by, and discussed with, senior stakeholders (and only when resolution and treatment at lower levels has not been possible).

c. **Defence Capability Committee (DCC).** The Chair is CCDG. The DCC reviews the draft MINSUB or CABSUB to assure that the proposal recommends capability options that are consistent with strategic guidance and Government direction. In addition, the DCC assures that projects are viable, cost effective,

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[2] A TCD is produced to support First Pass, whereas an ETP is developed to support Second Pass. The ETP is more closely aligned with the Test and Evaluation Master Plan which is used to manage T&E during the acquisition phase.

and within scope, budget and risk tolerances. Submissions endorsed by DCC are submitted to Service Chiefs and Group Heads, and then to SEC and CDF, for clearance before submission to Government.

d.   **Defence Capability and Investment Committee (DCIC**)**.** The Chair is the Secretary of the Department of Defence. The DCIC reviews the overall DCP and major capability and investment risks and issues to ensure that resourcing, including capital investment and operating costs, is consistent with Defence's strategic priorities and resourcing strategies. The DCIC requires that all MINSUBs and CABSUBs be reviewed by the DCC. In addition, the DCIC may review projects of significant strategic imperative, very high cost or high political sensitivity, or those with risks and issues that cannot be resolved by the DCC.

1.5.17.   **Government consideration.** The focus and purpose of Government considerations at First and Second Pass are:

a.   **First Pass consideration** - Government considers the capability options to be further developed, the engagement of industry in that development, and the resources (workforce and financial) required for Defence to undertake detailed analysis of the agreed capability options. At First Pass, approval is provided to expend funds between First and Second Pass to conduct further development of a reduced options set. The estimates for this funding are expected to be of high quality, providing assurance that the activities can be conducted within the approved First to Second Pass budget. The activities between First and Second Pass may include approaches to Industry to obtain tender quality cost estimates for the acquisition and support of the capability, to support Government's consideration of Second Pass.

b.   **Second Pass consideration** - Government considers funding the acquisition of the recommended capability option which has a well-defined budget, schedule and risk profile, and the future provision for through-life support costs, including the workforce allocation. The outcome is approval to acquire a specific capability system (or systems), including any changes to associated FIC elements, within the parameters (eg cost, schedule, scope) agreed by Government. Some projects may also require a number of Second Pass considerations to incrementally approve acquisitions, but this should be avoided if possible.

1.5.18.   These approval milestones can at times, and only with Government agreement, be combined into a single decision pass. Some DCP projects may also require additional Government consideration/s (called an 'Intermediate Pass') depending on the strategic importance, political sensitivity or complexity of the project.

The Acquisition Phase – Acquiring the Required Capability

1.5.19.   The CM/JCA has prime responsibility during this phase for ensuring that the project as a whole is brought together through the coordination of the FIC.

1.5.20.   The Acquisition Agency - normally the DMO, but possibly, Intelligence and Security (I&S) for projects in the I&S domain, the CIOG for Information and Communications Technology (ICT) or Defence Support and Reform Group (DSRG) for facilities and training areas – is responsible for acquisition of the major systems or facilities and training areas and FIC elements (as appropriate).

1.5.21.   **CDG's Role** For legacy projects without a Joint Project Directive (Joint PD), CDG's role during the Acquisition Phase is to assist the CM/JCA to ensure that the capability is brought into service as agreed by Government at Second Pass. For projects with a Joint PD the role of CDG is to identify any project interdependencies and any other responsibility laid down in the specific Joint PD. CDG remains involved during the Acquisition Phase to ensure that the capability system is accepted through the Test & Evaluation process as directed in the Joint PD.

The In-Service Phase – Managing the Acquired Capability

1.5.22.   Once acquired, the key challenge for the CM/JCA is to ensure that the system meets the identified capability deficiency, performs the agreed operational requirements and can be effectively managed over the whole life cycle.

1.5.23.   The CM/JCA monitors the various FIC elements and undertakes continual needs and requirements analysis to ensure that the acquired capability remains relevant to strategic guidance. This analysis may highlight further major capital investments to be entered into the DCP as follow-on project phases. Upgrades to major platforms, such as aircraft and ships, may also enter the DCP as separate projects, particularly if they contain capability enhancements.

1.5.24.   **Planning for In-Service**. Planning for the in-service support of the capability system must be addressed early in the Requirements Phase to ensure that coherent support arrangements are implemented and operating effectively in order to enable the Acceptance Into Operational Service (AIOS) process (refer to Defence Instruction General Operational 45-2 *Acceptance into Operational Service*). This planning is the primary responsibility of the project's CM or the JCA.

The Disposal Phase

1.5.25.   The Disposal Phase provides for the planned withdrawal of a capability at the end of its useful life. This phase is significant as early identification of the Planned Withdrawal Date (PWD) initiates action in the Needs Phase to plan for a replacement or follow-on capability system. PWD also represents a significant timeframe where FIC must begin the transformation required to satisfy the requirements of any replacement or follow-on capability system.

1.5.26.   Although identified as a discrete phase in the CSLC, disposal can occur during the In-Service Phase when equipment is replaced through capability upgrades or for supportability reasons.   For materiel systems, the authority for disposal is the DMO, in particular the relevant System Program Office (SPO), which, in conjunction with the CM who manages, or JCA who coordinates, the disposal process. The involvement of other Defence organisations may also be required, for example DSRG, if the disposal of infrastructure is involved, and CIOG, if the Single Information Environment (SIE) is affected.

1.5.27.   **Early Planning for Disposal.** Planning for disposal of the materiel system must be considered during the Requirements Phase, particularly where any caveats or restrictions applicable to the transfer of technology or re-sale of equipment are identified or known. This should be undertaken by the CM/JCA.

Section 1-6 Capability Development Responsibilities

1.6.1.　　　The responsibilities for managing the phases of the CSLC are shared across Defence and vary from phase to phase. Consequently, those organisational units responsible for managing, coordinating or developing policies or activities need to consult widely. In particular, the CM/JCA has a major role in all stages of the life cycle (figure 1-3).
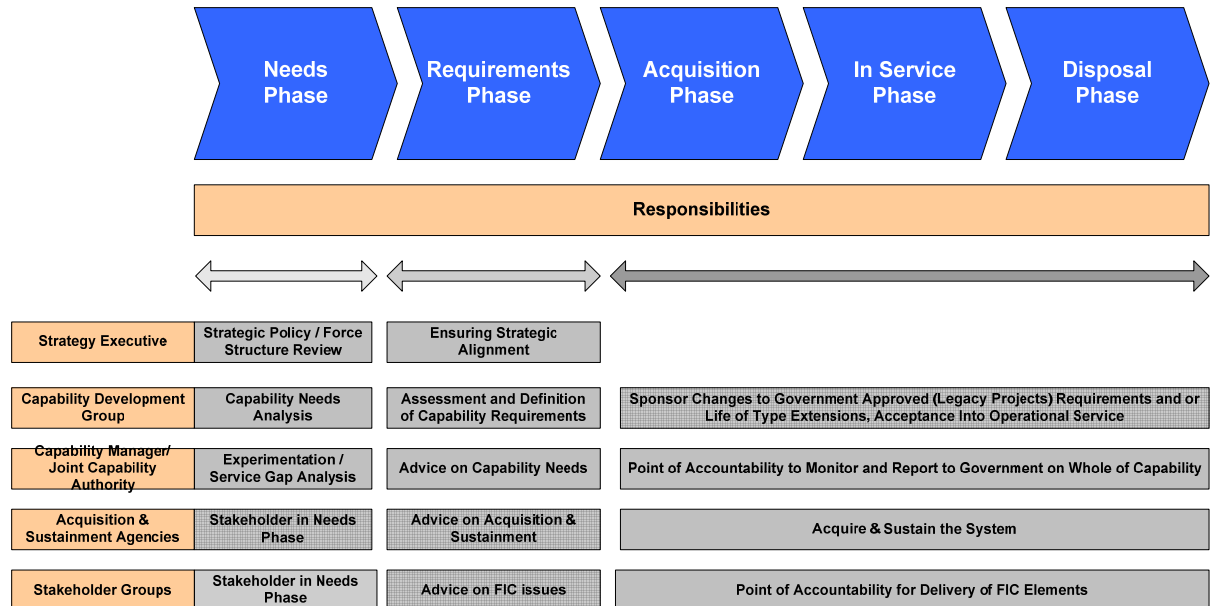
Figure 1-3: Capability Systems Life Cycle - Responsibilities

1.6.2.　　　The following paragraphs detail the responsibilities and accountabilities within the CSLC for capability assessment, options development, requirements definition, acquisition, in-service support and disposal.

Strategy Executive

1.6.3.　　　Strategic Policy Division is part of the Strategy Executive in the Office of the Secretary of the Department of Defence and Chief of the Defence Force Group. Strategic Policy Division is responsible and accountable for the overarching strategic guidance, including the Defence Planning Guide (DPG), and supporting plans to inform Defence decision making, including the development and use of Defence capability and the deployment of the ADF. The DPG identifies the broad tasks that Defence will be expected to perform in the near, mid and far term, together with their associated priorities and related policy development activities. Strategic Policy Division is responsible for *The Strategy Framework*.

1.6.4.　　　**Force Structure Development Directorate (FSDD)**. FSDD is responsible for the implementation of the Government directed Five-Yearly Capability Planning Cycle, institutionalising the FSR process. FSDD develops and provides authoritative strategic guidance for each project (including the Statement of Strategic Need) and, active participation in the Capability Development process and strategic oversight of DCP projects.

Capability Development Group (CDG)

1.6.5.　　　CDG is responsible and accountable for the development of the DCP, drawing on the approved annual DPG, supporting concepts, experimentation and futures work. The DPG describes how Defence will satisfy Government's capability requirements and risk-manage areas where requirements cannot be met from existing or planned capabilities.

Principally, as the lead planning organisation in the capability development process, CDG provides capability options and recommendations to Government within agreed workforce and funding guidance, including changes to force structure, FIC, and appropriate capital investments.

1.6.6.　　CDG also manages four key transition points in the strategy-led Capability Development and acquisition process:

a.　　jointly with Deputy Secretary Strategy, development of the capability strategy aspects of the DPG which articulates strategic options, and capability priorities and themes, for DCP development;

b.　　the transformation of future force capability needs into capability system needs for DCP entry;

c.　　obtaining Government approval of the DCP and associated projects; and

d.　　the transition of approved projects to the CM/JCA and acquisition agency, management and promulgation of the DCP and management of DCP funds following Government approval.

CDG Responsibilities

1.6.7.　　**Capability Systems Division (CS Div).** CS Div manages DCP projects and leads the development of the capability proposals, and supporting documents, that form the basis of the MINSUB or CABSUB that is submitted to Government. CS Div is headed by Head Capability Systems (HCS) who is the Senior Responsible Officer (SRO) for all pre-Second Pass projects for which CDG has responsibility as Sponsor. CS Div has four branches:

a.　　Maritime Development,

b.　　Land Development,

c.　　Aerospace Development, and

d.　　Integrated Capability Development (ICD). ICD Branch differs from the other (environmental) branches in CS Div in that its main focus is on support to CS Div for delivery of integrated capability. For further information regarding integrated capability please see the Additional Guidance on Integration. The Branch structure includes the Directorate of Joint Force Integration and the Directorate of Project Support. The Branch is also responsible for the governance of the Rapid Prototyping, Development and Evaluation (RPDE) program.

　　(1)　　Directorate of Joint Force Integration (DJFI). DJFI is responsible for ensuring individual DCP projects are considered and developed in the context of delivering an integrated joint force capability.

　　(2)　　Directorate of Project Support (DPS). DPS is an enabling organisation providing direct support to CS Div Project Managers (CS Div PMs), and CS Div more broadly, in a range of project management disciplines (eg risk, schedule, costing etc).

　　(3)　　Rapid Prototyping, Development and Evaluation (RPDE). The RPDE program is a collaborative arrangement between Defence and industry with a mission to enhance ADF warfighting capability through innovation and collaboration. Specific activities for RPDE are prioritised by a one-star steering group chaired by DGICD.

1.6.8.　　**CS Division Project Manager (CS Div PM).** The CS Div PM manages DCP projects and coordinates the development of the PDS that underpins the project. The CS Div PM uses this information to produce a complete and well-argued capability proposal and all supporting evidence. The CS Div PM:

a.　　ensures that DCP projects are developed and managed in accordance with the key tenets of Capability Development at paragraphs 1.3.2 and 1.3.3;

b.   articulates the link between strategic policy and the capability proposal;

c.   arranges, as part of ongoing DCP Forward Work Program review activities, the schedule for the project to be considered and approved by Government for entry to the DCP, First Pass and Second Pass approvals;

d.   ensures the overall and effective management of all risks and issues within the project in accordance with the CDG Project Risk and Issue Management (PRIM) Guide;

e.   provides early advice to their Branch Head of any critical risks and issues as well as ensuring those risks and issues are included in the DCIC Early Indicators and Warnings report;

f.   ensures that risk information received from other Defence Groups is analysed and considered holistically to enable Defence and Government to make meaningful decisions about the risk versus benefits of the capability solution being presented;

g.   develops affordable, well-defined capability options that satisfy the Statement of Strategic Guidance and the Capability Needs Statement;

h.   ensures that the capability options comply with Government and Defence policy and legislative requirements;

i.   chairs Integrated Project Team (IPT) meetings and regularly facilitates risk assessment workshops with IPT members and other key stakeholders to identify, analyse and validate new and existing risks;

j.   coordinates Capability Development Stakeholder Group (CDSG) meetings; and

k.   manages the development of the PDS.

1.6.9.   **Capability Investment and Resources Division (CIR DIV).** CIR Div provides independent analysis and review of capability proposals and related costs, including the overall balance of investment in current and future capability, major investment proposals and priorities. The Division is responsible for: ensuring that the DCP is appropriately programmed, independently reviewing capital and operating costs for all projects going to the Defence committees, and management of Net Personnel and Operating Costs (NPOC) estimates for all DCP projects and those approved projects (ie post-Second Pass) for which NPOC has not been triggered.

1.6.10.   CIR Div is headed by the First Assistant Secretary Capability Investment and Resources (FASCIR) and consists of two Branches and a Strategic Analysis cell:

a.   **Investment Analysis (IA) Branch.** IA Branch is responsible for providing advice - independent of CS Div - on capability proposals, and assigns capability analysts to each project who are responsible for:

   (1)   the provision of independent advice on each DCP project through analysis and assessment of the resource implications and risks;

   (2)   the provision of independent advice to the Defence capability committees through the development of agendum papers and recording decisions and actions in formal minutes;

   (3)   the preparation of MINSUBs/CABSUBs from capability proposals; and

   (4)   liaison with Central Agencies (see Section 3-7) in relation to capability proposals.

b.   **Cost Analysis Branch (CAB)**. CAB provides cost analysis - independent of CS Div and DMO - on capability proposals to support the development of MINSUBs and CABSUBs. CAB also develops independent cost estimates as required and assists in the management and review of the annual DCP update, as well as managing the DCP and associated NPOC. Additionally, CAB provides training, research, coaching and support services to the CS Div PMs in the development of cost estimates for their projects.

c.   **Strategic Analysis** Strategic Analysis reports directly to FASCIR and has two main functions. The first is the administration of the DCP including the Net Personnel Operating Costs (NPOC) program. This includes supporting the annual DCP update and annual NPOC trigger process. The second is the provision of independent advice and the preparation of associated MINSUBs and CABSUBs on key strategic projects or issues.

1.6.11.   **Capability and Plans Branch (CP)**. CP Branch is responsible for ensuring that the outputs of strategy formulation and capability planning are used consistently across CDG, and for providing Group level support (including governance) to CCDG and other areas of CDG. CP Branch also supports the analysis of capability system concepts and options through managing and coordinating activities at the Joint Decision Support Centre (JDSC). The branch is responsible for the production and promulgation of the:

a.   public version of the DCP, which has a four year horizon.

b.   the Defence Capability Guide (DCG) which has a horizon out to ten years; and

c.   the classified Key Defence Assets Register (KDAR).

1.6.12.   Specific Directorates in CP Branch include:

a.   **Plans and Concepts Directorate (PCD).**   PCD provides a planning staff to CCDG to engage with Groups and Agencies providing the Policy, Strategy and Needs that drive CDG involvement in the Requirements Phase of the CSLC. PCD coordinates CDG engagement with the White Paper, Force Structure Review, Defence Preparedness, Experimentation and Concept Development teams. PCD is responsible for the development of Defence's Capability Development Framework.

b.   **DCP Program Management Office (DCP PMO).**   The DCP PMO supports CCDG accountability to deliver the DCP to Government through:

   (1)   Strategic level, and targeted, analysis and reporting on DCP projects and programs, including the KDAR;

   (2)   Delivering the Committee Secretariat function, including operational support to the committees (Project Initiation and Review Board (PIRB), Capability Gateway Review Board (CGRB) and Defence Capability Committee (DCC)) and the programming of projects to committees; and

   (3)   Managing CDG's industry partnerships that are used to obtain services in support of DCP projects. These partnerships provide external expertise in such areas as cost estimation, scheduling, safety in capability development and risk.

c.   **Directorate of Industry & International Engagement (DI&IE).**   DI&IE facilitates CDG's engagement with Industry and manages the publication of the Public DCP and Defence Capability Guide. CDG seeks collaboration and international capability development relationships to maintain strategic interoperability by harmonising military concepts and capability requirements, primarily with the United States, the United Kingdom and New Zealand.

1.6.13.   **Australian Defence Test and Evaluation Office (ADTEO)**. ADTEO is the central organisation responsible for Defence Test and Evaluation (T&E) policy, early test planning for DCP projects and managing Defence Trials, tasks and demonstrations. ADTEO is headed by the Director General Test and Evaluation (DG T&E) and is comprised of two directorates.

a.   **Directorate of Early Test Plans (ETP).** ETP provides specialist T&E advice to CS Div to support the development of capability proposals. For most DCP projects (see Section 3.4 for further details) ETP will lead the development of the Test Concept Document (TCD) to support First Pass, and the Early Test Plan (ETP) to support Second Pass. Where ETP is not the lead in document development, ETP staff provide assistance to the CS Div PM with the development of T&E documentation. DGT&E and Director ETP are the

approving authorities for the TCD and ETP. The ETP Directorate is also responsible for management of Defence T&E Policy and international T&E agreements; and

b.   **Directorate of Operations (OPS).** The ADTEO OPS Directorate conducts Defence Trials, tasks and demonstrations to support the capability development process. ADTEO conducts trials during the pre-First Pass phase to assist in developing project requirements and project options. During First to Second Pass, ADTEO can conduct Operational Evaluations of options to assist in selecting the option that best meets the operational requirements. ADTEO OPS has the lead responsibility for conducting Operational T&E for all Land and Joint projects to support Acceptance Into Operational Service (AIOS).

Capability Manager (CM)

1.6.14.   A CM has the responsibility to raise, train and sustain forces. In relation to the delivery of new capability or enhancements to extant capabilities through the DCP, the CMs are responsible for both defining the definitive user need and delivering the agreed capability to Government through the coordination of the FIC. The CMs and their areas of responsibility are outlined below with further information provided within the Additional Guidance on CM Roles and Responsibilities.

1.6.15.   **Chief of Navy (CN)**. CN is the CM for maritime capability;

a.   **Chief of Army (CA)**. CA is the CM for land capability;

b.   **Chief of Air Force (CAF).** CAF is the CM for aerospace capability, and

c.   **Deputy Secretary Intelligence and Security (DEPSEC I&S)**. DEPSEC I&S is the CM for Defence intelligence agencies capability.

1.6.16.   CMs are also Capability Coordinators (refer to paragraphs 1.6.23 below) for particular domains which are referenced in the CDF Preparedness Directive (CPD).

1.6.17.   **Role of CM**. The role of the CM between a project's entry into the DCP and Second Pass approval involves input into the development of requirements documents such as:

a.   the SEC/CDF Joint Project Directive (Joint PD) – CDG lead;

b.   Materiel Acquisition Agreement (MAA) – CDG lead (First to Second Pass); and

c.   Capability Realisation Plan (CRP) – CM lead.

1.6.18.   As well as the requirement to review and endorse these documents, the appointed CM is directly accountable to the Secretary of the Department of Defence and the Chief of the Defence Force for the successful realisation of an approved new capability. This responsibility, delegated in the post Second Pass Joint PD, enables the CM to exercise oversight and coordination of FIC elements for the project. To meet this responsibility, the CM will develop the CRP and chair the Capability Managers Steering Group (CMSG).

1.6.19.   In accordance with the roles and responsibilities agreed by the Defence Committee (DC), the appointed CM will:

a.   in conjunction with CCDG, recommend to Government the appropriate capability to meet the DPG within agreed funding guidance, including changes to force structure and appropriate capital investments;

b.   provide professional advice, including information on FIC, to CDG and Defence committees to ensure that the Capability Development process, and the options put to Government for approval, will meet Government's capability objectives and will be implementable and sustainable;

c.   ensure, for each DCP project, that all FIC elements are appropriately addressed prior to Second Pass approval, and are coordinated and delivered following Second Pass approval;

d.　　　　report regularly to Government through the Secretary of the Department of Defence and the Chief of the Defence Force on the operational and capability consequences of changed circumstances that might have impacts on the capability;

e.　　　　agree the requirements of the MAA;

f.　　　　acknowledge to Government the proposed acquisition strategy;

g.　　　　after Second Pass, provide advice to CCDG on proposed changes to the scope, cost or schedule of major projects or any extension of the in-service life of existing equipment, subject to advice from the CEO DMO and other Group Heads, that are outside of the project boundaries set by Government; and

h.　　　　reach an agreement with DMO (in the Materiel Sustainment Agreement (MSA)) and other Groups on the level of support needed to maintain in-service capabilities to meet the CPD.

Joint Capability Authority (JCA)

1.6.20.　　　VCDF as the JCA is responsible for:

a.　　　　ensuring that new and extant capabilities are developed in accordance with joint concepts and doctrine;

b.　　　　appointing CCs to be responsible for coordinating the delivery of joint capabilities that service the Australian Defence Force and Defence, and reflecting these appointments in the annual Chief of the Defence Force's Preparedness Directive (CPD); and

c.　　　　providing the conceptual basis for the future joint force and integration of its component capabilities.

1.6.21.　　　Where a DCP Project is delivering capability outside of the domains managed by the CMs or to multiple domains, the JCA is responsible for the articulation of capability needs (through the Capability Needs Statement) and the development and implication of capability realisation planning.

1.6.22.　　　The JCA is supported by the Joint Warfare Council (JWC), which serves as Defence's coordination and dispute resolution body for joint force capability policy and integration issues, and is the enterprise level manager of integration activity.

Capability Coordinator (CC)

1.6.23.　　　The role of the Capability Coordinator (CC) is to coordinate the generation and sustainment of a designated capability, where the fundamental inputs to that capability, particularly the major systems, are owned or managed within several different Services or Groups. The CPD identifies the Capability Coordinators. Capabilities without clear boundaries, such as Electronic Warfare and Cyber Warfare are candidates for coordination under the CC construct.　The CC does not necessarily own or control any of the FIC associated with the capability for which they have responsibility.

Fundamental Inputs to Capability (FIC) Enablers

Defence Materiel Organisation (DMO)

1.6.24.　　　Where DMO is the acquisition agency for the major system and associated elements of the FIC defined in the Materiel Acquisition Agreement (MAA), the DMO:

a.　　　　develops the DMO cost and schedule estimates and project risk analysis for inclusion in the capability cost estimates;

b.　　　　is the authority for the acquisition strategy, and develops and maintains the Acquisition and Support Implementation Strategy (ASIS), for each project;

c.   provides acquisition and sustainment advice to Government and Defence at all stages of project development;

d.   provides specific project management and through-life support information and services following First Pass approval by Government;

e.   ensures that requirements for materiel systems, including those defined through the CDD, and the associated resource estimates are suitable for the purposes of acquisition;

f.   conducts industry solicitation activities for acquisition and sustainment (as described in Chapter 4);

g.   provides the CM/JCA and CCDG with advice on the progress of a project against the MAA;

h.   provides CS Div PMs with DMO workforce requirements for inclusion in Defence workforce plans;

i.   works with CS Div PMs and the IPT to identify/document any DMO workforce risks and their risk treatment strategies;

j.   works as part of the IPT to develop the required PDS;

k.   delivers capital equipment to specified levels on time and within budget, as agreed in the MAA, following the Second Pass approval of DCP projects by Government; and

l.   sustains Defence equipment as detailed in a MSA.

1.6.25.   The Chief Executive Officer, DMO (CEO DMO) provides independent advice to Government on materiel capability system cost, schedule, risk, industry and commercial aspects of a capability.

1.6.26.   Refer to the Additional Guidance on DMO Gate Reviews for more information.

Chief Information Officer Group (CIOG)

1.6.27.   CIOG's role in the development of capability is related to the provision of Single Information Environment (SIE) infrastructure and services. The SIE has its own asset life cycle, with planning, development, delivery, and operation and maintenance phases. In the Planning Phase, CIOG supports CDG in the development of the Defence Information Environment Request (DIER) when a requirement for a new SIE capability emerges, or there is a requirement for enhancement of an existing capability. For further information refer to the Additional Guidance on the SIE

Intelligence and Security (I&S) Group

1.6.28.   I&S Group consists of four agencies:

a.   Defence Imagery and Geospatial Organisation (DIGO);

b.   Defence Intelligence Organisation (DIO);

c.   Defence Security Authority (DSA); and

d.   Defence Signals Directorate (DSD).

1.6.29.   The I&S role in Capability Development is to provide:

a.   baseline threat assessments;

b.   foreign threat weapon data;

c.   intelligence and geospatial support for advanced capabilities (eg Joint Air-to-Surface Stand-off Missile, Joint Strike Fighter, Air Warfare Destroyer);

d.   baseline foreign weapon performance models to support the CSLC modelling and simulation;

e.   through DSD, information communications and technology security advice and standards; and

f.   through DSA, physical and personnel security advice.

Joint Logistics Command (JLC)

1.6.30.   JLC provides Defence logistics advice on capability proposals, in order to ensure compatibility in the way Defence provides logistic support to operations. This includes through-life support arrangements and the ability to support the sustainable aspects of preparedness.

1.6.31.   Within JLC, the Joint Logistics Capability Development Section provides capability management and assurance support of the Defence logistic capability to the Capability Development process on all projects entered in the DCP by:

a.   working with CS Div PMs to address the strategic logistics implications of all projects and to identify any strategic logistics issues;

b.   participating in Integrated Project Teams, Capability Development Steering Groups and Capability Manager Steering Groups;

c.   coordinating logistics capabilities to ensure alignment with strategic logistic guidance, policy and doctrine; and

d.   reviewing the Support Concept (SC), Preliminary OCD (POCD), OCD and acquisition strategy.

1.6.32.   More information is provided within the Additional Guidance on Joint Logistics..

Defence Science and Technology Organisation (DSTO)

1.6.33.   DSTO is the principal source of Science and Technology (S&T) advice to inform Government on Capability Development decisions and, where that is not feasible, the provision of support in the evaluation of advice obtained from outside agencies. To support projects, DSTO provides a range of services, including:

a.   assigning a Project S&T Adviser (PSTA) to each project;

b.   providing an assessment of the technical risks associated with the project through a Technical Risk Indicator (TRI) at the Project Initiation Review Board and a Technical Risk Assessment (TRA) at First and Second Pass. More information is provided within the Additional Guidance on DSTO Project Documentation.;

c.   conducting activities to support the development of a project, including deliverables agreed in the S&T Plan, to inform decision makers and Government on acquisition decisions; and

d.   managing capability technology development as part of the Capability and Technology Demonstrator (CTD) Program.

1.6.34.   The Chief Defence Scientist is also mandated by Government to provide independent advice on technical risk attached to a project at each Government consideration — primarily First and Second Pass approvals and Real Cost Increases. The Technical Risk Certification is the Chief Defence Scientist's statement on technical risk and uses the TRA as guiding input.

1.6.35.   More information on the role of DSTO in Capability Development is provided within the Additional Guidance on DSTO.

Defence People Group (DPG)

1.6.36.   Deputy Secretary Defence People (DEPSEC DP) and Head People Capability (HPC) provide strategic-level workforce advice to Government and the senior Defence committees. An independent Workforce Risk Assessment (WRA) is prepared for each capability proposal considered by the CGRB before First and Second Pass approval. The

workforce risk is assessed considering the proposed capability on its own and against the total emerging workforce demand from all projects across the DCP and within Defence. More information on the WRA is provided within the Additional Guidance on Workforce Planning Requirements..

1.6.37.　　　DPG also provides fundamental information for the development of the Workforce Plan, capability proposal and WRA. On behalf of the Deputy Secretary Defence People, Workforce Planning Branch supports CDG, CM and FIC providers during all CSLC stages in the following roles:

a.　　　**Director Workforce Modelling, Forecasting and Analysis (DWMFA).** DWMFA has the role of enhancing Defence capability through workforce modelling, forecasting, analysis and advice. Workforce demand and supply forecasts are needed during capability development to ensure future workforce decisions do not compromise the structural integrity or future viability of work groups and employment categories. DWMFA also provides the CM with workforce planning recommendations and Critical Category analysis.

b.　　　**Director of Workforce Intelligence (DWI).** DWI administers an integrated workforce research program to provide decision-makers with the best available workforce intelligence (information, risks, data, metrics, etc), to choose the most cost-effective options to address workforce matters. Use of Workforce Intelligence in capability development projects will enhance workforce related decisions.

c.　　　**Director Strategic Workforce Planning (DSWP).** DSWP is responsible for developing and managing the implementation of the Defence Strategic Workforce Plan and for providing advice to CS Div PMs to support the development of project Workforce Plans and ensuring workforce issues and risks are within an acceptable level for agreement by Defence committees and Government. DSWP drafts the independent WRA for each capability proposal.

d.　　　**Director Portfolio Workforce Management (DPWM).** DPWM provides the Department, CDG, CM and FIC providers with a robust system of management of workforce allocations, supporting the Secretary of the Department of Defence and the Chief of the Defence Force in meeting their respective accountabilities to Government for the employment of the workforce resource.

Defence Support and Reform Group (DSRG)

1.6.38.　　　DSRG's role in the development of capability is mainly related to the provision of infrastructure and services. Infrastructure has its own asset life cycle, with planning, development, delivery, and operation and maintenance phases. In the Requirements Phase of the CSLC, DSRG supports CDG in the development of the Corporate Services and Infrastructure Requirement (CSIR) when an infrastructure requirement for a new capability emerges, or there is a requirement for enhancement of an existing capability. DSRG (Infrastructure Division) also conducts Environmental Impact Assessments (EIA) if required.

1.6.39.　　　More information on facilities and training areas is provided within the Additional Guidance on Fundamental Inputs into Capability and the Additional Guidance on Environment and Heritage.

Australian Defence Simulation Office (ADSO)

1.6.40.　　　The ADSO role in Capability Development is to provide policy direction, collaboration and co-ordination of simulation activities across Defence. The role of simulation in Capability Development, apart from the delivery of actual simulation systems, is to help with analysing capability options and examining cost versus capability trade-offs. Some of the benefits of using simulation in this context are that it can:

a.　　　help clarify complex issues such as fitness for purpose and possible ripple through effects of choices, and by doing so break impasses with resultant savings in time and cost;

Chapter 1 – Introduction to Capability Development

b.   bring to attention deficiencies that would render the option unacceptable, which otherwise may have been missed; and

c.   provide graphic portrayals that offer a new dimension to conveying information to senior decision makers.

1.6.41.   Further information on ADSO and the application of simulation is provided within the Additional Guidance on Simulation in Capability Development.

CAPABILITY DEVELOPMENT PROCESS 2012
(Requirements Phase)
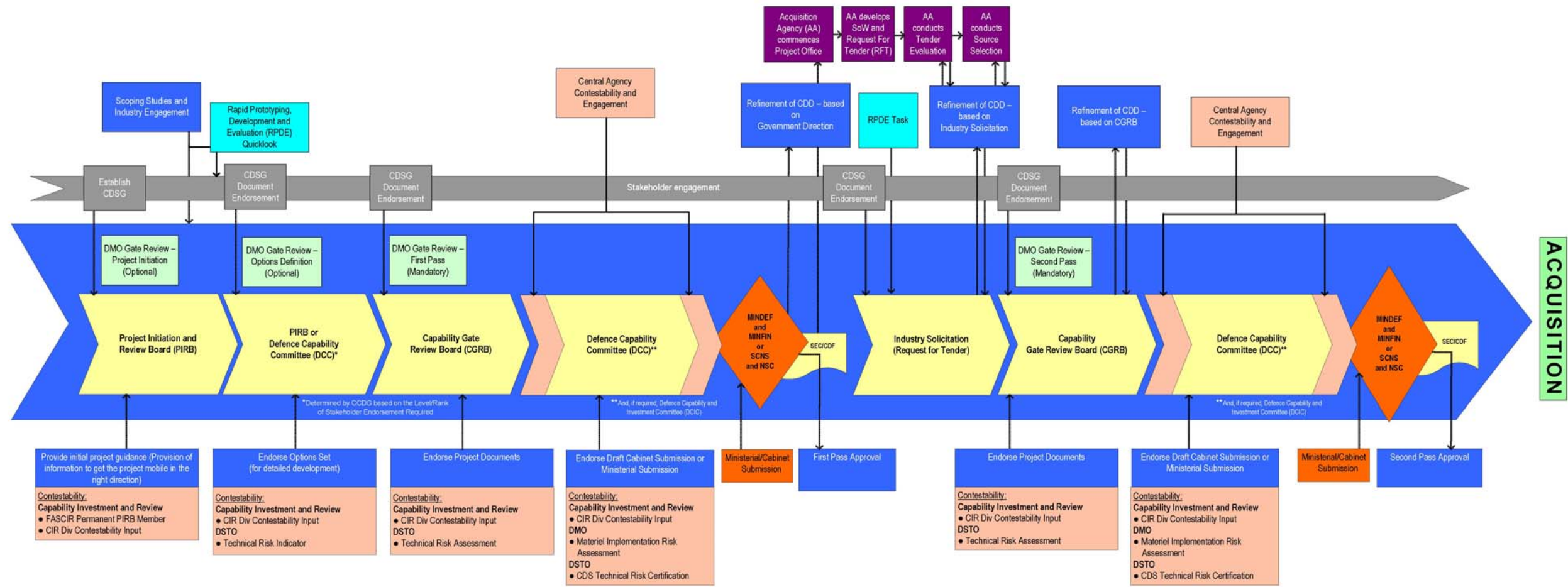
Figure 1-2

Chapter 2
The Needs Phase

Section 2-1 Introduction to the Needs Phase
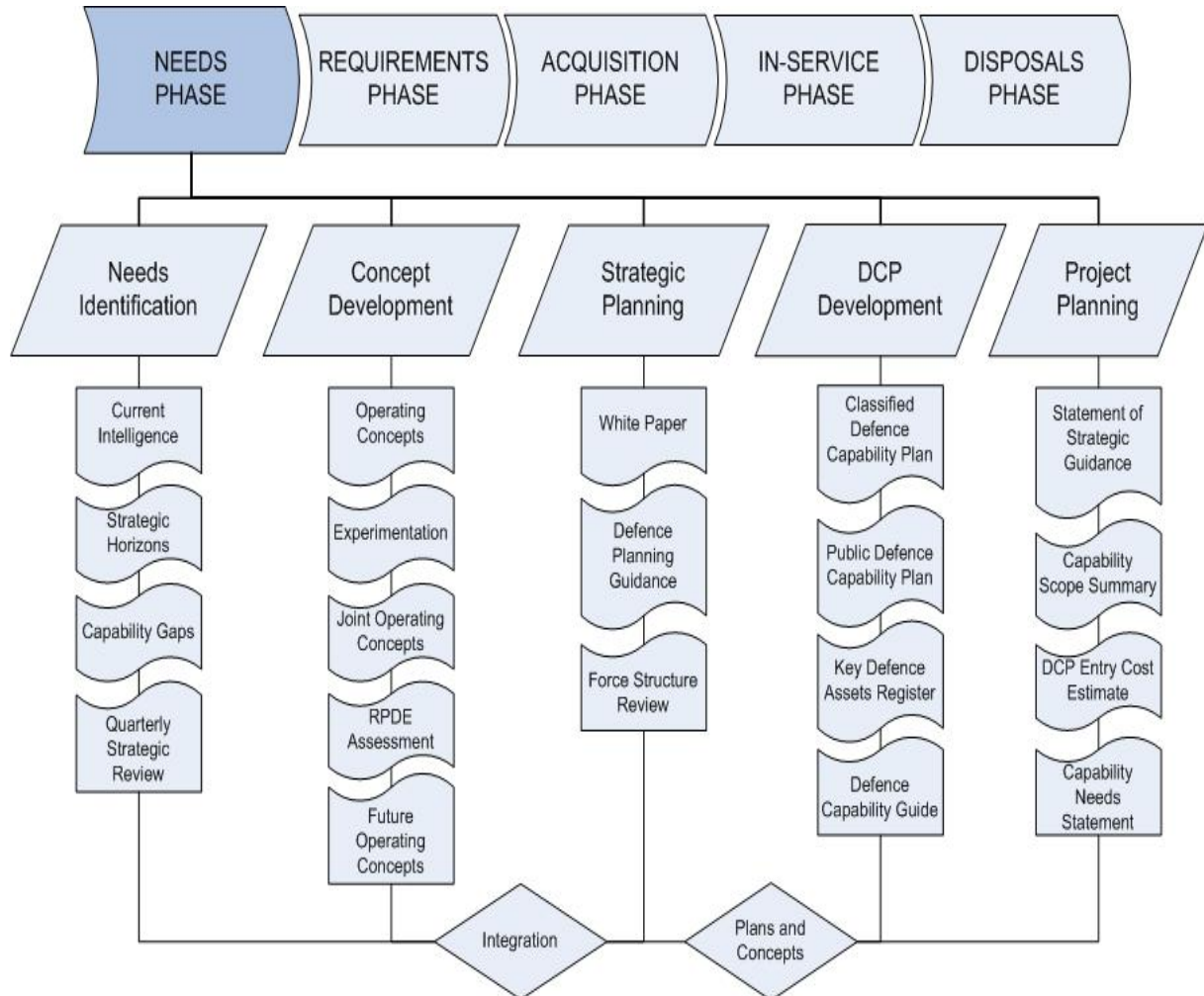
Figure 2-1: The Needs Phase

2.1.1   The Needs Phase (Figure 2-1) is the first phase within the Capability Systems Life Cycle (CSLC), and unites diverse activities carried out across Defence into a vision for the development, delivery, and employment of future military capabilities. The Needs Phase defines these future capabilities in accordance with the Government's strategic priorities and the principal tasks of the Australian Defence Force (ADF).

2.1.2   While many Needs Phase activities occur concurrently, they begin with activities which attempt to identify current or future gaps in ADF capability, and conclude with the creation of a portfolio of capability projects to meet or manage those gaps.

General Outcomes within the Needs Phase

2.1.3   For Defence the primary outcomes of the Needs Phase are:

a.   an identification of the strategic risks that confront Defence in fulfilling its principal tasks, resulting in an identification of capability needs or gaps;

b.   an understanding of the concepts, activities, and goals that will provide the operational means of addressing or managing those risks;

c.   an articulation of desired goals that Defence will pursue to address or manage those risks, and an understanding of the means available to pursue those goals;

d.   the development of a rigorous and effective method of managing the delivery of those means through a portfolio of future capabilities; and

e.   the refinement of the respective scopes of those capability projects – as well as their interaction, dependencies, and integration – to ensure that the further definition and delivery of those capabilities can be as effective as possible within the project's given limitations.

2.1.4   For CDG, the primary outcomes of the Needs Phase are the delivery of a fully costed classified Defence Capability Plan (DCP), and the progression of individual projects through their planning activities in preparation for project initiation and entrance into the Requirements Phase of the CSLC.

2.1.5   The Needs Phase also encompasses the planning activities that occur for projects prior to project initiation, which involves refining the scope of individual projects, subsequent to their entry into the DCP. Requirements for the definition of projects at entry into the DCP are tailored to the complexity and risk of each project. Planning for each project is conducted prior to project initiation, and the development approach to be employed within a given project is approved at the Project Initiation and Review Board (PIRB).

Roles and Responsibilities within the Needs Phase

2.1.6   The Needs Phase involves identifying capability gaps derived from consideration of strategic guidance, threat assessments, risk assessments, current and future operational concepts, future technology, and the current force structure and planned future force structure. For this reason, the Needs Phase involves a wide range of stakeholders across Defence – including Strategic Policy Division, the Capability Manager (CMs), Capability Coordinators (CCs), the Joint Capability Authority (JCA), the Defence Materiel Organisation (DMO), and other vital organisations within Defence.

2.1.7   **Strategic Policy Division (SP Div)** is the custodian of the Force Structure Review (FSR) process, the White Paper, and the DPG. As part of the drafting of the Capability Needs documentation, SP Div provides the Statement of Strategic Guidance (SSG) to ensure that adequate strategic direction and justification exists for all projects at project initiation. If a project requires strategic clarification before progressing towards consideration at the PIRB, then Capability Development Group (CDG) requests an updated SSG through the Capability and Plans Branch (CP Branch).

2.1.8   **CDG** is responsible for the creation and maintenance of the DCP. In the Needs Phase this involves producing the DCP Entry Cost Estimates, Capability Needs Statements, and Capability Scope Summaries for projects being considered by the FSR, as well as for new or revised projects to be included as part of a new White Paper. This task is led by CDG's Capability Systems Division, as the subject matter experts, and coordinated through CP Branch. This is also the case for any out-of-cycle entries to the DCP resulting from new projects outlined within the *Defence Planning Guidance* (DPG) or through Government direction.

Section 2-2 Strategic Level Guidance

The Force Structure Review and Defence White Paper Cycle

2.2.1.   In the *2009 Defence White Paper,* Government directed an improved force structure and capability development process within Defence that built stronger linkages between strategic guidance, force development and capability decisions. The new process, the Force Structure Review (FSR), was directed by Government as the primary process for determining future force structures and capability decisions. The FSR process is managed by the Military Strategy Branch in SP Div, and is described in detail in Chapter Three of *The Strategy Framework.*.

2.2.2.   The FSR is a key part of the White Paper development process which occurs in line with the White Paper cycle and Government direction (see *Figure 2-2* below). The FSR analyses and evaluates Australia's future Defence capability needs, and provides recommendations on the structure of the future Australian Defence Force to Government. The cycle generates the information which allows Government to make properly informed decisions.

2.2.3.   The FSR is the process of capability review, which is designed for Government to:

a.   consider the military force required and the capacity of the ADF to apply this force now and in the future; and

b.   consider the capability to be acquired, sustained or retired to ensure this can be achieved at an acceptable cost.
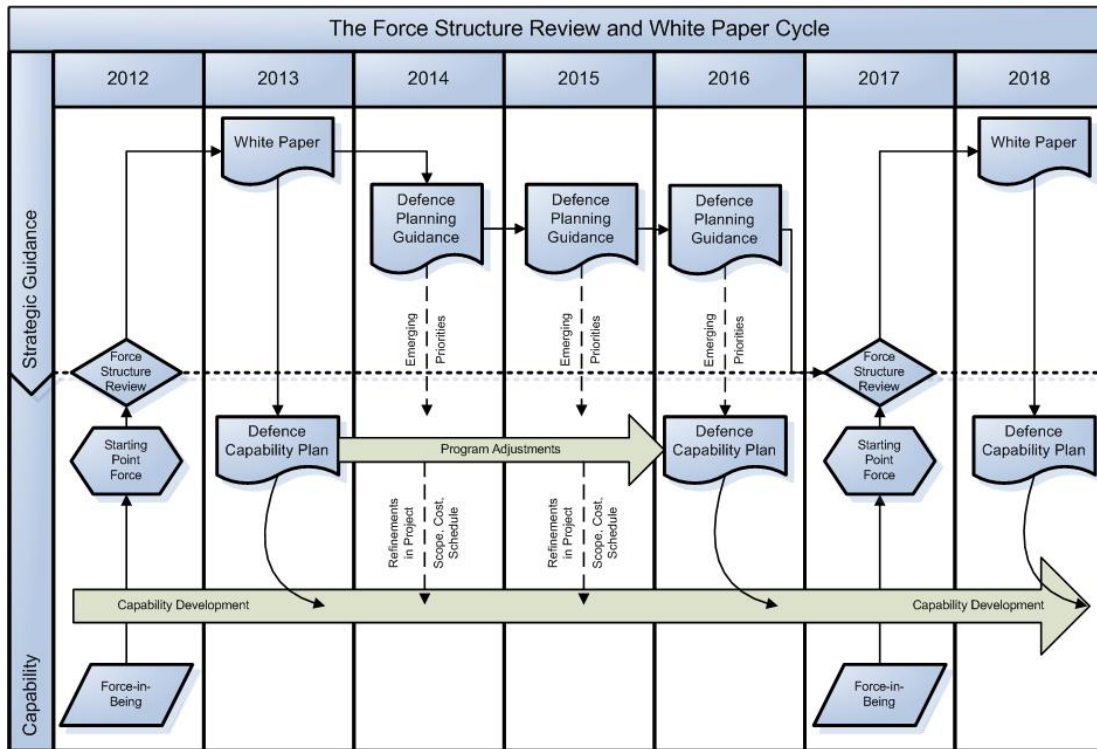
Figure 2-2: The Five Year Force Structure Cycle

Defence Capability Plan (DCP)

2.2.4.   The DCP is a classified and costed 10 year detailed development plan for Australia's military capabilities (including workforce requirements). The document lists the rolling program of major capital investment projects that meet the capability objectives and priorities that fall from

the Defence White Paper (or subsequent strategic updates) and the DPG. It is prepared by Defence for approval by Government at the National Security Committee of Cabinet (NSC), and is published in a classified version and unclassified Public version. The DCP is managed and executed by CDG.

2.2.5.　　　The primary purpose of the Public DCP (PDCP) is to provide industry with guidance regarding Defence's capability development priorities. It is aligned with the four year Forward Estimates Period in the Budget. It provides information for industry on project cost, project schedule, and local industry content. The unclassified PDCP contains details of:

a.　　　project descriptions and scope information, including the interrelationships with other approved or unapproved projects or project phases;

b.　　　industry opportunities for acquisition and/or for through-life support;

c.　　　decision timing information, such as indicative First and Second Pass dates;

d.　　　expected delivery date information, such as Initial Operational Capability (IOC) – the point in time at which the first sub-set of a capability system that can be operationally employed is realised;

e.　　　indicative budgetary data;

f.　　　Acquisition Category (ACAT); and

g.　　　points of contact in CDG and the Acquisition Agency (Defence Materiel Organisation, Defence Support and Reform Group, Chief Information Officer Group or Intelligence and Security).

Sources of the DCP

2.2.6.　　　There are four potential routes that a project can take for entry into the DCP, depending on the nature of the need and the class of project.

a.　　　**Through new or updated strategic policy.** This is the primary means through which new projects are generated and a new DCP is formulated or updated. The addition of new projects is preferably a result of the White Paper process (known as 'in-cycle entry'), which involves a FSR. Changes to the DCP can also be a result of newly approved DPG which adds or alters strategic needs and thus projects (known as 'out-of-cycle entry'). Both processes are initiated through strategic guidance that has been explicitly approved by Government.

b.　　　**Through direction from Government.** Projects can be added to the DCP through Government direction. This has occurred when an opportunity has arisen to acquire an essential capability that meets existing or future strategic needs and where the acquisition has been directed by Government.

c.　　　**Through urgent preparedness requirements.** Projects can be added to the DCP and acquired through the preparedness process where an urgent preparedness need arises, and has been approved by Government. The policies and processes governing this mode of acquisition can be found in the *Defence Preparedness Manual*.

d.　　　**Through the consolidation of sustainment and upgrade activities.** This process can be used to consolidate several associated projects, such as sustainment and upgrade activities on existing or approved capabilities, and gain entry into the DCP. This follows the out-of-cycle DCP entry processes, and must also meet with both agreement from SP Div and approval from Government.

Entry into the DCP

2.2.7.　　　Government approval for entry of projects into the DCP is the foundation for subsequent capability development work in Defence. It is important that the DCP has a solid underpinning, considering capability needs and possible adjustments to each of the FIC elements. The detailed requirements that will be subsequently derived during the Capability Development process should be traceable back to the key documents described in Section 2.3 on

which entry to the DCP was based.[3] Likewise, any DCP entry must be traceable back to higher strategic guidance and direction or approval from Government.

2.2.8.   **Internal processes for new projects** New projects are considered for inclusion in the DCP as part of an FSR process ('in-cycle entry'), as part of drafting of a new DPG ('out-of-cycle entry'), or in exceptional circumstances (such as 'accelerated acquisition'). These processes are described in more detail in the sections below.

2.2.9.   **Government approval for new projects** In the normal course new projects are considered by Government as part of the annual presentation to Government of a DCP. This is part of the budget process. This annual submission also provides the opportunity for existing projects to be adjusted in scope, schedule and funding. This ensures the portfolio of projects are affordable, executable and accord with Government priority. This is detailed further in paragraph 2.2.10.

Adjustments to the DCP

2.2.10.   Government approval is required for all adjustments to the DCP. Changes to the DCP are approved as either part of the annual DCP update process, FSR process, or on an individual basis. Each adjustment is then considered by the Government for approval.

2.2.11.   Adjustments to the DCP may involve adding projects, removing projects, or modifying an existing project's scope, budget, phasing and/or schedule. Adjustments to the DCP occur for a number of reasons and any adjustment involves the careful balancing of the affordability of the DCP, potential benefits and an appraisal of the risks in realising such benefits. Adjustments may arise through:

a.   Policy and regulation adjustments, including:

    (1)   a major programming adjustment, normally as a result of a FSR or White Paper process; and

    (2)   a minor programming activity, derived from minor changes in strategic priority, technology, risk to achieving the required workforce or capability need.

b.   **Non-discretionary adjustments.** As the DCP is a significant part of the overall Defence budget, factors external to the DCP may, from time to time, force projects to be adjusted in order to support the management of Defence's portfolio financial position. These may be driven by Government decisions, project schedule slippage, and changes to budget estimates or financial guidance.

c.   **Other inclusions.** Under the FSR process the inclusion of a project in the DCP outside the DCP entry process will usually be driven by the DPG and would only be done where there is a clearly defined urgent requirement for that capability.

d.   **Existing project adjustment.** This includes significant changes to a project's scope, schedule, workforce or cost estimate that result in a budget provision change in the DCP. This is distinct to a non-discretionary adjustment, as it will frequently result from the complexity, risk, or interrelationships internal to the project.

2.2.12.   The addition of any new programs or projects to the DCP out-of-cycle requires that a new policy proposal be prepared for consideration by Cabinet, along with other DCP entry documents. The requirements and format for new policy proposals can be found in The Cabinet Handbook and is coordinated with the appropriate central agency.

2.2.13.   **Removal of a project from the DCP.** A project may be removed from the DCP upon the recommendation of the Defence Capability Investment Committee and with the approval of Government. This usually occurs because the capability has been identified as being no longer required, or that the capability does not fit into the investment balance of the DCP. Projects may be removed from the DCP at the direction of Government at any given time.

2.2.14.   **Defence Capability Guide.** Defence also publishes the Defence Capability Guide (DCG). The DCG is designed to assist industry by providing general direction on projects over the

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[3] The purpose and content of the SSG, CSS, CNS, and DECE are explained in more detail in paragraphs 2.3.2 to 2.3.13

six year period that follows on from the four year Forward Estimates period covered in the PDCP. The purpose of the DCG is therefore to provide industry with guidance regarding Defence's capability developments beyond financial year 2016-17 out to 2021-22. This information is provided to industry in order to provide transparency on Government's capability intentions over the coming decade and to assist them in their future planning.

Section 2-3 The Capability Needs Process

Development and Definition of Proposals

2.3.1.　　　As mentioned above, the primary outcome of the Needs Phase is the translation of strategic guidance on high level capabilities into a Government-approved DCP in which capabilities are adequately costed, their scope defined, and their timeframes for delivery achievable.

2.3.2.　　　This outcome is achieved through the generation of four essential and enduring documents to ensure adequate guidance exists for all other phases of the capability development process. These are the Statement of Strategic Guidance (SSG), the Capability Scope Summary (CSS), the Capability Needs Statement (CNS), and the DCP Entry Cost Estimate (DECE). This section will explain the background, role, and relevance of these documents for both DCP entry and subsequent project initiation.

2.3.3.　　　A detailed guide to completing project documents in the Needs and Requirements Phases can be found in the Project Document Suite.

Key Documents

Statement of Strategic Guidance (SSG)

2.3.4.　　　The SSG is drafted by Military Strategy Branch in consultation with other relevant areas, such as the team responsible for the ongoing development of the DPG and subject matter experts. The SSG articulates a clear strategic need for the capability that forms the foundation of the CSS, which is drafted in subsequent steps of the process. The SSG will directly link the project to Government endorsed strategic guidance.

2.3.5.　　　The SSG contextualises the proposed timeline for the development, procurement, and introduction of the proposed capability as well as indicating the specific strategic priority of the capability need in relation to other capability needs also being developed and introduced during the proposed timeframe.

2.3.6.　　　As part of this consultation, CP Branch will consult with Capability Investment and Resources Division (CIR Div) in order to highlight at an early stage any issues that might arise from the timing of the DCP entry or the costing of the proposed capability. Early consultation with CIR Div allows a degree of contestability and constructive engagement from the beginning of the Needs Phase.

2.3.7.　　　Depending on the nature of the capability and the degree to which it conforms with previous strategic guidance, the SSG is endorsed by the Director General Military Strategy, First Assistant Secretary Strategic Policy, or Deputy Secretary Strategy. Military Strategy Branch determines the appropriate level of approval, based on the scope of the proposed SSG.

Capability Needs Statement (CNS)

2.3.8.　　　The CNS is the high level statement of user requirements, defined in effects-based language and linked to specific strategic guidance, which clearly defines and provides indicative costs of remediating the capability deficiency. The CNS is sponsored and developed by the relevant CM or the Joint Capability Authority.

2.3.9.　　　The identification of the definitive user need will arise from a number of sources. These include strategy formulation, revised threat assessment, capability planning, concept development and experimentation, simulation and modelling, operational research and analysis, preparedness deficiency reporting, planned withdrawal dates for existing capabilities or lessons learnt.

Capability Scope Summary (CSS)

2.3.10.   The CSS seeks to define the capability gap in the CNS into core capability development concepts. The CSS serves two purposes during the Needs Phase: firstly, it provides a further level of analysis to the need identified by the CNS, allowing for a more robust assessment of the gap identified in the Issues Paper(s) or FSR deliberations; and secondly, it provides the basis for a project's inclusion in the DCP by providing essential information required to develop a cost model. As an enduring document, the CSS will provide guidance to the Project Manager in the Requirements Phase concerning the scope of the DCP project.

2.3.11.   The CSS does not seek to provide a solution for the capability gap identified by the CNS: it identifies the issues and risks that will be involved for the proposed project in the Requirements Phase. These risks and issues will have also been considered during experimentation and analysis activities during the FSR, as well as through additional, high-level investigation of the capability gap by CDG and other key areas of Defence.

DCP Entry Cost Estimate

2.3.12.   Once the CSS is underway, and FIC stakeholders have been consulted, the Capability Systems Division Project Manager will then begin drafting a DCP Entry Cost Estimate (DECE). This document articulates the associated costs of developing, raising, and sustaining the capability, and is usually based on the exemplar of the capability. The DECE forms the basis for eventual entry into the DCP.

2.3.13.   CIR Div has established processes for updating the DCP which are primarily concerned with scheduling (programming), financial management, and cost estimation. The DECE, along with the CSS (outlined above), contains all of the inputs required by CIR Div and will articulate a clear business case for justifying and costing the capability. Further guidance on cost estimation and the DECE, including risk considerations and recommended contingency funding levels[4], is found within the Additional Guidance on Cost Estimating.

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[4] **Risk Considerations**. Prior to entry to the DCP projects are to consult with Cost Analysis Branch (CAB) in CDG for the identification of cost risk and the appropriate application of contingency. CAB has developed a guidance document for the identification of costs associated with risk at entry to the DCP.

Section 2-4 Support to the Needs Phase

Needs Phase Tools

2.4.1.   Several tools are essential to the conduct and management of Needs Phase activities. These include gap analysis tools, the Force Structure Matrix, and Force Structure Workshops.

Gap Analysis

2.4.2.   Within the five year FSR-WP cycle, review and experimentation activities occur across Defence that are intended to examine the structure of the ADF to identify capability gaps based on the Australian Capability Context Scenarios. Examination may take a number of forms, including experimentation, simulation, studies, participation in activities with allies, or reviews of operations. The majority of these activities are independent programs run by the Services and Groups.

2.4.3.   Force Structure Development Directorate (FSDD) in Strategy Group provides coordination to ensure that capability investigations align with Government direction, and that there is a clear and auditable link between Defence's strategic and capability development processes. FSDD also maintains the Force Development Activity Schedule (FDAS), which provides a unified view of needs investigation occurring across Defence. This coordinating role ensures that independent activities contribute to the development of the full depth of detail required to support the FSR process, and also that opportunities for cooperation and coordination of complementary activities (including those conducted overseas) are identified.

Force Structure Matrix and Workshops

2.4.4.   The Force Structure Matrix (FSM) is a tool designed to capture and track identified force structure issues, and to focus organisational attention on known capability gaps. It gives focus to the questions to be answered through investigation, and aligns the research activities required to answer them. The key benefit of the FSM is the ability to synchronise input from all areas of Defence on a particular force structure issue, including strategic enablers, to ensure that relevant, considered information is available to support FSR judgements.

2.4.5.   The FSM lists and defines the key issues that will likely be considered in the FSR. In doing so it forms a comprehensive repository of studies, activities and experiments on each of those issues. It also sets out information requirements related to the issue, identifies stakeholders and assigns a lead organisation for further action. As such it is fundamental to maintaining a logical and accountable trail of developing capability proposals and their origins in strategic guidance.

2.4.6.   Force structure workshops are held biannually, and are attended by stakeholders from across Defence. The primary purpose of the workshops is to guide the investigation of capability needs across Defence. These workshops review and update the content of the FSM, align upcoming experimentation with force structure considerations, and identify opportunities for collaboration in investigations where possible. They are also intended to highlight FSM line items which are not being addressed and encourage investigation. These workshops also provide a forum for the refinement and endorsement of the force structure development process.

Chapter 3
The Requirements Phase

Section 3-1 - The Requirements Phase – First Pass

3.1.1.   The goal for the first stage of the Requirements Phase (refer Figure 3-1) is First Pass approval by Government to allow further investigation and refinement of the option or options that will satisfy the identified capability need.
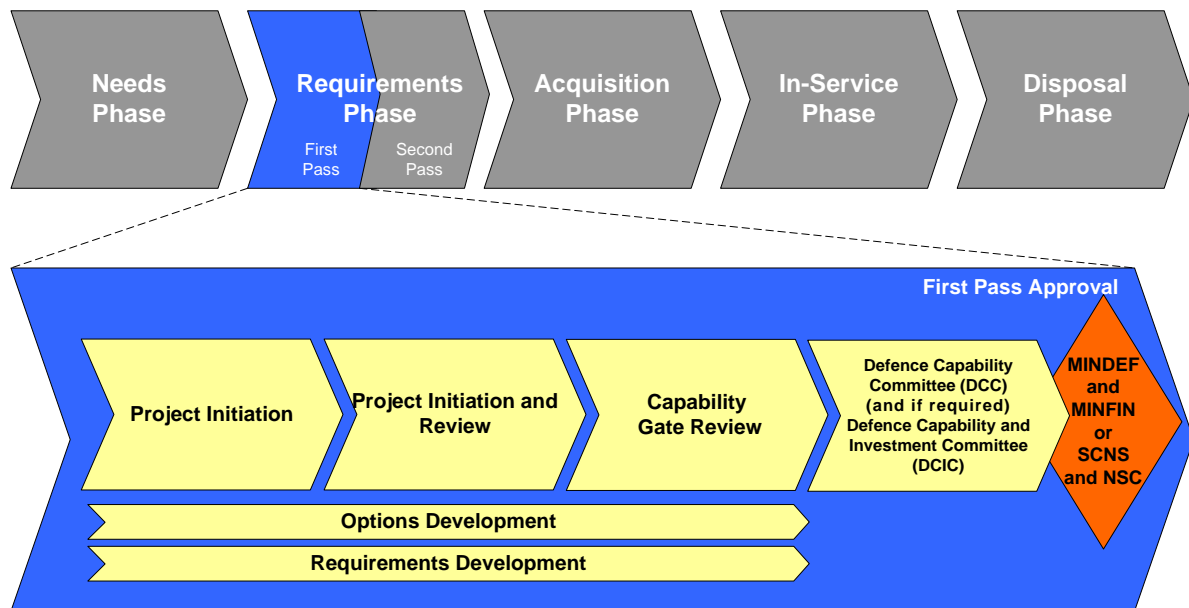
Figure 3-1: Requirements Phase – key First Pass activities

3.1.2.   In the lead up to First Pass approval, the capability requirements (identified in the documents required for DCP entry) are developed further and a number of broad capability options that meet these needs are identified, analysed and presented to Government. These options are developed through detailed research to define the capability system to a level that supports the proposals submitted to Government at First Pass. Options are then assessed on their ability to provide a basis for further developing a solution to address the agreed capability gap.

3.1.3.   The key milestones leading to First Pass are:

a.   project initiation;

b.   strategic level guidance and options guidance provided by the Project Initiation and Review Board (PIRB);

c.   if required, further guidance or option development by PIRB or the Defence Capability Committee (DCC);

d.   endorsement of the Project Document Suite (PDS) by the Capability Gate Review Board (CGRB;

e.   endorsement of the draft Joint Project Directive, Materiel Acquisition Agreement, ministerial submission or cabinet submission by the DCC or the Defence Capability Investment and Committee (DCIC), if appropriate; and

f.   First Pass consideration and approval by Government.

Section 3-2 - Project Initiation

3.2.1.　　　After a project is entered into the Defence Capability Plan (DCP), project initiation planning commences and culminates in presentation at the PIRB. The PIRB confirms the scope of the project and the commitment of resources, including scheduled events to take the project to First Pass approval.

Starting the project

3.2.2.　　　On commencement of a project, as deemed necessary by the designated Capability Systems Division (CS Div) Branch Head, a meeting may be held with key stakeholders to formally start the Requirements Phase processes and identify and understand the high level risks associated with the project. These stakeholders could include, but are not restricted to, the Capability Systems Division Project Manager (CS Div PM), representatives from the Capability Manager (CM), the Joint Capability Authority (JCA), the Capability Coordinator (CC), the Defence Materiel Organisation (DMO), Defence Support and Reform Group (DSRG), Chief Information Officer Group (CIOG) and the Defence Science and Technology Organisation (DSTO). Following this meeting, the CS Div PM will conduct initial planning activities to prepare the project for PIRB.

Project Initiation and Review Board (PIRB)

3.2.3.　　　The PIRB formally begins the Requirement Phase activities of a DCP project, by confirming the approving authority and the scope for the project identified in the Needs Phase, and committing resources to the project. It also provides an opportunity for strategic level guidance to the CS Div PM at the earliest stages of the project. Specifically, the PIRB will:

a.　　　confirm the Project Scope;

b.　　　confirm the CM for the project or, if applicable, the JCA;

c.　　　confirm the Acquisition Agency for the project;

d.　　　confirm the Approving Authority;

e.　　　endorse any proposed tailoring to the two pass process for the project and the timeline for staffing the project to the Approving Authority;

f.　　　confirm the documents within the PDS that are necessary for the progression of the project;

g.　　　identify the resources allocated, and the likelihood of the requirement for supplementation, to achieve First Pass (see the 'Resourcing Summary' annex in the Sponsor's Paper for further information);

h.　　　confirm the broad concept for options development;

i.　　　identify the key risks and issues for the cost, schedule and capability of the project;

j.　　　provide guidance on the approach to be taken on Industry Engagement;

k.　　　identify the opportunity for Rapid Prototyping Development and Evaluation (RPDE) to conduct a QuickLook;

l.　　　provide an estimate of the extent of DSTO engagement; and.

m.　　　provide senior level review of projects.

3.2.4.　　　The PIRB membership consists of:

a.　　　Chief Capability Development Group (CCDG) as chair;

b.　　　Chief Executive Officer (CEO DMO), Deputy Secretary Strategy, Chief Defence Scientist (CDS), Chief Information Officer (CIO), First Assistant Secretary

Capability Investment and Resources, Head Capability Systems (HCS) (standing members);

c.   Relevant Capability Managers.

3.2.5.   The processes and guidelines for advancing a project towards a PIRB decision can be found under the PIRB Business Rules

3.2.6.   The expected outcomes of a PIRB will be: confirmation that the scope of a project aligns with the Government-endorsed DCP; high-level advice on potential approaches to option development; capability development approach (including any tailoring of the two pass process and Project Documentation Suite); identification/notification of potential key risks and initial industry engagement. Additionally, the PIRB will gain a commitment of initial resources from CDG, the CM/JCA, and the Acquisition Agency.

3.2.7.   DSTO is responsible for advising on the potential areas of technical risk to the Project Initiation and Review Board (PIRB) through a Technical Risk Indicator (TRI). DSTO will also agree with CDG at PIRB the indicative level and type of support envisaged for the DCP project depending upon the technical maturity and complexity of the project. This will include an agreement on the type and complexity of the committee documentation that will be submitted to Government. The level and type of support will be confirmed as the project develops at the Capability Gate Review Board (CGRB).

PIRB Consideration of Options Pre-First Pass

3.2.8.   The PIRB may have a role in determining which options will be developed for consideration by Government at first pass, as follows:

a.   If the PIRB has sufficient information to conclude that the option set is readily identified, it can direct the project proceed with the identified options set to CGRB and then on to the DCC, with no further consideration of the option set required;

b.   if the option set is not clear, the PIRB can provide advice to the project on options and require that the project return to the PIRB for endorsement of the option set; or that it take the options set to the DCC for it to consider prior to review by CGRB; or

c.   following the PIRB, CCDG may settle the options set 'out of session'; normally in consultation with HCS and FASCIR and other relevant stakeholders.

3.2.9.   The approved approach to options development, including the role of the DCC in particular, will be set out in the PIRB Minutes. Projects may return to the PIRB for review whenever senior level guidance is required.

Stakeholders

3.2.10.   A stakeholder is defined as a party with an interest in the execution and outcome of a project. Stakeholders are influencers and decision makers, and must have the organisational authority to allocate resources and set priorities for their own organisation's support of the project. The success of any DCP project requires that stakeholders are actively involved and in agreement with the decisions made on the project. They must also have a clear understanding of their primary role, and the primary role of all other project stakeholders.

3.2.11.   The involvement of stakeholders in the development and endorsement of project documents is essential for ensuring that:

a.   proposals, and their associated recommendations, are appropriate and will provide the required capability;

b.   all Fundamental Inputs to Capability (FIC) issues and risks have been identified, analysed and treatment actions agreed to; and

c.   the proposed workforce requirement, budget, schedule and resources are suitable for delivering and sustaining the capability.

3.2.12.   Stakeholders in the Capability Development process will generally include:

a.   Government;

b.   The CMs

c.   the Joint Capability Authority;

d.   specialist authorities:

(1)   Joint Capability Coordination (JCC) Division;

(2)   Joint Logistics Command;

(3)   Australian Defence Simulation Office; and

(4)   Chief Security Officer (CSO);

e.   Strategy;

f.   DMO;

g.   DSRG;

h.   CIOG;

i.   Defence People Group (DPG);

j.   Intelligence and Security (I & S);

k.   **DSTO** provides technical risk assessments, technical risk certifications, project S&T plans and other S&T support as required;

l.   **Chief Finance Officer Group** provides advice and direction on financial policy and the overall assessment of financial aspects of proposals before committee consideration. The CFO assures the affordability of the DCP;

m.   **Internal CDG stakeholders** – other projects, CIR Div, Capability and Plans Branch and Australian Defence Test & Evaluation Office; and

n.   **Central Agencies**. The Department of the Prime Minister and Cabinet (PM&C), the Department of Finance and Deregulation (DoFD) and Treasury are colloquially known as the Central Agencies. While not stakeholders in the normal sense, the Central Agencies play an important part in the consideration and approval of the capability proposal. It is important to note that CIR Div has the lead for engagement with Central Agencies. CS Div PMs should only engage Central Agencies in consultation with CIR Div. See paragraph 3.6.6 for the role of the Central Agencies at First Pass.

3.2.13.   For particular sets of requirements, different organisational elements have responsibility for ensuring that the requirements within their domains are appropriately identified and specified. For example, the Australian Defence Force (ADF) Tactical Data Link Authority in DMO has carriage of the requirements associated with tactical data links, while the Defence Spectrum Office in CIOG has responsibility for regulating and licensing the Radio Frequency spectrum. In relation to Geospatial Information, the Defence Imagery and Geospatial Organisation (DIGO) within Intelligence and Security has these responsibilities. A Geospatial Assessment Certificate is to be obtained from the Capability Coordinator - Geospatial Information and presented to the Capability Development Stakeholder Group, and to all subsequent higher committees upon request. Refer to the Additional Guidance on Defence Geospatial and Information Services.

Stakeholder Engagement

Integrated Project Team (IPT)

3.2.14.   The IPT is established and led by the CS Div PM responsible for a DCP project, and provides a working group whose members have a collective responsibility for the success of that project. The role of the IPT is to ensure that the project is defined (including system and FIC integration activities), costed, and scheduled with risks and issues identified and

treated. Each project must establish an IPT as soon as practicable after project initiation, with its membership being drawn from the various project stakeholders.

3.2.15.   The IPT's role is to:

a.   provide the CS Div PM with access to expertise from throughout Defence, particularly in the consideration of FIC risks and issues, that will assist in the development of capability proposals and supporting project documentation;

b.   provide a common basis for planning and analysis of options for meeting the capability need, including acquisition strategy alternatives;

c.   provide 'reach back' into members' respective organisations to advise on, and facilitate, any additional processes with which the project must comply (eg consideration by CM committees);

d.   identify dependencies between projects and achieve agreement on responsibilities for the definition and implementation of interfaces between dependent projects and systems;

e.   become familiar with, and contribute to the development of the context of the project including its short and long term objectives to identify appropriate risks and issues and to ensure such objectives are achieved;

f.   assist the CS Div PM to aggregate the specialist risk assessments conducted by individual Defence Group experts and assess them holistically to enable the DCC and Government to make meaningful decisions about the risk versus the benefits of the capability solution being presented;

g.   actively monitor and review the project's critical risks in line with scheduled IPT and stakeholder meetings and in accordance with the CDG Project Risk and Issues Management (PRIM) Guide; and

h.   provide an orderly and timely transition of the project post-Second Pass approval from CDG to the CM/JCA and the acquisition and enabling agencies.

3.2.16.   The initial tasks of an IPT are to:

a.   identify and consider the proposed broad capability options for the project and obtain high-level agreement to pursue those options (via the Capability Development Stakeholder Group (CDSG) and PIRB);

b.   meet in a formal workshop setting to establish the project's context and objectives in order to identify possible FIC risks and issues and prioritise actions to treat those risks and issues;

c.   contribute to the tailoring of the Capability Development process, and development of the Project Capability Proposal (PCP) to outline the methodology for achieving First and Second Pass approval;

d.   if appropriate, identify workforce and Project Development Fund (PDF) requirements to further develop the agreed options;

e.   develop the initial project-specific requirements for providers responsible for delivering FIC and FIC in-service support; and

f.   consider acquisition and support strategies for delivering and sustaining the capability.

3.2.17.   The level of involvement by individual stakeholders will vary from project to project. However, all affected stakeholder groups should be invited to participate in an IPT in either a full-time, part-time or advisory capacity. In practice, an IPT may consist of a small core team, with other members contributing at particular points in the process depending on their expertise. It is the responsibility of the CS Div PM to ensure that all relevant stakeholders have an opportunity to contribute to the work of the IPT.

3.2.18.   Capability proposals require Defence experts from other Groups to provide specialist risk assessments. CS Div PMs are responsible for aggregating these assessments and assessing them holistically to determine the impacts on the realisation of the capability.

This can be challenging because Defence Groups appropriately operate with varying and different risk assessment criteria which have been developed to suit their specific function and context.

3.2.19.   An effective IPT is crucial to supporting CS Div PMs to interpret these specialist risk assessments and build an effective aggregated risk assessment.

Emerging Project Teams (EPT)

3.2.20.   An EPT are the primary means by which the DMO supports DCP projects until a DMO Project Office has been established. The EPT is a core group of DMO personnel that are primarily focused on supporting CDG activities prior to First Pass – an EPT may be embedded within CDG or remain within DMO. The EPT provides the project with access to specialist skills, including project management, commercial, engineering and logistics, that are required to develop comprehensive capability proposals. See the Additional Guidance on EPTs.for further details.

Capability Development Stakeholder Group (CDSG)

3.2.21.   Each project must establish a CDSG at the same time that the IPT is established. The CDSG is the formal means for obtaining senior-level stakeholder involvement in and commitment to, DCP projects. The CDSG is chaired by the relevant CDG Branch Head during the Requirements Phase, and generally includes One-Star/Senior Executive Service (SES) Band 1 representation from the CM/JCA, the Acquisition Agency and the relevant enabling groups. The CDSG does not have the authority to change the scope or underlying business case for unapproved projects.

3.2.22.   The role of the CDSG is to:

a.   provide advice to the CM/JCA, CDG and Acquisition Agency managers responsible for project decision making;

b.   provide executive oversight of IPT activities;

c.   provide specialist information, advice and guidance to the IPT;

d.   assist the project to identify additional strategic risks and interdependencies;

e.   address and facilitate resolution of key stakeholder and inter-Group risks and issues;

f.   advise on the escalation of risks and issues that cannot be resolved by the CDSG members;

g.   endorse project documentation for approval by the relevant authority or consideration at relevant Defence committees;

h.   commit resources to provide expertise that is outside the scope of CDG staff;

i.   review the draft Materiel Acquisition Agreement (MAA) and Joint Project Directive (Joint PD) prior to presentation at the Capability Gate Review Board (CGRB);

j.   for post-First Pass projects, review the First to Second Pass Joint PD and MAA at each CDSG meeting. Where amendments are required due to a significant change in one of the key elements of the directive or agreement, recommend such changes to CCDG;

k.   review critical risks and treatment strategies at each meeting; and

l.   meet at least biannually for Acquisition Category (ACAT) I projects and annually for ACAT II, III and IV projects.

3.2.23.   The CDSG provides high-level advice and guidance on the above tasks prior to key decision points in the Requirements Phase. These decision points will generally be consideration by the PIRB, CGRB, and DCC and (if required) DCIC. The CS Div PM must

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get CDSG endorsement of project options, documents and proposals prior to these committees.

3.2.24.   **Confirmation of Requirements**. The CDSG will confirm initial tailoring of the project, ensuring that special requirements are addressed, for example facilities or geospatial information. The initial tailoring proposal is to be considered by the CDSG meeting prior to the project's first consideration by PIRB.

3.2.25.   **Stakeholder Involvement during Acquisition (CMSG and PMSG)**. During the Acquisition Phase, the CDSG is reconstituted as the CMSG to consider wider CM and FIC issues – refer to the Additional Guidance on CM Roles and Responsibilities.for more information. The DMO Project Management Stakeholder Group (PMSG)[5] considers the Major System and associated FIC elements.

3.2.26.   The CDSG Terms of Reference are the same as the Project Management Stakeholder Group's Terms of Reference..

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[5]   For more information on the PMSG roles and responsibilities see the DMO Project Management Manual.

Section 3-3 - Options

3.3.1.   In the lead up to First Pass, the number of capability options under consideration needs to be reduced to a manageable level at an early stage. The pre-First Pass PIRB is the point at which CCDG will provide guidance on the broad options to be investigated, in consultation with senior Defence stakeholders, and agree on those to be eliminated because of strategic misalignment or affordability. The project may need to return to PIRB at a later stage for endorsement of the option set.

Option Investigation

3.3.2.   Government requires that the option set at First Pass includes at least one Off-the-Shelf (OTS) solution, where available, as a benchmark. Options that move beyond the requirements of an OTS solution must include a rigorous cost-benefit analysis of the additional capability sought so that the full resource risks and other impacts are understood. The results and recommendations arising from that analysis must be clearly communicated to Government so that it is well informed for decision-making purposes.

3.3.3.   Defence cannot presume that its preferred option will be selected by Government and must be in a position to effectively implement any option presented. Therefore, each of the options presented must be achievable in financial, technical, logistics, workforce and schedule terms, and any significant differences between the options in these areas must be highlighted to Government.

3.3.4.   Initial identification of broad capability options generally occurs at DCP entry, although it is during the Requirements Phase that options are eliminated or identified for further development. It is important to think laterally about possible ways of filling the identified capability need, and not simply in terms of replacing existing equipment with similar, but newer and more advanced, equipment. In particular, given that the overall capital funding available for all capability is always constrained, it is especially important to seek options that can produce the required capability outcomes for less cost than the DCP budget provision (and within the Net Personnel and Operating Costs (NPOC) provision) in order to maximise total ADF capability within the overall capital and sustainment funding.

3.3.5.   The time, effort and expense of examining each option in detail makes it essential to concentrate on investigating only a small number of options (usually no more than three or four). The First Pass documentation should explain why specific options have been selected for investigation and why alternatives have not been investigated.

3.3.6.   As the investigation of options approved by the PIRB is likely to take 12–18 months to develop to the required level of detail for First Pass approval, options are usually investigated in parallel rather than sequentially.

3.3.7.   **Solution class**. An important concept to consider is that options will generally be developed to the solution-class[6] level at First Pass. A solution-class is a generic solution type that does not incorporate any specific implementation elements or a manufacturer's solution. Examples include fighter aircraft, airborne radar, ground-based surveillance, space-based communications, ground transportation, and submarines.

3.3.8.   While options are generally developed to the solution-class level, this does not preclude the development of options that propose other ways of providing the capability, including, but not limited to, the following (or a combination thereof):

a.   alternative means of achieving a capability effect, such as Air Lift (Option 1) or Sea Lift (Option 2);

b.   different levels of capability within a solution such as Full Functionality (Option 1), Fitted For But Not With (Option 2), Not Fitted For (Option 3);

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[6]   For further description of solution classes refer to the Capability Definition Document Guide..

c.   different basis of provisioning a system such as All Units (Option 1), Selected Units (Option 2) or Operational Units (Option 3);

d.   a mixture of different platform and equipment types.

3.3.9.   The options presented must consider the type of platform/equipment being acquired and the stage of the project (ie pre-DCP, pre-First Pass). It is possible that options for a single project may reflect one or more of the above descriptions throughout the Capability Systems Life Cycle (CSLC).

3.3.10.   Key considerations in assessing the viability of options are whether they:

a.   have the potential to meet the capability need with acceptable cost, schedule and technical risk;

b.   have the potential to support Defence's broader system-of-systems and Integrated Defence Architecture objectives;

c.   enhance interoperability with allies and likely coalition partners;

d.   meet the requirements for safe, secure and compliant operation in the ADF context;

e.   plan for an achievable and sustainable workforce;

f.   have the potential to integrate with Defence's logistic capability/construct;

g.   reduce the risk to ADF deployed forces conducting operations in a hostile environment;

h.   satisfy specific Government and Departmental policies and directives with respect to industry and/or procurement; and

i.   can be implemented and will deliver the capability solution including through-life costs within the budget, workforce constraints and schedule of the DCP.

3.3.11.   Each option will meet the above criteria to varying degrees, and meeting one or more to a lesser degree does not necessarily exclude an option. However, any gaps in meeting the criteria must be identified, assessed for risk and have treatment strategies developed. The gaps, risks and treatment strategies are to be reflected in the appropriate project documents, such as the relevant Initial Business Case (IBC) at First Pass or Acquisition Business Case (ABC) at Second Pass. This will enable informed trade-off decisions to be made by Government.

Further Considerations in Option Investigation

3.3.12.   **Investment Considerations**. The minimum level of capability that will satisfy the capability need is to be considered. The project may also propose to Government options that are considered to provide value for money above the minimum level of capability and within the project's budget provision. Where an option is proposed that exceeds the budget provision, offsets from other areas of the DCP must be identified within the capability proposal.

3.3.13.   **Explosive Ordnance**. All new projects that acquire weapon systems or munitions are to make provision for the procurement of an explosive ordnance (EO) reserve in accordance with Defence Instruction General Logistics 4-1-001 *Defence Explosive Ordnance Manual*.. Director General Explosive Ordnance (DGEO), Joint Logistic Command, (JLC), on behalf of CJLOG, as the Strategic J4 for Defence, is to be contacted for advice on the means and timing of the procurement of an initial quantity of EO. This should occur at least 12 months before scheduled Second Pass approval is sought.

3.3.14.   DCP Projects that are introducing a new EO capability, or that require a substantial increase in EO holdings, are to provide:

a.   an EO reserve in accordance with guidance from the biennial EO Reserve Stock Requirements Study;

b.   up to three years of operating, raise train and sustain stocks;

c.   EO required for proofing, evaluation and testing; and

d.   NPOC for whole of life EO consumption.

3.3.15. All new projects that acquire weapon systems or munitions are to comply with the Insensitive Munitions (IM) requirements of Defence Logistics Manual Volume 9 Part 2 Chapter 4 *Insensitive Munitions*. To ensure that IM are considered as part of the weapons system or munitions acquisition:

a. **Pre First Pass**. The requirement for IM shall be part of Capability Proposal First Pass documentation by including the requirements of STANAG 4439 Policy for Introduction, Assessment and Testing for Insensitive Munitions, in Preliminary Capability Definition Documentation. Additionally, an argument supporting or rejecting an IM decision should be included in the IBC.

b. **Pre Second Pass**. The IM assessment of munitions shall be conducted during Tender Evaluation. If the assessment finds that the munitions do not meet the requirements of the STANAG 4439, a determination of the need for a waiver from IM policy will be made in accordance with Defence Logistics Manual Volume 9 Part 2 *Insensitive Munitions*. Where a waiver to the IM policy is required, it shall be generated and approved prior to confirming source selection.

3.3.16. **Legal review.** Capability Development proposals need to be tested against legal and political constraints affecting Australia's use of armed force. Examples include prohibitions on the use of land mines and nuclear and chemical weapons. Projects acquiring new weapons, means or methods of warfare (including modification of existing weapons) need to obtain a Legal Review in accordance with Defence Instruction General Operational 44-1 *Legal Review of New Weapons.*. For further guidance on legal issues contact the Defence Legal Service.

3.3.17. **Safety.** In Australia, the following legislation focuses attention on health and safety and environmental issues, and therefore guides safety activity within the Capability Systems Life Cycle (CSLC): Work Health and Safety Act of 2011 (WHS Act). The parties involved in the acquisition and sustainment of systems for Defence have a duty of care arising from their legal obligation to take reasonably practicable steps to avert harm to members of the public, as well as their own employees.

3.3.18. All stakeholders in the CSLC must be appropriately aware of safety risks and issues related to their organisational duties within the lifecycle, in accordance with the WHS Act. Those responsible must take measures to ensure that systems are designed to be safe, So Far As Is Reasonably Practicable (SOFAIRP[7]), and are to remain that way throughout their lifecycle. This requires effective capability system safety risk communication across the lifecycle.[8] A breach of duty of care, related to the above legislation, has the potential to render personnel personally liable in the case of an accident. Furthermore, the duty of care under the WHS legislation is not able to be transferred.

3.3.19. Defence stipulates that Service Chiefs are accountable to the CDF for ensuring that ADF materiel is Fit for Service, and only poses acceptable risk to personnel, public safety and the environment.[9] [10] This is achieved through Safety Management Systems and Technical Regulatory Frameworks within the organisation and the communication medium for these is sound risk management methodology.

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[7] SOFAIRP is a term used within the WHS Act 2011, and hence is introduced here to describe the practical limits of risk reduction in accordance with the legislation. The legislation should be referred to for a better understanding of the term.

[8] Secretary and Chief of Defence Force (SCAC) Agendum Paper of 6 Aug 2012 highlights the points in this paragraph as being mandated by the WHS Act 2011.

[9] Environmental Protection and Biodiversity Conservation Act of 1999

[10] Defence Instruction General Logistics 4-5-012 *Regulation of Technical Integrity of Australian Defence materiel.*

3.3.20.　　　A prescribed Systems Safety suite of activities should be applied to a capability system during all of its lifecycle phases. The Safety Case[11] provides for a level of assurance commensurate with the perceived level of danger associated with the system. To enable an adequate body of evidence to be captured in the Safety Case, the suite of safety activities is to be prescribed at the beginning of the CSLC. These activities begin with identification of hazards and causal factors and then assess, implement and manage a suite of controls to ensure the safety of the Capability System, SOFAIRP. The requirements phase will identify early hazards and then prescribe the means by which they are to be controlled into the Acquisition Phase (refer to the Additional Guidance on Safety in Capability Development).

Development of Options

Off-the-Shelf Options (OTS)

3.3.21.　　　OTS[12] is defined as a system or equipment that:

a.　　　is already established in-Service with the armed forces of another country or Australia or is anticipated to be at the time a Second Pass decision is sought;

b.　　　is sourced from an established production facility (not just a military OTS design);

c.　　　requires only minor, if any, modifications to deliver interoperability with existing ADF and/or allied assets; or

d.　　　is in-Service with one or more other customers for the equivalent purpose.

3.3.22.　　　**OTS and FIC**. An OTS solution normally only satisfies the major system and associated FIC elements and, consequently, consideration of how the remaining FIC are realised must still be undertaken.

3.3.23.　　　**OTS as the benchmark**. Where an OTS option exists for Defence's capability requirements, it will be presented for Government consideration and will be the benchmark against which a rigorous cost-benefit analysis of any additional capability is sought, taking into account the cost and risk of doing so[13]. When an OTS option is judged not to exist, this will be explained in the First Pass submission to Government.

3.3.24.　　　**Australianisation and modification of OTS**. Any option that proposes the 'Australianisation' or modification[14] of OTS equipment must detail the rationale and associated costs and risks. The body of each Initial Business Case (IBC) must include a discussion of the rationale for undertaking further analysis of some of the options and, at a high level, the cost, capability, schedule and risk trade-offs between the different options identified[15].

3.3.25.　　　It is also important to recognise that the first-time integration of a number of separate OTS systems is no longer an OTS solution and must therefore be considered as developmental.

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[11] A Safety Case is a body of evidence that demonstrates the adequacy of a Capability System's safety at all stages of the lifecycle. The Safety Management System that the Capability falls within will capture objective quality evidence that at any time in the lifecycle can be analysed and collated into a Safety Case Report to demonstrate the Safety of the Capability System at that time.

[12] 3.3.16 a to c are sourced from: Department of Defence, 2008, *Going to the next level: the report of the Defence Procurement and Sustainment Review* p 17, David Mortimer et al; 3.3.21d is a variation on 3.3.21 a to note that it may be in non-military service.

[13] Department of Defence, 2008, *The Response to the Report of the Defence Procurement and Sustainment Review* p 22

[14] The modifications to a system or equipment might be proposed to meet the particular requirements of the Australian and regional physical environments and the ADF's particular operational requirements. They may also be needed to meet national legislation and regulatory requirements (ie Workplace Health and Safety).

[15] Prime Minister and Cabinet Drafter's Guide – Preparation of Cabinet Submissions and Memoranda, July 2009.

Developmental

3.3.26.   A developmental option is an option to provide a capability that does not currently exist as an OTS solution. Such an option might be delivered through:

a.   the development of an entirely new product;

b.   the integration of existing OTS components to deliver a new product; or

c.   participation in another nation's developmental program.

3.3.27.   Developmental options have the potential to deliver the capability required but the technical and schedule risk is usually high, and costs are normally more uncertain.

Modification of Existing Systems

3.3.28.   Some projects may propose a modification to an existing capability platform or system due to:

a.   external regulatory requirements;

b.   internal technical requirements;

c.   integration (including interoperability) requirements; and

d.   capability enhancements.

3.3.29.   First Pass consideration of these projects gives the Government scope to consider the capability being modified. Such projects may qualify for consideration for Combined Pass, accelerated acquisition or other tailored processes.

Sustainment Solution

3.3.30.   Some projects are introduced for the sole purpose of modifying the sustainment solution of a capability that is already in-service, or is being introduced into service. Such projects do not normally require the full PDS, or full versions of documents, as they can leverage off already existing documentation such as the Operational Concept Document (OCD) and Functional Performance Specification (FPS).

Section 3-4 - Project Development and Management

3.4.1.　　This section covers the development of the documents required to start the project, to define the technical requirements, to support decision making, the plans for delivery of the products at First and Second Pass and management of the project.

Project Management Plan

3.4.2.　　**Document purpose**. The Project Management Plan (PMP) is the primary plan for the Requirements Phase. The PMP identifies the major products, activities and resources required to move the project through the Capability Development process. The PMP provides:

a.　　　A summary of the overall project strategy;

b.　　　The current and next stage in detail;

c.　　　A risk management plan covering the risk reduction activities to be undertaken through the science and technology, test and evaluation and modelling and simulation programs;

d.　　　The staffing profile including Contractor or Consultant requirements;

e.　　　External dependencies;

f.　　　Planning assumptions;

g.　　　Project tolerances; and

h.　　　A schedule covering the activities, with identified resources.

3.4.3.　　The CS Div PM is responsible for developing the PMP, in consultation with other members, and ensuring that it identifies the major products, activities and resources required to achieve First Pass.

3.4.4.　　**When used**. Nominally there are three PMPs developed for a Project: PIRB to First Pass, First Pass to Second Pass and Acquisition. Drafting of the PMP should commence on project initiation as information becomes available. The CS Div PM should aim to have an initial draft available for PIRB as it will assist when briefing the PIRB on the plan to progress the project forward. The PMP should be finalised after PIRB with a detailed plan to get to First Pass and a 'skeleton' plan to get to Second Pass.

3.4.5.　　The PMP is an evolving document and will need to be reviewed regularly and updated as necessary to ensure that it is still relevant to the particular stage of the project.

3.4.6.　　At First Pass CGRB a draft PMP for the period between First and Second Pass is to be presented to Board Members.

3.4.7.　　In developing the PMP, the CS Div PM will also consider how the Capability Development process could be tailored – subject to CCDG approval – to best suit the project.

3.4.8.　　This information will be regularly reviewed by the IPT and CDSG, and updated as required to ensure the currency of the PMP.

Project Document Suite

3.4.9.　　During 2012 a significant initiative was undertaken to streamline the document set for capability development which resulted in a revised and consolidated Project Document Suite (PDS) and Guide. This 2012 edition details this streamlined PDS. The PDS describes the information requirements that support the Capability Development process. The PDS consists of:

a.   **Project Capability Proposal (PCP)**. The PCP is a high level document, written in plain English that provides the argument for the capability to the First and Second Pass CGRB. The PCP is to be no more than 10-15 pages and is mapped to the information required to produce the cabinet submission (CABSUB)/ministerial submission (MINSUB). Under the PCP is the PDS Index which lists the documents and information packages that will be used by a project.

b.   **PDS Parts**. The PCP is supported by six parts within the PDS that contain the supporting information. The information contained in the parts could range from a single paragraph or page to a stand-alone document such as the Operational Concept Document. The parts are as follows:

(1)   **Part 1 - Summary Information**. This part contains the high level information common to all phases of the project such as Common Information, Stakeholder Reference and Acronyms, Abbreviations and Glossary. Where the high level project information, project background or current capability etc, was previously duplicated in a number of documents, those documents should now reference the Project Common Information document where that information is held.

(2)   **Part 2 – Project Start-Up**. This part contains the initial or start-up information pertaining to strategic and capability factors. This information is critical for a project to commence the Requirements Phase and if it is not provided the project should not progress to PIRB.

(3)   **Part 3 - Decision**. This part contains much of the information that supports decisions, for example options, cost estimates, studies, risk assessments, linkages and dependencies, and FIC analyses.

(4)   **Part 4 - Technical**. This part contains Capability Definition Documents (CDD) – Operational Concept Document (OCD), Function and Performance Specification (FPS) and Test Concept Document (TCD) or Early Test Plan (ETP).

(5)   **Part 5 - Planning**. This part contains the project plans pertaining to the project.

(6)   **Part 6 - Governance**. This part contains governance information pertaining to the project such as Cabinet and Ministerial Submissions, Committee management papers, minutes and outcomes from committees and compliance certificates.

3.4.10.   For a full description of the project documentation requirements see the PDS Guide. The DCDH will not repeat the description of the documentation provided in the PDS, but will provide additional guidance where available.

Tailoring

3.4.11.   The process described in this handbook should be tailored, in accordance with the key tenets of Capability Development detailed in Section 1-3, to suit each project's needs, and taking into account:

a.   risk;

b.   urgency of the requirement;

c.   size of the option set and maturity of solutions;

d.   maturity of project definition at DCP entry;

e.   value of the investment;

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f.   nature of the acquisition[16], for example:

   (1)   developmental;

   (2)   Off the Shelf (OTS);

   (3)   OTS with modifications;

   (4)   modification of existing systems; or

   (5)   sustainment;

g.   the complexity of the project (ACAT I, II, III or IV);

h.   resource availability;

i.   the timing of market opportunities; and

j.   the requirement to comply with Government legislation, such as achieving the efficient, effective, ethical and economical use of Commonwealth resources.

3.4.12.   Tailoring the process must be controlled, appropriately documented and approved, and may involve more or less of:

a.   the type of documents developed (eg an OCD may not be required if the equipment or capability being delivered is already defined in an OCD);

b.   the number of documents developed (eg it may be appropriate to combine documents);

c.   the level of detail in the project document suite;

d.   the level at which and/or number of times internal Defence consideration is sought; and

e.   the number of times Government approval is sought such as Combined Pass, Intermediate Passes, Multiple Second Passes (see paragraphs 3.4.20 to 3.4.25).

3.4.13.   Tailoring of the process may have been identified and approved at DCP entry. If not, project initiation is the point at which tailoring will be considered and a decision will be made by the PIRB. While tailoring of the project may occur at any time, the initial tailoring will be documented in the project common information (as per the PDS) and approved by CCDG. Any follow-on tailoring that may be required will be approved through the internal Capability Development committee process, eg a subsequent PIRB or DCC meeting. Examples of common ways to tailor the process are provided in the following paragraphs, noting the roles of the IPT and CDSG at paragraphs 3.2.14 and 3.2.22 respectively.

Collective Projects and Phases / Omnibus – Program of Projects

3.4.14.   Multiple projects or phases of a project may be managed together to achieve efficiencies, maintain consistency amongst interrelated projects and/or to facilitate a system-of-systems approach. This may involve the development of overarching or omnibus documents (eg an umbrella OCD) for the whole program, to either reduce the individual projects' documentation or establish common architecture, requirements and standards.

3.4.15.   Where an umbrella OCD exists, each related project or phase may only require development of the solution-specific Section 5 of the OCD. The CS Div PM should be mindful, however, that omnibus Cabinet Submissions require the agreement of the Prime Minister and early senior level consultation on the approach; this should occur before proceeding.

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[16] Considerations in relation to the nature of the acquisition could result in different acquisition strategies being required for different solutions; for instance, a solution option that is developmental will require a strategy that is quite different from one that is off-the-shelf.

Combined Pass

3.4.16.   For less complex projects, where formal project definition phases have been completed, or for follow-on activities under contract options, it may be acceptable for Defence to bring forward a proposal for Second Pass approval to be agreed at the First Pass consideration[17] (ie effectively combining First and Second Pass approval into a single decision point).

3.4.17.   A Combined Pass may be appropriate, for example, for a follow-on phase of a previously approved project (ie where the follow-on phase received some prior consideration by Government), or as a consequence of strategic assessments which require acquisition of additional quantities of an extant capability.

3.4.18.   Development of a Combined Pass capability proposal will generally include all the activities as for a project in the First to Second Pass stage, as the documentation must be of Second Pass quality.

3.4.19.   Combined Pass approvals should not be considered as a mechanism for shortening project schedules, and any proposal to adopt a Combined Pass approach should be endorsed by the PIRB and approved by Government before any detailed project development work is undertaken.

Intermediate Consideration / Review by Government

3.4.20.   Although the Requirements Phase is generically described as a Two-Pass approval process, there may be a need for additional decision points. This need particularly arises in the case of capability proposals of major strategic significance that have very high costs, have major workforce impacts and/or are politically sensitive. Proposals for new combat aircraft or for major surface or sub-surface combatants are examples of DCP projects likely to involve additional Government consideration.

3.4.21.   The purpose of instituting additional approvals is generally to allow Government to make key intermediate decisions (eg approval of the acquisition strategy or selection of key industry partners). Intermediate consideration may also be required where significant new information becomes available, major issues arise or strategic circumstances substantially change and Government direction is required in relation to the project's scope or direction. Intermediate passes should be seen as an opportunity to assure Government that an important or sensitive project is progressing in the right direction.

Accelerated Acquisition

3.4.22.   In exceptional circumstances the Government may approve an accelerated acquisition process. An accelerated process is used to acquire capability systems deemed of vital priority to meet new or existing capability needs within very short timeframes. Accelerated acquisitions are managed by CDG in close consultation with the CM/JCA and DMO and other FIC providers, and are generally applied to systems that will significantly increase ADF capability or close an urgent operational gap.

3.4.23.   Accelerated acquisition achieves prompt consideration by Government by reducing documentation requirements to achieve an accelerated schedule. A key element of an accelerated acquisition is that only one system or equipment option is realistically capable of providing the capability within the timeframes required by the ADF. The capability system is also purchased as an OTS system with little or no tailoring or modification for Australian conditions. Past examples of accelerated acquisition projects include the acquisition of RFA Hallics, C-17, Super Hornet and Abrams Tank.

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[17] *Drafter's Guide; Preparation Of Cabinet Submissions And Memoranda -Third Edition – July 2009*

Operational Procurement (Rapid Acquisition and Urgent Operational Procurement)

3.4.24.   Operational Procurement comprises two separate but complementary procurement processes, namely Rapid Acquisition (RA) and Urgent Operational Procurement (UOP). RA is defined as the acquisition of new capability, that is operationally urgent and not previously planned, that can be procured and deployed into theatre within the Government approved period of operations, is approved by the Prime Minister, and funded from Government with new 'funding arrangements'. UOP is a procurement activity for procurement of a capability urgently needed in support of operations that is approved by a Capability Manager (CM) and funded using baseline funds or operations supplementation as appropriate. Together they form the Operational Procurement process which is explained in Defence Logistics Manual Vol 8 Part 2 Chapter 2 through Defence Instruction General Logistics 4-1-007 *Logistics Support to Operations and Exercise Manual*.

3.4.25.   **Relationship to Accelerated Acquisition**. Operational Procurement (RA and UOP) is separate to the process outlined in paragraphs 3.4.22 and 3.4.23 for Accelerated Acquisition. While RA is conducted by CDG, the process for RA is currently outside the scope of the DCDH.

Funding the project

3.4.26.   The project is funded in three ways:

a.   from PIRB to First Pass and for Combined Pass Project Development Funds (PDF) are provided,

b.   from First to Second Pass the project uses funds approved at First Pass, and

c.   during acquisition the project uses funds approved at Second Pass.

Project Development Funds

3.4.27.   PDF are available to develop and refine capability options and project documents up to First Pass approval, and for Combined Pass projects. PDF, which is bid for annually and approved by HCS, is typically used for:

a.   establishment and management of IPTs (eg domestic or international travel for IPT members participating in technical and market studies, to investigate capability solutions in other defence forces or to assess industry capability);

b.   the development of the PDS particularly the CDD (ie OCD, FPS and TCD);

c.   technical and trade studies (eg to determine capability performance requirements, conduct technical feasibility studies, assess workforce requirements, assess risks and issues, action risk treatments, assess facilities options, conduct modelling and simulations, and develop and assess prototypes);

d.   market studies (eg to assess industry capacity, technical ability and access to technology);

e.   costing studies to produce robust estimates of acquisition and through-life costs (in some cases, these may be the responsibility of, and be funded by, other Groups); and

f.   analysis to support the development of the Workforce Plan, including any studies required such as Work Health and Safety studies, occupational and Training Needs Analysis (TNA).

3.4.28.   PDF is not to be used for:

a.   First to Second Pass and/or post Second Pass activities;

b.   activities unrelated to the project;

c.   establishment of infrastructure; or

d.   the purchase of Specialist Military Equipment.

Schedule

3.4.29.   The CS Div Scheduling Management System (SMS) enables each project to have a detailed schedule and a key milestone record. The SMS is an integrated program of projects, that can be interlinked to manage the activity and resource interrelationships that often exist not only within a project but also between projects.

3.4.30.   The project schedule starts with a generic Work Breakdown Structure (WBS) and associated project schedule that will need to be tailored by CS Div PMs to suit the project with the assistance of specialist schedule staff. The schedule will be modified as information on the activities and resources needed to complete the activities is gained progressively throughout the life of the project.

Industry Engagement

3.4.31.   Early engagement with industry can provide projects with useful information about the products available in the marketplace, an indication of their expected whole-of-life costs, any innovative options that might be available for addressing the capability gap and insights into the nature of the marketplace required for the development of an acquisition strategy. However, this engagement must not compromise the market or remove options for commercial competition.

3.4.32.   Pre-First Pass solicitation activities may be undertaken to inform the PCP. Solicitation activities prior to First Pass may include the following:

a.   **Request for Information (RFI)**. An RFI[18] is used primarily to obtain estimated (not tender quality) cost, capability and schedule information for preliminary requirements of a new project, particularly pre-First Pass. An RFI is conducted by the acquisition agency at the request of CDG. Industry benefits from gaining an early, more detailed view of the new project, and Defence benefits from establishing market capacity and obtaining sufficient support and option information leading up to First Pass. Responses to an RFI may be from the industry at large or confined to one or more suppliers. Procurement approval must be obtained from an appropriate financial delegate prior to releasing an RFI, in accordance with the Defence Procurement Policy Manual (DPPM)[19], as they are generally part of a larger procurement strategy;

b.   **Rapid Prototyping Development and Evaluation**. The RPDE Program is a vehicle for engaging with industry. A new RPDE activity has been introduced to specifically provide for early industry engagement on the project. The activity is called a modification of the standard RPDE Quicklook (QL) process. Ahead of the pre First Pass PIRB, the CS Div PM engages with RPDE staff to help craft QL questions appropriate to the project. The proposed RPDE QL is then presented at the PIRB for endorsement prior to the PM submitting the endorsed QL proposal to RPDE for action. The outcome of the RPDE QL is intended to inform the PCP; and

c.   **Capability and Technology Demonstrator Program**. The CTD Program[20] allows the consideration of innovative options in a relatively low risk environment. The program is a collaborative activity between CDG, DMO and DSTO that enables Australian industry to demonstrate how advanced technologies can enhance priority areas of Defence capability. The programs emphasis is on technologies under development in Australia that may provide capability

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[18] *Defence Procurement Policy Manual*, 1 October 2010, Section 4.9, Staged Procurement provides more information.

[19] Ibid, paragraph 6, page 4.9-1, 4.9-2.

[20] For more information on the CTD Program visit www.dsto.defence.gov.au/ctd/

advantages for Defence and allow Australian industry to position itself to provide in-service capabilities and through-life support. An intent of the CTD Program is to further mature the technology to support the transition of the technology to capability.

3.4.33.　　Industry input can also be obtained through the following means, which are not formal solicitation activities.

a.　　**Joint Decision Support Centre**. JDSC brings together science and technology expertise from across DSTO, provides secure facilities, uses modelling, simulation and analysis tools and information networks so that stakeholders can explore and analyse capability issues in a systematic way in preparation for making proposals to committees;

b.　　**Industry conferences / Australian and overseas visits**. A valuable method for gaining insight into emerging capabilities, likely costs and production capacities without having to undertake a formal RFI, is attendance at scheduled industry conferences and visits to foreign military forces or visits to Australian or overseas industrial facilities; and

c.　　**Environmental Working Groups (EWGs)**.　A EWG, typically chaired by the relevant CS Div Branch Head, provides an opportunity for the two-way exchange of information with industry in relation to DCP projects.

3.4.34.　　Further information on Defence industry policy is provided in the Additional Guidance on Defence Industry.

Information Management

3.4.35.　　To promote effective project management CDG has adopted an approach to information management in which tailored enterprise wide applications are used by CDG. Specifically:

a.　　project documentation is stored in Objective (Defence's record management tool) using a specified file structure for ease of discovery;

b.　　project data and reporting utilises the Capability Development, Management and Reporting Tool (CDMRT); and

c.　　project scheduling uses Open Plan Professional (OPP).

Project Documents

3.4.36.　　For a complete description of all project documents see the PDS.

Project Capability Proposal

3.4.37.　　The Project Capability Proposal is the key document upon which the MINSUB or CABSUB is based. It incorporates and summarises the key points of the Business Case for each option and recommends one or more preferred capability options for further investigation after First Pass.

3.4.38.　　It is essential that the CS Div PM has a thorough understanding of the risks and issues within the Proposal, and is able to explain and justify (if necessary) any aspect of the capability proposal or subordinate business cases.

Decision Documents

Initial Business Case

3.4.39.　　Each option presented to Government for First Pass consideration requires an Initial Business Case (IBC). The IBC describes the reasons for the project and the justification

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for undertaking the project based on estimated costs of the project, the risks and expected benefits as follows:

a.   an overview of the capability option, including how it aligns with the Statement of Strategic Need[21];

b.   an outline of the key advantages and disadvantages of the capability option, including a discussion on the capability gap, if any;

c.   schedule information for key events and decision points in the Requirements Phase, Acceptance Into Operational Service (AIOS) milestones in the transition through Acquisition Phase to In-service Phase, to the Planned Withdrawal Date (PWD) of current capability;

d.   the expected Life Of Type (LOT) for the option, an assessment of the likely obsolescence risk and potential treatment options;

e.   estimates and risk assessments for total acquisition and whole-of-life costs, broken down by major components of the proposed equipment/system, workforce, logistics supportability, and appropriate contingency levels;

f.   assessments of technical, schedule, cost, materiel implementation, safety, security, facilities, workforce and environmental risk and treatments to manage those risks, endorsed by relevant organisations in Defence;

g.   the net Workforce Estimate (extracted from the Workforce Plan);

h.   any test and evaluation that could be undertaken prior to Second Pass to treat risk;

i.   advice about industry implications, including an overview of the acquisition strategy and through-life support, and both sectoral implications and regional implications in Australia;

j.   advice about proposed subsequent reporting to Government on progress of the project; and

k.   the strategy for getting from First to Second Pass approval, including industry solicitation, studies to be carried out and funding requested to finance those studies (these should include any required Science & Technology, Modelling and Simulation, Test & Evaluation (T&E) activities, Work Health and Safety (WHS), Training Needs Analysis, Workforce, Intelligence and Environmental Impact Assessments).

3.4.40.   A good business case is:

a.   clearly aligned with strategic guidance and Government direction;

b.   agreed by Defence stakeholders, in line with the Capability Development process;

c.   complete;

d.   analysed and agreed by subject matter experts;

e.   supported by overseas experience or simulation where appropriate;

f.   underpinned by a strong evidence base; and

g.   understandable and logical.

3.4.41.   The Preliminary CDD, Workforce Plan and cost estimate are supporting documents for each IBC.

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[21] This is available from FSDD through PCD.

Acquisition Strategy[22]

3.4.42.   Each capability system option proposed for First Pass consideration must be accompanied by a description of how the capability is to be acquired and its support implemented. The strategy is prepared by the Acquisition Agency (normally the DMO, but may be CIOG, I&S or DSRG) in consultation with the IPT and CDSG. Each acquisition strategy[23] will:

a.   describe the alternatives, and the preferred alternative, for procuring and implementing each specific capability system beyond Second Pass;

b.   detail any solicitation activities to be undertaken in the stage between First Pass and the next pass (typically Second Pass, but could be an Intermediate Pass);

c.   explain how the proposed implementation strategy, including procurement approach, will create the best value for money and commercial outcomes for the Commonwealth;

d.   explain how the proposed implementation strategy, including procurement approach, will provide the intended in-service support arrangements (both in Australia and on operations) described in the Support Concept; and

e.   identify the steps and stages in the implementation strategy, in particular identifying any steps at which the approach has interdependencies:

(1)   with other projects (eg where multiple projects might need to come together to conduct an integration / risk reduction activity); and

(2)   across Defence agencies (eg across the different providers of the elements and sub-elements of the FIC).

3.4.43.   Typically, some form of solicitation (eg Request For Tender (RFT), Request For Proposal (RFP) or Letter Of Request LOR) will occur after First Pass approval by Government. The acquisition strategy (First Pass) for a capability system option establishes strategic environment considerations that are likely to influence the acquisition approach and the establishment of in-service support must be sufficiently detailed to enable the costs through to the next Pass to be properly established and for committees and Government to understand the costs and risks associated with implementing the capability system option.

3.4.44.   The acquisition strategy (First Pass) is endorsed by the key stakeholders and approved by the acquisition agency (typically at the two star/Band 2 level).   Further information on the acquisition strategy is provided in the Additional Guidance on Acquisition Strategies.

Capability Risk Assessment

3.4.45.   Capability project risks are managed by CS-Div staff up to Second Pass in accordance with the CDG Project Risk and Issues Management.

3.4.46.   The PDS provides guidance on the risk documents and registers to be developed for the project.

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[22] In the DMO, the document that provides the acquisition strategy is known as the Acquisition and Support Implementation Strategy (ASIS).

[23] This requirement is not stating that a separate acquisition strategy is required for each capability system option; however, this approach may be required if the capability system options are sufficiently different. The fundamental principle here is that the strategy must be sufficiently developed to enable the proper identification of costs (both acquisition and NPOC) and risks for each capability system option, thereby enabling committees and Government to incorporate these considerations into their deliberations. If these aspects can be cogently addressed through a single document (eg by detailing a core strategy, with optional elements for each capability system option), then the use of a single document would be appropriate.

Safety - First Pass Work Health and Safety Assessment

3.4.47.   While the First Pass Work Health and Safety Assessment is included in the PDS the guidance for completion is currently contained in the Additional Guidance on Safety in Capability Development. The purpose of the First Pass Work, Health and Safety Assessment (First Pass WHSA) is to support program shaping and capability decision-making to reduce safety risks from an early stage. These safety assessments identify the types of hazards and their associated risks anticipated in each capability option as an input to the CGRB. This early assessment supports the adoption of the most effective levels of risk control such as 'elimination' and 'substitution' into the Capability System safety program. The assessment aims to identify safety risk controls within the capability system and to identify relevant compliance requirements, based upon the level of understanding at this lifecycle phase. Information gained from industry engagement prior to First Pass, when undertaken, can be particularly useful to complete this assessment.

3.4.48.   These assessments are completed by the CS Div PM through consultation with the IPT and are an input to the risk register (through the Capability Development Management Reporting Tool (CDMRT)), the preliminary capability definition documentation requirements and may also inform the First Workforce Plan. This assessment is endorsed by the CDSG. The guidance and assessment template can be found in the Additional Guidance on Safety in Capability Development.

DSTO Technical Risk Indicator

3.4.49.   A Technical Risk Indicator (TRI) document provides a high-level identification of the key technical risks and issues associated with the options being considered in the early stages of the project. The TRI should consider the proposed system from a capability perspective, discussing both the options being considered for acquisition, and the key systems with which the proposed options will need to interact to deliver the expected capability.

3.4.50.   The intent of the TRI is firstly to identify if there are high technical risks associated with any of the options, both to ensure appropriate treatment strategies are put in place as soon as practical and to inform the PIRB in selecting options to be pursued further; and secondly, if there are any developmental systems or technologies which could potentially provide greater capability and which could be developed in time to meet the proposed schedule, they should be raised.

3.4.51.   The TRI is developed by the Project Science and Technical Advisor (PSTA), and will address the differing risk profiles that arise from OTS, Australianised or modified OTS, an in-service upgrade and developmental capability options. The TRI is approved by the relevant DSTO Chief of Division. A more detailed Technical Risk Assessment (TRA) will be done later in the life of the project as more information becomes available and the options are better defined. Refer to the Additional Guidance on DSTO Project Documentation.

DSTO Technical Risk Assessment

3.4.52.   The TRA is part of the PCP and identifies and assesses the technical risks associated with each option in the proposal. The primary purpose of the TRA is to inform stakeholders of the areas of technical risk and the feasibility of the technology proposed so that appropriate risk treatments can be developed. To enable risk treatment to occur as soon as practicable, an initial draft TRA is developed after PIRB endorsement of the option set to identify information gaps and risk areas. The TRA is then refined until it is endorsed and presented to the CGRB. The TRA is developed by the PSTA and approved by the relevant DSTO Chief of Division.

3.4.53.   See the Additional Guidance on DSTO Project Documentation for further information on the development of the TRA.

DMO Materiel Implementation Risk

3.4.54.   DMO will conduct a Materiel Implementation Risk Assessment (MIRA) for all projects where it is the Acquisition Agency. The MIRA is a summary of the most significant risks that will impact on DMO's ability to deliver the Materiel System (Mission and Support System) outcomes on time, within budget, and to the required scope and quality. For further guidance on a MIRA refer to the DMO *Project Risk Management Manual*.

DSRG Environmental Impact Assessment

3.4.55.   The Environmental Impact Assessment (EIA) considers impacts that are likely to result from potential activities or decisions, and is driven by legislative requirements. During the planning stage and pre-First Pass, important environment and heritage considerations include:

a.   identification of standards and regulations that will need to be met, and

b.   scoping environmental impacts.

3.4.56.   The Environmental Impact Management Section within Infrastructure Division is responsible for managing the EIA process. The section has scoped a range of environmental considerations specific to aerospace, maritime, land, electronics and communications, and weapons and munitions. More information on these considerations is provided in the *Defence Environmental Manual.*.

First Pass Workforce Plan

3.4.57.   A Workforce Plan is a mandated analysis of the total workforce required to support the development, acquisition, transition, implementation and sustainment of a capability. It contains the robust analysis explaining and validating the workforce numbers, workforce changes, risks and treatment strategies to ensure the workforce is understood and able to be achieved and sustained. Increases in workforce numbers, changes to workforce mix, and significant risks must be specifically communicated to and agreed by Government.

3.4.58.   The Workforce Plan is written by the CS Div PM, working in collaboration with the IPT, involving all affected Groups and Services. Where workforce requirements and risks differ greatly across the capability options, separate plans are to be developed for each option. Where workforce requirements and risks are consistent across the options, they can be addressed in the one Workforce Plan. A Workforce Plan template has been developed by DPG to assist PMs.

3.4.59.   The Workforce Plan must be aligned with all project documentation and should include input from relevant studies and reports. A Workforce Plan must include the following:

a.   existing workforce baseline information (numbers, mix, employment categories, rank/level, and locations);

b.   future workforce requirements for Capability Development, Acquisition, In-Service and support, and DMO sustainment (numbers, mix, employment categories, rank/level, and locations);

c.   a Workforce Estimate (a summary of all Groups and Services Average Funded Strength (AFS), civilian Full Time Equivalent – Average (FTE-A) and Reserve Day future requirement across financial years);

d.   alignment with the Defence White Paper allocation, or an agreement for additional workforce provision by the Secretary of the Department of Defence and Chief of Defence Force Advisory Committee (SCAC);

e.   analysis of workforce issues (such as future workforce demand and supply analysis, critical categories impact, structural sustainability impact, skills required, training, costs, project transition and scheduling) and identification of risks;

f.   identification of future workforce studies and associated resources;

g.   risk treatment strategies; and

h.   CDSG and relevant stakeholder endorsement.

Corporate Services and Infrastructure Requirement

3.4.60.   DSRG is charged with managing the Defence estate, including training areas, and the provision of base support, personnel and other shared services. New or upgraded platforms or weapon systems require the consideration of disposition (both the location of any new capability and relocation of any existing capability's functions, people and/or equipment); and the modification, acquisition or disposal of associated facilities, infrastructure and/or land, sea or airspace; and additional or changed support services provided by DSRG. Facilities and training areas, including associated infrastructure and land, also have through-life management costs which must be included in the overall capability cost. Note that there is a cost to Defence for the provision of facilities to contractors and this will require consideration when preparing budgets (refer to Defence Instruction General Administration 35-1 *Procedures for the Use of Defence Estate Assets by non-Defence organisations or individuals including commercial contractors*).

3.4.61.   The CS Div PM must develop a Corporate Services Infrastructure Requirement (CSIR) Part 1 to progress any DSRG services or infrastructure requirements for their DCP project. The Deputy Director Infrastructure Support (CS Div) is the contact for infrastructure aspects for all DCP projects and will provide assistance with the development of the CSIR Part 1 and coordination of its review by DSRG. The approved CSIR Part 1 will be lodged by the CS Div Branch Head to DSRG. This is required for a CSIR Part 2 (strategic screen) to be completed for First Pass approval by DSRG. The CSIR Part 2 will provide broad estimates based on the detail and scope provided in the CSIR Part 1. The CSIR Part 2 is used to support the development of the First Pass business case.

3.4.62.   See the PDS, available from the CDG intranet, for more information on the development of infrastructure business cases in support of DCP projects.

Cost Estimate/Cost Model

3.4.63.   The cost model is a standardised spreadsheet, approved by CAB that is used to present whole-of-life cost information (including workforce estimates) and capture the assumptions on which the costs were developed.

3.4.64.   Generally, the First Pass cost estimate would be supported by active industry engagement through market surveys, targeted cost information collection activities and studies. Furthermore it should also be informed by the requirements of stakeholders such as DMO, DPG, DSRG, CIOG, DSTO and the Services.

3.4.65.   The cost estimate at First Pass consideration is to be based on the cost model and should clearly articulate the basis (and cost drivers) for the estimates and should be of sufficient quality to:

a.   determine the overall affordability of each option, both in terms of acquisition and NPOC;

b.   allow valid discrimination between the options and support the analysis given in the documentation of the workforce/cost/capability trade-offs between options;

c.   identify workforce requirements and personnel and operating cost offsets from existing capability systems; and

d.   capture all known cost risks and assign contingency to each cost element based on assessed cost risk exposure.

3.4.66.   The cost estimates must include consideration of:

a.   capability development and acquisition activities;

b.   studies or discrete risk treatment activities to be conducted by Defence and/or industry;

c.   the level of contingency funding and the cost elements to which it is allocated;

d.   whole-of-life costs, including in-service support and disposal costs;

e.   workforce requirements (gross and net workforce) and costs to be incurred by all associated stakeholders;

f.   Operational Test and Evaluation (OT&E) and prototype items for testing and analysis; and

g.   project funding required to progress from First to Second Pass approval including travel, contractors or legal costs and the cost of tender activities, such as advertising and the hire of resources for evaluation (Note: First to Second Pass cost estimates must be sufficient to deliver the activities and products required to achieve Second Pass approval, as Government will be asked to agree to the expenditure of the specified funds at First Pass).

3.4.67.   It is essential that the cost estimate is endorsed by the relevant stakeholders, and clearly articulates the:

a.   associated scope and cost basis;

b.   assumptions, inclusions and exclusions;

c.   source of the estimate;

d.   time currency of the estimate; and

e.   assessment of cost risk and allocation of contingency.

3.4.68.   Refer to the Additional Guidance on Cost Estimating. for further information on the development of cost estimates.

Technical Documents

Preliminary Capability Definition Documents

3.4.69.   Preliminary versions of the CDD are required prior to First Pass to support development of the IBC and associated costs, and to provide a basis on which cost versus capability trade-offs can be made, if required.

3.4.70.   The PCDD are the result of a process that identifies the capability and broadly defines its operational scope, and consists of:

a.   Preliminary OCD (POCD);

b.   Preliminary FPS (PFPS); and

c.   TCD.

3.4.71.   The level of detail required in these preliminary documents will be influenced by the strategic importance, complexity, technology maturity and technical risk inherent in the capability. Sufficient detail must be provided to support the development of robust business cases and well founded arguments for the level of capability being sought.

3.4.72.   CDD are not usually required for upgrade projects, acquisition of additional capabilities similar to capabilities already in-service or enhancements to existing capabilities, provided that they are suitable for any associated solicitation activities. In such situations, the CS Div PM can gain PIRB approval to use already approved CDD (from previous project approvals) or relevant in-service documents such as concept of operations, system specification, and Test and Evaluation Master Plan (TEMP) to meet the same requirements as the CDD.

3.4.73.   **Capability definition in form other than physical documents**. Systems that allow the definition of the capability and storage of the definition in a format that can be readily verified and used by the system developers, in accordance with the CDD Development Guide removes the requirement for the physical production of the CDD. In such cases, the

endorsement and approval of the capability definition by the stakeholders is still required, and a hard copy of the CDD may still be required for industry solicitation and audit purposes.

3.4.74.   The CS Div PM is responsible for the development the PCDD, and obtaining their endorsement prior to approval by HCS. Further information on the CDD is provided in the PDS.

Preliminary Operational Concept Document

3.4.75.   The POCD is the pivotal document in the CDD suite. It is used to translate the needs of the warfighter from the language of the warfighting domain (operational needs) into that of the engineering domain (engineering specification). It should:

a.   be solution independent;

b.   describe the characteristics of the required capability from an operational perspective;

c.   facilitate an understanding of the overall system goals for implementing the capability system across all elements of FIC;

d.   detail the missions and scenarios associated with the operations and support of the capability system; and

e.   provide a justifiable basis for the formal requirements of each system change or new element that need to be delivered by each FIC provider.

3.4.76.   The POCD is developed to provide *initial definition of the capability system needs* and must address all the FIC elements. At First Pass the document should include enough detail to adequately capture the scope of capability need and FIC system changes so that stakeholders can identify the full extent of the changes that they will be required to implement.

3.4.77.   Development of the POCD must also encompass populating the Integrated Defence Architecture with the relevant architectural elements for the capability, and the incorporation of agreed Australian Defence Architecture Framework V2 (AUSDAF2) products in the document set. The CIOG Stakeholder Engagement Team should be contacted to negotiate Enterprise Architecture Branch support, including scheduling of a compliance assessment prior to finalisation of the POCD.

3.4.78.   The document breadth and depth must also be sufficient to support the initial cost, schedule and risk assessments, initial cost capability tradeoffs and presentation of possible solutions to Government. Therefore at First Pass the scope and depth of the document will vary, consistent with the level of project complexity.

3.4.79.   **Support Concept.** The SC should, at First Pass, be developed within the POCD Section 5. The SC outlines the concepts for the in-service support solution, broadly outlining the philosophies, concepts, requirements and constraints associated with the support aspects of the Materiel System, including support on operations. The SC will describe the integration of the support elements necessary to provide optimum support including detail on the needs of the Support System for the Life Of Type. These aspects may be different for each option and, therefore, may need to be identified for each option. The SC provides a source of information for the development of:

a.   Integrated Logistics Support Plan;

b.   Acquisition Strategy;

c.   Life Cycle Costing Analysis (LCCA);

d.   Net Personnel and Operating Costs; and

e.   Initial Business Case.

3.4.80.   The support concepts and requirements, including associated support scenarios, should reflect key policies and standards governing the support of the option and identify existing support infrastructure (where applicable) that is either mandated or available to be

used. This could include infrastructure relating to the domains of operating support, engineering support, maintenance support, supply support and training support.

3.4.81.   **Approval**. HCS is the principal approving authority for the POCD, through the CS Div Branch Head.

Preliminary Function and Performance Specification

3.4.82.   The primary function of an FPS is to describe the requirements of the capability system and provide a means by which individual stakeholders propose to meet the capability system requirements allocated to them.

3.4.83.   A single PFPS is generally sufficient to cover all options. A matrix that identifies which requirements are needed for each option may be developed to distinguish the options. It must provide sufficient technical analysis and understanding (depth) to support the capability, cost, schedule and risk assessments, and must be of sufficient detail to provide *formal, verifiable and unambiguous requirements* that are derived from and traceable to the needs identified in the POCD.

3.4.84.   Care must be taken in developing the PFPS (and subsequent FPS) to ensure that 'essential' criteria are absolutely essential to achieving the agreed capability outcomes. Too may 'essential' criteria can be a considerable constraint on the options available and drive the project cost estimates.

3.4.85.   **Approval**. HCS is the approving authority for the PFPS.

Test Concept Document (TCD)

3.4.86.   The TCD considers test and evaluation (T&E) requirements for all options presented at First Pass. It is a concept document that considers T&E requirements, not a final plan of how the T&E is to be conducted. The TCD outlines the concept for T&E to be executed between First and Second Pass and the T&E strategy to be undertaken following Second Pass approval. It provides the basis for identifying the:

a.   critical issues that need to be resolved through the use of T&E;

b.   major project risks that may be mitigated or reduced through the application of T&E;

c.   link between the results of T&E and key milestone decisions; and

d.   associated funding and resource requirements, including the T&E authorities and agencies likely to be involved.

3.4.87.   Depending on the option set, a TCD may be required for each option.

3.4.88.   Where T&E activities are identified between First and Second Pass, the TCD is to capture the required resources to a sufficient level of detail, for inclusion in the project cost model, to support approval of these funds by Government at First Pass approval.

3.4.89.   **Approval**. DGT&E is the approving authority for the TCD.

3.4.90.   Further information on T&E is provided in the Additional Guidance on Test and Evaluation.

Planning Documents

First to Second Pass Project Management Plan

3.4.91.   It is the responsibility of the relevant CS Div PM to develop this PMP prior to First Pass, in consultation with other IPT members.

Governance Documents

Materiel Acquisition Agreement

3.4.92.   An MAA specifies the scope (supplies and support services), schedule, price, milestone completion criteria and customer (ie Defence) furnished supplies for work assigned to DMO for an individual DCP project, as approved by Government. The MAA is signed by HCS and relevant Acquisition Agency and CM/JCA representatives at the DCC that immediately follows Government approval.

3.4.93.   The responsibility for developing the MAA lies with the CS Div PM (in conjunction with DMO Emerging Project Team if constituted) in consultation with the CM/JCA and DMO Systems Program Office (SPO).

3.4.94.   Further information on the MAA is provided in the Additional Guidance on Materiel Acquisition Agreements available from the CDG intranet.

Joint Project Directive

3.4.95.   Following First Pass approval by Government, SEC/CDF will issue a Joint Project Directive (Joint PD) that covers the time from First Pass approval to the Second Pass approval. The Joint PD will be drafted by the CS Div PM prior to First Pass, in consultation with the CM/JCA and the acquisition agency, and is to be included in the PDS considered by the CGRB. At the DCC immediately following First Pass approval, the Joint PD is released for staffing to SEC/CDF for signature and assigns accountability and responsibility for the project from First Pass approval to Second Pass approval in accordance with the First to Second Pass PMP. A synopsis of the Joint PD is provided to Government in the MINSUB or CABSUB.

3.4.96.   The First to Second Pass Joint PD assigns accountability and responsibility to:

a.   CCDG for progressing the project from First to Second Pass, in accordance with what was agreed at First Pass;

b.   the CM/JCA and acquisition agency assisting in the development of the capability requirements and providing agreed resources;

c.   other key enablers, such as CIO, DEPSEC DSR and CDS, for the provision of elements of FIC, and DEPSEC DP for the management of the Department's workforce allocations via the Workforce Guidance Trails; and

3.4.97.   Specific arrangements for change consideration (including thresholds) will be developed by CCDG in consultation with key stakeholders and documented in the Joint PD.

Section 3-5 - CGRB and DCC (First Pass)

Capability Gate Review Board

3.5.1.   The Capability Gate Review Board (CGRB) provides senior endorsement of a project prior to its consideration by DCC. In doing this, the CGRB ensures that required documentation has been developed to a standard that enables development of a submission sufficient to support consideration and decision making of higher committees, Central Agencies and ultimately Government.

3.5.2.   Chaired by HCS, the CGRB tests, reviews and clears capability proposals and supporting documentation, and provides guidance and direction to CS Div PM regarding any shortfalls or corrective actions required to be addressed before higher committee consideration.

3.5.3.   As failure to achieve CGRB endorsement is likely to have an adverse impact on the project's ability to meet DCC and National Security Committee of Cabinet (NSC) timelines, CCDG has mandated that all projects must be reviewed by their respective CDSG prior to CGRB consideration.

3.5.4.   CGRB members are able to access and comment on all project documentation if they have significant concerns that must be addressed before the project can be considered by DCC.

3.5.5.   Full details on the membership and documentation requirements for CGRB can be obtained from the CGRB Business Rules available from the CDG intranet.

Defence Capability Committee

3.5.6.   The role of the Defence Capability Committee (DCC) is to consider the strength of argument in the submission to Government of a capability proposal. The DCC focuses on individual projects to ensure:

a.   consistency with Government policy, the Defence White Paper, Defence Planning Guide and the DCP;

b.   a whole-of-life and whole-of-capability perspective;

c.   an acceptable return on capital expenditure;

d.   that there are no unmanageable strategic, security, technical, logistics, schedule, workforce or financial risks; and

e.   rigorous, independent scrutiny of capability, cost, workforce, schedule and risks and risk treatment actions.

3.5.7.   The key decisions/recommendations that might be considered by the DCC are:

a.   suitability of the draft Joint PD, MAA, MINSUB or CABSUB;

b.   suitability of the new policy proposal (if required);

c.   recommended acquisition strategies and capability options;

d.   priorities for, or balances of, investment (workforce and funds);

e.   the viability and adequacy of the options considered; and

f.   the appropriate offsets and resources (workforce and funding) sources.

3.5.8.   Approved projects will return to DCC for signature of their MAA at the DCC immediately following Government approval.

3.5.9.　　**DCC Documents**. Following a project's endorsement by the CGRB, the following documents will be prepared and presented to DCC:

a.　　　　MINSUB or CABSUB (as appropriate);

b.　　　　independent acquisition advice (from CEO DMO);

c.　　　　Technical Risk Certification (from CDS);

d.　　　　draft Joint PD for endorsement and clearance. After Government decision this is staffed to the Secretary of the Department of Defence and Chief of the Defence Force for signature; and

e.　　　　draft MAA for endorsement at DCC before Government approval. At the DCC following Government approval final MAA for signature.

3.5.10.　　The underlying PDS is available to members for review and comment should they have significant concerns that must be addressed before the project can be considered by Government.

3.5.11.　　CIR Div will develop the draft MINSUB or CABSUB and present it for DCC consideration.

3.5.12.　　**DCIC.** As discussed at paragraph 1.5.16d, the DCIC will consider projects of significant strategic imperative, very high cost or high political sensitivity, or with issues that cannot be resolved by the DCC. Any consideration by the DCIC is in addition to that of the DCC.

Section 3-6 - First Pass Review by Government

Ministerial and Cabinet Submission (MINSUB and CABSUB)

3.6.1.   **Secretary of the Department of Defence and Chief of the Defence Force clearance**. Draft MINSUBs or CABSUBs endorsed by the DCC are submitted to the Secretary of the Department of Defence and Chief of the Defence Force for clearance before submission to Government.

3.6.2.   **Agreement with information in submission**. Prior to submission to the Secretary of the Department of Defence and Chief of the Defence Force the final MINSUB or CABSUB is reviewed by key responsible authorities, generally at the Group Head level, to ensure that the detail is correct and aligns with departmental policies and allocations. In particular it states that, for the submission:

a.   the CM/JCA will formally advise the Secretary of the Department of Defence and Chief of the Defence Force that they agree (or otherwise) the capability being sought and understand the proposed acquisition strategy;

b.   CCDG agrees with the capability aspects;

c.   the CM/JCA and CCDG agree on the level of risk associated with options that do not fully close the capability gap;

d.   the CEO DMO (if responsible for acquisition) agrees with the summary acquisition strategy and cost, schedule and risk estimates;

e.   the CFO agrees with the costs presented and that the project is affordable within the DCP;

f.   DPG agrees the net Workforce Estimate is aligned with portfolio workforce allocations; and

g.   the CDS agrees the description of technical risks (via the Technical Risk Certification).

3.6.3.   The CEO DMO also provides independent written advice on the cost, schedule and commercial aspects as an attachment to the MINSUB or CABSUB.

3.6.4.   **Timing of the submission.** The time from when the DCC agrees on what should be presented to Government for decision and the National Security Committee of Cabinet (NSC) meeting (if applicable) is typically four months. This time includes final drafting of the submission, internal clearance processes, ministerial clearance and NSC approval. The critical deadline is the final draft of the MINSUB or CABSUB, which is typically 11 weeks out from the scheduled NSC date. Changes to the submission after that may cause the project to go back to the DCC for further consideration and/or to slip to a later NSC date, depending on the nature and scale of the changes proposed.

3.6.5.   **Template**. The MINSUB or CABSUB follows a particular template and the CABSUB is strictly page limited. It is submitted with an attached business case for each capability option, and must identify the:

a.   background—including strategic policy and references to earlier Cabinet decisions and ministerial correspondence, recent developments and other factors;

b.   rationale—how the option addresses the capability gap agreed by Government in the DCP;

c.   key outcomes sought—that is, the capability option requiring approval;

d.   levels and types of risk associated with the options implementation; and

e.   financial and workforce implications including expected whole-of-life costs.

Central Agencies Review

3.6.6.   The Central Agencies are the Departments of Prime Minister and Cabinet Finance and Deregulation (DoFD), and Treasury (as noted in paragraph 3.2.12.n.). They provide an additional level of scrutiny and advice on Capability Development proposals from a whole-of-Government perspective. Each First and Second Pass submission requires the agreement of DoFD on the detailed acquisition and operating costs and financial risk assessment. This is especially the case for decisions on DCP capabilities or decisions having important political, workforce and/or financial implications for Government.

Early engagement of Central Agencies.

3.6.7.   Early engagement with the Central Agencies is encouraged. FASCIR and HCS will coordinate early project briefings.

First Pass Consideration and Approval by Government

3.6.8.   Government will consider the submission (ie MINSUB or CABSUB) and typically approve a solution-class option (comprising a number of options) for further investigation. The level at which First Pass approval is required with Government depends on the estimated cost of the proposal and on whether there are any political or diplomatic sensitivities associated with the proposal.[24] The Minister for Defence will often determine the appropriate mechanism for approval depending on a project's sensitivity, previous considerations, etc.

Post-First Pass Project Approval Review

3.6.9.   Once Government has approved the capability proposed in the MINSUB or CABSUB, the CS Div PM (seeking advice from CP Branch and CIR Div) is to align the documentation (draft Joint PD, MAA, CDD, acquisition strategy, etc) with the project approval from Government prior to submitting the Joint PD to the Secretary of the Department of Defence and Chief of the Defence Force for signature. If there are significant changes, these should be noted in the covering brief to the Secretary of the Department of Defence and Chief of the Defence Force..

3.6.10.   Any changes made by the Project Approval authority (refer to the Additional Guidance on Project Approval) need to be communicated to affected Joint PD action addressees as soon as possible to ensure they are aware of the Project Approval authority's decision and the consequential revisions to the Joint PD that is issued by the Secretary of the Department of Defence and Chief of the Defence Force. The revised Joint PD will then be passed to HCS for clearance and for submission to the Office of the Secretary of the Department of Defence and Chief of the Defence Force for signature.

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[24] Approvals are based on 'out turned' dollars – refer to the Additional Guidance on Project Approval for more information.

Chapter 4
The Requirements Phase
(Second Pass)

Section 4-1 - The Requirements Phase – Second Pass

4.1.1.　　　The goal of this stage of the Requirements Phase is Second Pass approval by Government to acquire and implement an agreed capability that fulfils the capability requirement identified in the Defence Capability Plan (DCP). The approval will include a defined acquisition budget; schedule; level of performance; a budgeted whole-of-life cost; and the workforce requirement.
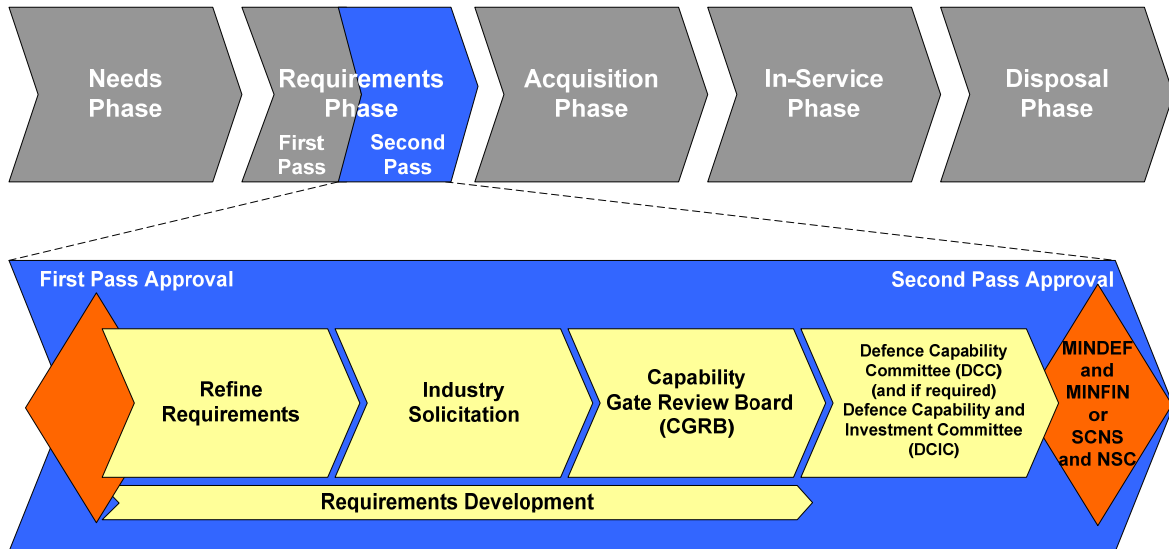
Figure 4-1: Requirements Phase—Key Second Pass activities

4.1.2.　　　The key Second Pass processes are depicted in Figure 4-1. After Government has approved a capability proposal at First Pass, the task for Capability Development Group (CDG) is to further refine the option(s) agreed by Government. Typically, this will involve the investigation of specific solutions within one solution-class level option and the development of an Acquisition Business Case (ABC) developed for each option to be considered at Second Pass.

4.1.3.　　　The proposals to be considered by Government at Second Pass are summarised in the Project Document Suite (PDS). These documents address the capability to be acquired, the cost, workforce and risk implications, and the schedule for introduction into service. The PDS must also address how the proposed capability will be acquired and introduced into service, including statements on Australian industry participation, Defence and Government-specified industry requirements, intellectual property issues, through-life support and impacts on regional economic development in Australia, and how the transition to the new capability will be managed.

4.1.4.　　　The key activities to achieve Second Pass are:

a.　　　detailed requirements definition/CDD refinement (pre and post-solicitation);

b.　　　solicitation documentation development (eg Request for Tender (RFT), Letter of Offer and Acceptance (LOA), etc);

c.　　　industry/Foreign Military Sales (FMS) solicitation activities, including contract negotiations and offer definition activities (if required);

d.　　　Capability Development Stakeholder Group (CDSG) endorsement of project documents;

e.   Capability Gate Review Board (CGRB) endorsement of the updated Project Capability Proposal (PCP), Acquisition Business Cases (ABCs) and commercial, technical and workforce risk assessments (Second Pass);

f.   Defence Capability Committee (DCC) and, where required, Defence Capability and Investment Committee endorsement of the cabinet submission (CABSUB) or ministerial submission (MINSUB) (Second Pass); and

g.   Government approval of the MINSUB or CABSUB.

Stakeholder Engagement

4.1.5.   The Integrated Project Team (IPT) and Capability Development Steering Group (CDSG) provide the primary means of garnering stakeholder input and endorsement of all Second Pass activities and products. The IPT and CDSG are chaired by CDG and continue to meet under the terms of reference established for First Pass.

4.1.6.   An effective IPT and CDSG are critical elements in facilitating and guiding a project's approach to achieving Second Pass.

Integrated Project Team

4.1.7.   The IPT (see 3.2.14) continues to be the primary stakeholder engagement forum from First to Second Pass.

Capability Development Stakeholder Group

4.1.8.   The CDSG (see 3.2.21) continues to provide oversight and executive support to the IPT from First Pass to Second Pass. Members of the CDSG, as representatives of their Group or Service, will continue to provide information, advice or guidance, and commit the resources required to achieve the objectives of specific projects as directed in the Joint Project Directive (Joint PD).

Section 4-2 - Requirements Development (Second Pass)

Requirements Development

4.2.1.   First Pass approval provides Government endorsement and direction to further develop an agreed solution class option (or options) and allows Defence to commence in-depth investigation and expend funds in order to achieve Second Pass approval. This translation from First Pass to Second Pass encompasses a strong emphasis on further defining the *function and performance requirements*, and refining and specifying those requirements in order to enable industry solicitation.

4.2.2.   First Pass approval may also have included agreement to conduct specific studies and capability risk management activities to help develop and cost the options approved for further examination. These studies and activities may include work by Defence Science and Technology Organisation (DSTO) or industry to help specify the performance requirements of a proposed solution, to assess technical risk and safety, to model and analyse workforce factors, to understand environmental impacts, or to estimate costs. Another example could be studies conducted by the Defence Science and Reform Group (DSRG) (with an industry panel member) to analyse the related infrastructure requirements and develop a strategic business case for infrastructure support and services.

4.2.3.   The Capability Systems Division Project Manager (CS Div PM), supported by the IPT, remains responsible for managing the project through to Second Pass Government approval. During this stage the broad capability needs are translated into a set of specific functional and technical performance requirements (and the concept for its in-service support) for the acquisition of capability systems within cost and schedule constraints. A funded acquisition agency project office will be established, and for complex projects the Capability Manager (CM)/Joint Capability Authority (JCA) may establish a dedicated transition team. Solicitation is likely to be conducted to identify specific and detailed capability solutions, schedules, risks and costs. The solicitation process is described below (see paragraph 4.2.12).

4.2.4.   **Funding.** Funding for all activities to achieve Second Pass approval is provided from the project's funds as approved by Government at First Pass.

Capability Definition Documents (Refinement)

4.2.5.   After First Pass approval, the broad requirements articulated in the Preliminary Capability Definition Documents are to be reviewed and refined in the Capability Definition Documents (CDD). The review will incorporate Government direction provided at First Pass, and will provide more detailed analysis of the function and performance requirements of the capability.

4.2.6.   **CDD Evolution.** The refined CDD evolves throughout the First to Second Pass timeframe. It is essential that they be endorsed and approved throughout this process to ensure that the capability requirements and other key elements of the proposal are agreed by stakeholders in accordance with the approval provided at First Pass.

4.2.7.   **Baseline.** The CDD will be used as the baseline for the development of the industry solicitation documentation. The CDD must therefore be endorsed by the CDSG and approved by HCS before undertaking solicitation activities.

Operational Concept Document (OCD)

4.2.8.   The Operational Concept Document (OCD) builds on the POCD developed during the First Pass approval process. The OCD must support the detailed cost, schedule and risk assessments and any final cost capability trade-offs presented to Government. The

OCD will therefore be more detailed than the POCD presented at First Pass and a Section 5 must be developed for each option under consideration.

4.2.9.   **Support Concept (SC)**. The SC is further developed with the aim of refining the concepts that were identified in the POCD at First Pass. At Second Pass, for complex options that either propose a significant logistics footprint or opt to use a commercial supply chain management system which will impact on Defence logistic capability, the SC should be developed as an annex to the OCD. Those options that are proposing to adopt current Defence support processes and are considered to have little to no impact on the Defence logistic capability can incorporate the SC under Section 5 of the OCD. The SC will inform the:

a.   Life Cycle Costing Analysis (LCCA);

b.   Integrated Logistic Support Plan (ILSP); and

c.   Net Personnel and Operating Cost (NPOC) elements of the Acquisition Business Case (ABC).

Function and Performance Specification (FPS)

4.2.10.   The Function and Performance Specification (FPS) should be further developed for each solution class being considered and provide detailed technical analysis and understanding (depth) to support solicitation activities and enable the assessment of capability, cost, schedule and associated risks that are required for Second Pass.

Early Test Plan (ETP)

4.2.11.   The test planning conducted to support the Test Concept Document (TCD) submitted at First Pass is further developed and captured in the Early Test Plan (ETP). The ETP structure is aligned with that of the Test and Evaluation Master Plan (TEMP), used by the Defence Materiel Organisation (DMO) for detailed test planning during the Acquisition Phase, allowing a more streamlined and coordinated approach to Test & Evaluation planning. In the case where there is only one option being progressed, it is recommended that a Test and Evaluation Master Plan (TEMP) be developed for inclusion in the CDD rather than an ETP, noting that the level of detail in this TEMP will be commensurate with being at the Second Pass approval stage. The approval authorities are the same as for the TCD.

Industry Solicitation

4.2.12.   It will generally be necessary to solicit formal quotations and estimates from industry before seeking Second Pass approval. Industry solicitation[25] is conducted by the acquisition agency (normally DMO, but may also be conducted by Chief Information Officer Group (CIOG), Intelligence and Security (I&S) or Defence Support and Reform Group (DSRG)) and usually takes one of the following two forms:

a.   **Request for Proposal.** A Request for Proposal (RFP) is used as part of a staged procurement process to encourage suppliers to propose solutions, whether innovative or not, to achieve a desired outcome or resolve a specific problem. An RFP may also be used where a preferred solution class to an identified problem has not been determined. An RFP will always be followed by another form of solicitation (eg Request for Tender (RFT). The objective of an RFP can be to:

(1)   further define a solution class to an identified requirement, including cost estimate and project schedule;

(2)   solicit industry for innovative solutions to meet the capability requirement; or

(3)   assess the feasibility and merits of a number of proposed solution classes or solutions (as appropriate) to meet the capability requirement.

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[25]   See the *Defence Procurement Policy Manual* (DPPM) for further information on Industry Solicitation.

b.   **Request for tender.** A Request for Tender (RFT) is primarily used to obtain offers for clearly defined and specific requirements. An RFT may be derived from an evaluation of earlier responses to an Invitation to Register Interest or an RFP. An RFT may be issued to suppliers at large or restricted to one or more suppliers, or restricted to an individual supplier (referred to as direct (or sole) source procurement).

c.   **Letter of Request.** A Letter of Request (LOR) is the document that initiates a request for the establishment of an FMS case. This document sets out the details of the requirement, including a comprehensive statement of work. For more information refer to the Additional Guidance on Foreign Military Sales available from the CDG intranet site.

4.2.13.   The decision to undertake either an RFP in addition to RFT would be described in the acquisition strategy and made with due and appropriate consideration to industry, given the costs and timelines involved, and the possible need for an intermediate pass to Government. The type of industry solicitation chosen must fit with the cost of tendering and the practicality of seeking and obtaining quality proposals from companies against the range and diversity of cost-capability trade-offs to be investigated.

4.2.14.   Projects may wish to consider releasing draft versions of the CDD (if UNCLASSIFIED) to industry prior to solicitation. This can provide valuable feedback on the clarity of the documents and assist industry to prepare its eventual response to solicitation.

4.2.15.   The acquisition agency will develop specific solicitation documents from the CDD, specifically, a draft Statement of Work (SOW). The SOW defines what the acquisition agency is to acquire and the detailed specifications placed on the supplier. It should include a functional specification of the system, and a detailed description of any support services required (drawn from the Operational Concept Document (OCD), Section 5).

4.2.16.   Developing a draft SOW requires considerable consultation and information gathering. While the SOW is developed by the acquisition agency, it is the responsibility of CDG to ensure that the requirements translate accurately from the CDD, or that the CDD are updated to reflect the changed (and approved) requirements.

4.2.17.   It is important to note that any changes to requirements after solicitation has commenced may invalidate the tender process, resulting in significant cost increases and delay to the project, and expense to industry. In addition, any RFP or RFT which informs the ABC must be completed before the Second Pass approval process.

4.2.18.   While the CS Div PM retains leadership of the project between First and Second Pass, the acquisition agency has the expertise and responsibility for handling solicitation activities, and prepares and conducts solicitation activities and the release of solicitation requests. Head Capability System (HCS) and First Assistant Secretary Capability Investment and Review (FASCIR) will ensure that the information sought on capability options and costs is sought in a manner that supports progression of the Second Pass submission to Government.

Procurement Methods

4.2.19.   If solicitation is to be undertaken in First to Second Pass, the procurement method will have been identified in the acquisition strategy at First Pass. Detailed guidance on industry solicitation, procurement methods, tender evaluation and source selection is provided by the *Defence Procurement Policy Manual* (DPPM). A brief description of common procurement methods follows:

a.   **Staged procurement.** Staged procurement involves the use of a staged or structured acquisition strategy to break the procurement process into more manageable parts and refine the market testing process in order to reduce uncertainty and mitigate risk. Staged procurement using an RFP is mostly adopted for high value, highly complex or strategic projects, where projects involve emerging technologies or where the operational requirements cannot be clearly defined. As staged procurement lengthens the procurement timeline and

incurs additional costs to Defence and industry, it should only be used where the benefit of such a process outweighs the increased costs.

b.   **Open tender.** An open tender involves the public release of an RFT for a designated capability system, and provides the greatest level of competition – it is normally, therefore, the Australian Government's preferred procurement method. Where there is a sufficient benefit and justification to do so, Government may limit the release of the RFT to a number of identified companies.

c.   **Direct (sole) sourcing.** Strict conditions are prescribed for direct sourcing, and it should only be considered when competitive procurement methods are demonstrably neither effective nor practicable. The Project Capability Proposal (PCP) (through the acquisition strategy) must have justified a direct sourcing method and include other means for Government to maintain its bargaining position. While direct sourcing may appear to simplify or shorten the acquisition process, the effort involved in justifying sole sourcing and dealing with the lack of leverage with the selected company is often more than that required for open tenders.

d.   **FMS.** Foreign Military Sales (FMS) can be used to procure materiel and services for both acquisition and sustainment projects by purchasing directly from the United States Government. FMS is a major component of the US Government's security assistance program and is the means by which the Australian Government, through DMO, undertakes Government-to-Government procurement of materiel and services from the US Government. Further detail is provided in the Additional Guidance on Foreign Military Sales.

e.   **Public Private Partnerships (PPP).** As part of the acquisition strategy, all projects must consider the National Public Private Partnership (PPP) Policy Framework and National PPP Guidelines. The National PPP Policy and Guidelines note that where the Australian Government considers a project involves National Security issues, the National PPP Policy and Guidelines may not apply.

DSRG can provide advice on the PPP Policy Framework. Further information can be obtained from the Infrastructure Support Cell within CDG.

Solicitation Planning and constraints

4.2.20.   Solicitation activities play a significant role in reducing the option set associated with acquiring a new/modified capability system. For example, an RFP can assist with selecting a particular solution-class, while an RFT can be used to obtain tender quality pricing information for particular solution-class options and solution options (eg in relation to Off-The-Shelf (OTS) options or Australianisation of an OTS product). Solicitation should not be used to obtain a 'shopping list' of options from which a preferred set of options would be selected. This approach unnecessarily drives up the cost of responding (which is likely to be ultimately borne by Defence in some form), and has the potential to eliminate viable options because particular vendors may be unwilling to fund the cost of bidding under these circumstances.

4.2.21.   As a general rule, an RFT should only include a small number of options, for which a response can reasonably be developed within the tender response period. If analysis of a greater number of options is required, then a staged approach should be used instead to reduce the option set before tendering (eg an Invitation to Register leading to an RFP leading to an RFT). This approach may require ongoing direction from Government in the form of MINSUBs and CABSUBs (or even Intermediate Passes), depending upon the significance of the direction required.

4.2.22.   If the capability system requirement involves a strategic acquisition, an RFT at this level of complexity and cost may include a pre-contract phase (known as an Offer Definition Activities (ODA) phase), which can be used to refine more detailed options with a smaller number of tenderers (typically, no more than two or three) that have been down-selected based on their initial tender responses. Under this approach, the initial tender response would contain a small number of important capability system options, while these options and other more detailed options would be addressed during the ODA phase. The

outcome of the ODA phase would normally be the selection of the preferred tenderer and the identification of the proposed options to be provided to Government at Second Pass; however, in some cases, the preferred tenderer may vary based on the option chosen by Government, so the selection of the preferred tenderer will not be able to be made until after Second Pass approval.

4.2.23.   This highlights some of the more important constraints that solicitation places on the Capability Development process. These constraints must be understood and, as such, the strategy for reducing the option space through the use of the market must be developed in conjunction with the acquisition agency. This option-space reduction strategy would be embedded in the acquisition strategy as well as in the plans developed by the various Defence agencies for the period leading up to First Pass and between First Pass and subsequent passes (eg Second Pass).

Solicitation Response Evaluation and Source Selection

4.2.24.   The solicitation response evaluation and source selection process will be managed by the acquisition agency, with appropriate support from the CS Div PM and other IPT members. The primary goal of evaluation is to select the offer that represents the best value for money. However, there are a number of secondary goals, such as reducing the cost of tendering, maintaining competition and facilitating the rapid extraction of cost-capability issues and other significant considerations that enable development of Second Pass submissions to Government.

4.2.25.   Each different type of solicitation request requires an evaluation process (eg, an RFP requires a proposal evaluation, while an RFT requires a tender evaluation), which must be planned and agreed before the solicitation documents are released. The tender evaluation strategy is developed by the acquisition agency and must accord with Government and Defence procurement policies and requirements, particularly in relation to efficient, effective, ethical and economic use of Commonwealth resources.

4.2.26.   The role of the CS Div PM during the evaluation period is to provide technical advice on the 'war fighting' aspects of the responses and to evaluate and advise on any changes to the baseline CDD and other key project parameters established by Government at First Pass.

Section 4-3 Project Management

Project Document Suite

4.3.1.   As with First Pass, there are a number of information requirements and supporting documents which support the progression of a project from First Pass to Second Pass. In many instances the documents used at First Pass are updated during the progression of the project Second Pass. For example, the PCP documents will be further developed and updated for Second Pass CGRB from the First Pass PCP. For a complete description of all project documentation for Second Pass refer to the PDS.

Decision Documents

Acquisition Business Case

4.3.2.   Each option presented to Government for Second Pass consideration requires an Acquisition Business Case (ABC) containing:

a.   an overview of the option, including the expected function or effect of the capability to be acquired;

b.   an outline of the key advantages and disadvantages of the option;

c.   schedule information for key events / decision points in the Acquisition Phase, the Acceptance into Operational Service (AIOS) milestones in the transition through acquisition to in-service, and ultimately, to the planned withdrawal date of proposed capital equipment;

d.   an analysis of the technology, cost, schedule, environmental, commercial and workforce risks, and risk treatment activities and any implications that may arise;

e.   the net Workforce Estimate (extracted from the Workforce Plan);

f.   a cost template detailing estimates and risks for total acquisition and whole-of-life costs, including the source of and confidence in costs, contingency levels, financial spend-spreads, a brief outline of the major items to be acquired, Personnel Operating Costs (POC)/Net Personnel Operating Costs (NPOC), and affordability within current departmental provisions;

g.   the expected Life of Type (LOT) for the option and an assessment of the likely obsolescence risk and potential treatment options;

h.   advice about industry implications, including the general intent for both acquisition and through-life support (industry implications should cover both sectoral implications and regional implications in Australia);

i.   a description of the differences, if any, between the tendered solution and the required capability defined in the CDD; and

j.   advice about proposed subsequent reporting to Government on progress of the project.

4.3.3.   The ABC summarises the information provided by the supporting documentation. This documentation includes the CDD, the Acquisition Project Management Plan (APMP), the acquisition strategy, the cost estimate and any subordinate risk or industry plans developed by the acquisition agency.

4.3.4.   **Endorsement and Approval.** The ABC is written by CS Div using the information from the supporting documentation. The ABC is endorsed by key stakeholders via the CDSG and approved by HCS.

4.3.5.   Acquisition Strategy (Second Pass)

4.3.6.   The acquisition strategy[26] presented at Second Pass is further refined / developed from the acquisition strategy described at First Pass, or subsequent Government direction. The acquisition strategy (Second Pass) should not change significantly after the main solicitation documentation for a project (eg, an RFT for the acquisition and support of the required Major System(s)) has been released to the market. As such, the role of the acquisition strategy is considerably reduced at Second Pass because a major part of the implementation strategy has already been enacted through issuing the solicitation documents.

4.3.7.   The acquisition strategy (Second Pass), therefore, should explain the reason for any variation to the approach approved at First Pass, noting that a significant change to the acquisition strategy would represent a significant change to project progression. The strategy for other significant procurements identified in the course of First to Second Pass development is also included. The acquisition strategy (Second Pass) is endorsed by the CDSG and approved by the acquisition agency.

4.3.8.   At Second Pass, the Government can either agree to continue the strategy upon which the solicitation was based or can decide to adopt a different strategy. In the latter case, the process would effectively start again, with significant project delays. The acquisition strategy may need to be updated to incorporate any changes to the strategy required by Government and/or to clarify any outstanding matters that were unable to be finalised when the previous approval was provided.

Cost Estimate (Second Pass)

4.3.9.   The Second Pass cost estimate presents final cost information for each option and captures the assumptions on which the costs were developed. The final figures from the completed cost estimate are summarised in the ABC and PCP. The CS Div PM is responsible for completing the cost estimate with information provided by the CM, other Defence Groups and the DMO as required.

4.3.10.   Refer to the Additional Guidance on Cost Estimates for detailed information on the development of cost estimates.

DSTO—Technical Risk Assessment and Science and Technology Plan

4.3.11.   A Technical Risk Assessment (TRA) and Science and Technology (S&T) Plan supports the PCP. In the period between First and Second Pass, the Project Science and Technology Advisor (PSTA) will refine the TRA and focus on those options approved for further development at First Pass. It will also include the results of any risk mitigation activities that have been completed. The intent of the Second Pass TRA is to allow Defence to advise Government on the areas and levels of technical risk of the options being proposed for acquisition. Defence will also advise Government on the risk treatment strategies being undertaken in other documents (eg the acquisition strategy).

4.3.12.   The S&T Plan for Second Pass describes the project's requirements for S&T support and the agreed S&T deliverables and effort (including resources requirements) that will be provided by the DSTO, including timelines, to ensure the successful introduction into service of the capability being sought. This may include technical advice to the project office and support to the Capability Manager (CM) in OT&E for example. The S&T Plan is developed by the PSTA and is approved by the relevant CDSG Chair and DSTO Chief of Division.

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[26] In the DMO, this acquisition strategy is known as the Acquisition and Support Implementation Strategy

DSRG – Strategic Business Case and Environmental Impact Assessment

4.3.13.   If required, Defence Support and Reform Group (DSRG) develops a Strategic Business Case (SBC), detailing the cost and schedule for any infrastructure works required to bring the capability into service.

4.3.14.   In addition, the Environmental Impact Assessment (EIA) will need to be updated and/or refined to include the required infrastructure works and the additional data available about the system to be acquired.

Planning Documents

Capability Realisation Plan

4.3.15.   The Capability Realisation Plan (CRP) defines the transition and capability release milestones for the capability being introduced by a project, and outlines how the CM/JCA will coordinate the FIC elements and realise the agreed capability at Final Operational Capability (FOC). The CRP will detail the capability to be achieved at Initial Operational Capability (IOC) and FOC and any capability states in between.

4.3.16.   The CM/Joint Capability Authority (JCA) will lead the development of the CRP and take primary responsibility for carrying out the plan following Second Pass approval. Its generation and execution by the CM/JCA may require significant resources and ongoing support throughout the Requirements and Acquisition Phases, proportional to the scale and complexity of the project. Care should also be taken to ensure the CRP aligns with the proposed acquisition strategy. More information is provided in the Additional Guidance on the CRP.

Second Pass Workforce Plan

4.3.17.   The Second Pass Workforce Plan delivers a more detailed and rigorous assessment of the workforce issues that were considered in the First Pass Workforce Plan (see Chapter Three). It is developed from further analysis produced under the guidance of the IPT and incorporates any workforce and training studies. The plan finalises the analysis and management of workforce demand and supply issues, identifies any changes to skill sets, outlines training requirements, considers workforce schedules and responsibilities, identifies all associated workforce costs, and identifies risks to achieving and sustaining the capability and respective mitigation strategies. It must include consideration of the workforce requirements to transition from the existing capability to the new, or establishing workforce for a new capability.

4.3.18.   The Workforce Plan must provide enough detail for CM/JCA and Government to be able to determine the workforce implications of each capability option, or be aware in advance of workforce issues that may affect future operational capability. Changes to workforce numbers or mix and issues that may affect the success of the project and/or future operational capability must be adequately detailed and analysed. Workforce changes and risks must be communicated to and agreed by Government.

4.3.19.   The Workforce Plan includes a final Workforce Estimate attached as an annex, which details the complete workforce required for all stages of the project. The Workforce Estimate should align with the workforce allocation specified in Government guidance and workforce allocations.

4.3.20.   The CS Div PM is the coordinator of the information presented in the Workforce Plan. The CM/JCA, the Defence Materiel Organisation (DMO), Defence People Group (DPG) and Chief Information Officer Group (CIOG) are the key stakeholders who must assist in developing this information. The Workforce Plan is endorsed by members of the CDSG and other relevant stakeholders, prior to DPG providing a Workforce Risk Assessment (WRA) that independently assesses the Workforce Plan.

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Acquisition Project Management Plan

4.3.21.   The Acquisition Project Management Plan (APMP) describes how the project is to be managed in the Acquisition Phase. It provides an overview of the work to be undertaken in the project and identifies key decision and review points. The draft APMP is developed by the acquisition agency and endorsed by the CDSG, HCS and a person nominated by the acquisition agency before Second Pass approval. The final version and subsequent approval of the APMP will occur following Government Second Pass, taking into account the content of the Joint PD, and approved at the appropriate level in the DMO or other acquisition agency.

Capability Risk Assessments

4.3.22.   As with the guidance provided in Chapter Three, Capability Project risks will be managed by CS Div staff up to Second Pass in accordance with CDG Project Risk and Issues Management guidelines.

4.3.23.   The PDS provides guidance on the risk documents and registers to be developed for the project.

Safety – Second Pass Work Health and Safety Assessment

4.3.24.   While the Second Pass Work Health and Safety Assessment (WHSA) is included in the PDS the guidance for completion is currently contained in the Additional Guidance on Safety in Capability Development. The Second Pass Work Health and Safety Assessment (WHSA) builds upon the rigour of the First Pass WHSA in identifying safety related risk control measures and implementing them in the project document suite. The compliance requirements of the second pass capability options are identified by the safety effort within this phase, and will be incorporated into the project document suite. This assessment is completed by the CS Div PM through consultation with the IPT and is an input to the risk register which in turn will inform the safety program and have definitive input into the RFT prior to second pass approval. This assessment is also endorsed by the IPT quorum.

Governance Documents

Materiel Acquisition Agreement

4.3.25.   For Second Pass, where DMO is the acquisition agency, the Materiel Acquisition Agency (MAA) will detail the scope and cost of the capability to be acquired, and will commit the signatory agencies to completing assigned tasks and providing the necessary resources and assets to ensure effective management of the Acquisition Phase. The MAA is endorsed at the DCC before Government Approval and is signed at the DCC immediately following Government Approval.

Joint Project Directive

4.3.26.   CDG's role beyond Second Pass Approval is to enable guidance transfers from Chief Finance Officer (CFO) in accordance with Government approval and, where required by a specific Joint Project Directive (Joint PD). Following Second Pass approval by Government, the Secretary of the Department of Defence and Chief of the Defence Force will issue a Joint PD that covers the time from Second Pass Approval to the closure of the acquisition business case. The Joint PD will be drafted by the CS Div PM, in consultation with the acquisition agency, and is to be included in the project document suite considered by the CGRB. The Joint PD is signed by the Secretary of the Department of Defence and Chief of the Defence Force and assigns accountability and responsibility for the project from Second Pass approval to the closure of the acquisition stage in accordance with the First to Second Pass Project Management Plan. A synopsis of the Joint PD is provided to Government at Second Pass.

4.3.27.   The Joint PD assigns accountability and responsibility to:

a.   the CM/JCA for overall responsibility for the in-service realisation of the capability;

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b.   the Chief Executive Officer DMO for materiel acquisition (which is implemented through the terms and conditions in the (post Second Pass) MAA); and

c.   other key enablers, such as Chief Information Officer, Deputy Secretary Defence Support and Reform and Chief Defence Scientist, for the provision of elements of the Fundamental Inputs to Capability (FIC), and Deputy Secretary Defence People for the management of the Department's workforce allocations via the Workforce Guidance Trails.

Specific arrangements for change consideration (including thresholds) will be documented in the Joint PD and developed by Chief Capability Development Group (CCDG) in consultation with   key   stakeholders.

Section 4-4 – Capability Gate Review Board and Defence Capability Committee (Second Pass)

Capability Gate Review Board

4.4.1.　　　As for First Pass, CGRB ensures that capability proposals produced within CS Div are complete, comprehensive and of a standard that allows development of formal submissions and facilitates effective decision making by higher Defence committees and Government.

4.4.2.　　　In preparation for Second Pass approval, the CGRB has responsibility for ensuring that the project has:

a.　　　a detailed and robust estimate of acquisition and sustainment costs [27];

b.　　　accurate and agreed transition and final workforce requirements for acquisition and in-service support;

c.　　　a detailed TRA of the specific option(s) being considered, and appropriate treatment strategies are described;

d.　　　a test and evaluation strategy that will ensure that the capability meets specified requirements;

e.　　　a feasible and agreed schedule that meets the CM/JCA capability timeframes;

f.　　　an appropriate acquisition and support strategy, with corresponding commercial risk assessments; and

g.　　　options that comply with the original strategic need for the capability.

CGRB Documentation

4.4.3.　　　The CGRB tests, reviews and clears capability proposals and supporting documentation, and provides guidance and direction to CS Div PMs regarding any shortfalls or corrective actions required to be addressed before higher committee consideration.

4.4.4.　　　Failure to achieve CGRB endorsement is likely to have adverse impact on the project's ability to meet DCC/DCIC and National Security Council timelines. It is therefore important, that all stakeholders are engaged through the IPT and CDSG to ensure that any issues are identified and resolved as soon as practicably possible.

4.4.5.　　　CGRB members are able to access and comment on all project documentation (eg, CDD, acquisition strategy) if they have significant concerns that must be addressed before the project can be considered by DCC/DCIC.

4.4.6.　　　Further detail on the membership and documentation requirements for CGRB can be found in the CGRB Business Rules.

DCC Documents

4.4.7.　　　The stage from CGRB to DCC is broadly similar to that of the First Pass CGRB to DCC stage (see Chapter Three). As for First Pass, DCC considers a draft MINSUB or

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[27]　　　While the Government (see the Cabinet Handbook) does not require 'tender quality' information the expectation for most projects is that a FMS, tender or a commercial offer will have occurred and that the cost estimates will be based on this information. Where a 'tender quality' estimate is not available advice should be sought from Capability Investment and Resource Division (CIR Div) on appropriate standards for cost estimates.

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CABSUB prior to Second Pass, which is developed from the project documents endorsed by CGRB (including any agreed changes).

4.4.8.   Following a project's endorsement by CGRB, the following documents will be prepared and presented to DCC:

a.   MINSUB or CABSUB (as appropriate);

b.   independent acquisition advice (from CEO DMO);

c.   Technical Risk Certification (from CDS);

d.   draft Joint PD for endorsement and clearance. After Government decision this is staffed to the Secretary of the Department of Defence and Chief of the Defence Force for signature; and

e.   draft MAA for endorsement at or before DCC before Government approval. At the DCC following Government approval final MAA for signature.

4.4.9.   The underlying PDS is available to members for review and comment should they have significant concerns that must be addressed before the project can be considered by Government.

4.4.10.   Detailed information on the membership and operation of the DCC is provided in the DCC Business Rules**.**

Consideration by Defence Capability and Investment Committee

4.4.11.   As discussed at paragraph 1.5.16d, the DCIC will consider projects of significant strategic imperative, very high cost or high political sensitivity, or with issues that cannot be resolved by the DCC. Any consideration by the DCIC is in addition to that of the DCC.

4.4.12.   Detailed information on the membership and operation of the DCIC is provided in the DCIC Committee Governance Principles.

Section 4-5 Second Pass Review by Government

4.5.1.   Following DCC endorsement of the draft MINSUB or CABSUB, its clearance and approval by the Secretary of the Department of Defence and Chief of the Defence Force is processed as for First Pass.

Second Pass Consideration and Approval of the CABSUB/MINSUB by Government

4.5.2.   The MINSUB or CABSUB provides Government the opportunity to consider and approve the following:

a.   a preferred specific capability solution selected from the options approved at First Pass (or a subsequent Intermediate Pass);

b.   the specific functions and performance of the proposed capability;

c.   the implications of any identified changes to each of the FIC elements;

d.   the planned IOC and FOC;

e.   budgetary provision for acquisition and operation of the capability solution, including all relevant FIC aspects and NPOC (including workforce numbers);

f.   the risk to achieving and sustaining the workforce required;

g.   the technical, cost, schedule and commercial risks for the capability solution and their treatment strategies;

h.   the acquisition strategy for the proposed capability system;

i.   the strategy for managing the transition of FIC, including acquiring the capability and its transition to in-service; and

j.   critical issues to be tested, the associated Test & Evaluation strategy and the resource and funding requirements to support that strategy.

4.5.3.   **Agreement with information in submission**. Following endorsement at DCC, the MINSUB or CABSUB is submitted to key responsible authorities, generally at the Service Chief and Group Head level, to ensure that the detail is correct and aligns with departmental policies and allocations. In particular it states that, for the submission:

a.   the CM/JCA will formally advise the Secretary of the Department of Defence and Chief of the Defence Force that they agree (or otherwise) the capability being sought and understand the proposed acquisition strategy;

b.   CCDG agrees with the capability aspects;

c.   CEO DMO provides independent advice with the acquisition strategy and cost, schedule and risk estimates;

d.   CFO agrees with the costs presented and that the project is affordable within the DCP;

e.   DPG agrees the net Workforce Estimate is aligned with portfolio workforce allocations; and

f.   The CDS provides a Technical Risk Certification which is included in the MINSUB or CABSUB.

4.5.4.   **Secretary of the Department of Defence and Chief of the Defence Force Clearance**. Submissions agreed by Service and Group Heads are cleared by the Secretary of the Department of Defence and Chief of the Defence Force before submission to Government.

4.5.5.   **Development and timing of the submission**. Development of submissions to Government for Second Pass approval is the responsibility of Capability Investment and Resource Division (CIR Div). The lead times for approval are subject to the requirements of the Minister and the timing of the Secretaries Committee on National Security, National Security Council and Cabinet meetings.

Post-Second Pass Project Approval Review

4.5.6.   Once Government has approved the capability proposed in the MINSUB or CABSUB, the CS Div PM is to align the documentation (draft Joint PD, MAA, CDD, acquisition strategy, etc) with the Project Approval from Government prior to submitting the Joint PD to the Secretary of the Department of Defence and Chief of the Defence Force for approval. If there are significant changes these should be noted in the covering brief to the Secretary of the Department of Defence and Chief of the Defence Force.

4.5.7.   The changes made by Government at Second Pass need to be communicated to affected Joint PD action addressees as soon as possible, to ensure they are aware of the Government's decision and the consequential revisions to the Joint PD that will be issued by the Secretary of the Department of Defence and Chief of the Defence Force. The proposed final Joint PD will then be passed to HCS for clearance and for submission to the Office of the Secretary of the Department of Defence and Chief of the Defence Force for execution.

Project Case Studies

4.5.8.   Following second pass approval, a case study will be developed for each project in order to identify 'Lessons Learned' and how these lessons can potentially be incorporated into business improvement practices within CDG. They will also be used by students at the Capability and Technology Management College and on staff course.

Chapter 5
Acquisition, In-Service and Disposal Phases

Section 5-1 - Acquisition, In-Service and Disposal Phases

5.1.1.   The outcome of the Acquisition Phase is the delivery of a capability system, which includes the associated FIC elements, that fills the capability need identified at the beginning of the Capability Systems Life Cycle (CSLC). The capability system is then supported over the programmed Life Of Type (LOT) until disposal.
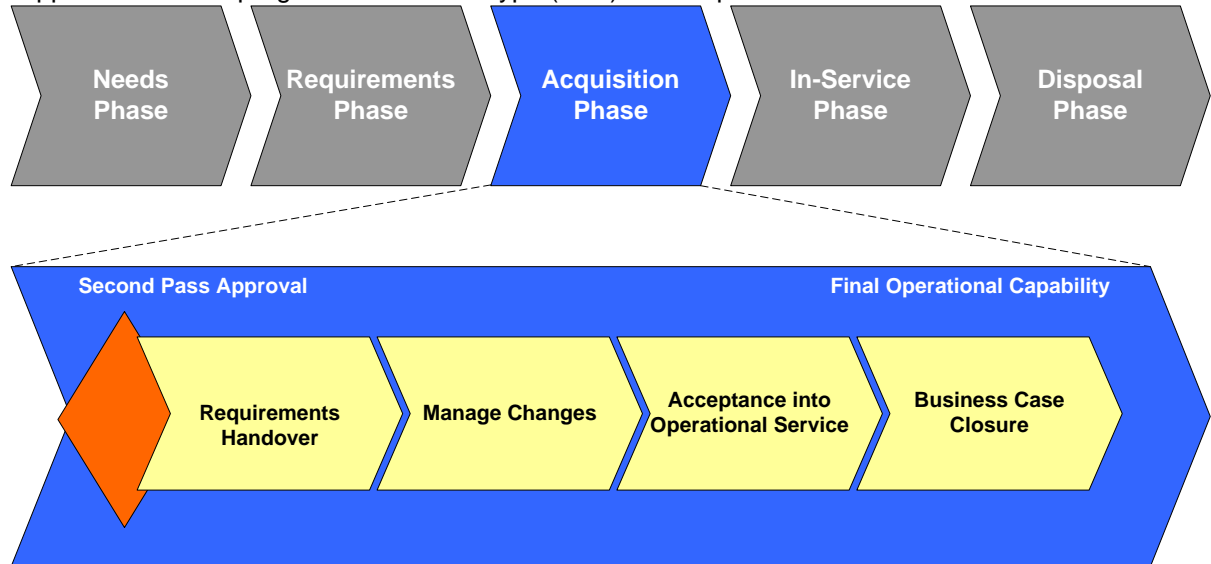
Figure 5-1: CDG's role during the Acquisition Phase

5.1.2.   At the end of the Requirements Phase and at the beginning of the Acquisition Phase, Chief Capability Development Group (CCDG) is responsible for transitioning management of a project to the Capability Manager (CM)/Joint Capability Authority (JCA).

5.1.3.   The Capability Development Group's (CDGs) role beyond Second Pass approval is to enable guidance transfers from Chief Financial Office (CFO) in accordance with Government approval and, where required by specific Joint Project Directive (Joint PD). The latter is generally to assist the relevant CM/JCA in:

a.   integrating Fundamental Inputs to Capability (FIC);

b.   reporting to Government on the progress of (FIC) projects;

c.   reconciling the delivered capability against the Government endorsed capability; and

d.   closing project business cases.

5.1.4.   For projects delivering into single service domains the CM has responsibility for overseeing the delivery of the whole capability (ie all FIC elements). The CM then monitors and reports through the Secretary of the Department of Defence and Chief of the Defence Force on all FIC elements to Government as depicted in figure 5-1 and detailed in the Additional Guidance on Capability Manager Roles and Responsibilities.

5.1.5.   The Government-approved capability solution is acquired by the relevant Acquisition Agency; that is the Defence Materiel Organisation (DMO), Chief Information Officer Group (CIOG), Intelligence and Security (I&S) or Defence Support and Reform Group (DSRG) (for facilities).

5.1.6.   CDG remains involved during the Acquisition Phase to ensure that the capability system is accepted through the Test & Evaluation process as directed in the Joint PD.

Chapter 5 – Acquisition, In-Service and Disposal Phases

5.1.7.　　CDG attendance at post-Second Pass project management stakeholder and project groups for those projects with a Joint PD is on an 'as required' basis, particularly if CDG needs to provide context for associated phases or other projects. For example, where an approved project (ie post Second Pass) may be impacted or influenced by a follow-on phase that is still being managed by CDG (ie pre-Second Pass), CDG will attend relevant meetings of the project management stakeholder and project groups to ensure the integrity of scope for related project phases is not compromised.

5.1.8.　　CDG will continue to have a role in 'legacy projects' (without a Joint PD), to assist the CM/JCA to ensure that the capability is brought into service as agreed by Government at Second Pass.

Section 5-2 The Acquisition Phase

5.2.1.   At Second Pass, Government approves the acquisition of a particular capability solution and the acquisition agency subsequently assumes management of the Major Systems FIC elements of the project (normally through a dedicated project office). Second Pass also allows the acquisition agency to enter into a commercial or foreign military sales arrangement with one or more suppliers to deliver the capability agreed by Government.

5.2.2.   In parallel, the CM/JCA coordinates other stakeholder and steering groups to undertake the activities necessary to ensure that all elements of FIC are in place before delivery of the capability system/s.

Project Governance

Capability Manager Steering Group (CMSG)

5.2.3.   The CMSG is chaired by the CM/JCA, or their representative, to oversee the coordination of all FIC elements during the Acquisition Phase. This steering group is the CM's key mechanism to oversee and guide implementation with a whole-of-FIC capability view, and to provide high level oversight, co-ordination and direction to FIC providers. The CMSG, being a steering group where the Chair has the executive authority derived from the Joint PD, will oversee and coordinate FIC elements as required within the resources allocated by Government at Second Pass approval.

5.2.4.   **Project Management Stakeholder Group.** The DMO will form a Project Management Stakeholder Group (PMSG) for specific Materiel System project oversight. Refer to DMO's Project Management Manual for more information on the role and operation of the PMSG.

5.2.5.   The CMSG will operate in conjunction with the DMO PMSG which is the formal mechanism for coordinating stakeholder input into DMO managed projects.

Acceptance into Operational Service

5.2.6.   Acceptance Into Operational Service (AIOS) is the process, documented in the Capability Realisation Plan (CRP), by which the FIC elements comprising a capability system are proven to meet endorsed capability requirements (usually specified in the Operational Concept Document (OCD)) and assembled so that the capability is suitable for use as described in the OCD. The CM/JCA, CDG, FIC providers, Joint Logistics Command (JLC) and the acquisition agency work closely together (through the Integrated Project Team (IPT), PMSG, and CMSG) to manage the AIOS activities. The AIOS process and organisational responsibilities are detailed in Defence Instruction General Operational 45-2 *Capability Acceptance into Operational Service*.

Baseline

5.2.7.   **Capability Baseline.** The Capability Definition Documents (CDD), as amended as a result of Government approval at Second Pass, defines the Capability Baseline that is promulgated in the Joint PD. This baseline sets the materiel scope of the project and documents the requirements against which the acquisition agency and FIC providers are to deliver, and the testing framework with which they must comply.

Transfer of Project Leadership Post Second Pass

5.2.8.   After Second Pass approval, management responsibility for the project is transferred to the CM/JCA through the Joint PD. Before handing over leadership to the CM/JCA, changes made to a project's scope, schedule and budget at Second Pass must be reflected in the Joint PD and other relevant project documents. Once these changes are

made, the acquisition agency assumes responsibility for managing the CDD and associated documents. Where the DMO is the acquisition agency, they begin to report against the Materiel Acquisition Agreement (MAA) at this stage.

5.2.9.   Capability Systems Division prepares a summary report on the status of the project at the time of handover, addressing the changes to the project since Defence Capability Plan (DCP) entry, along with lessons learnt during the Requirements Phase.

5.2.10.   **MAA Review.** The schedule for the DMO acquisition project agreed at Second Pass approval will, potentially, be subject to further refinement after contract negotiations and before contract signature. For this reason, DMO project the Performance Measurement Baselines (PMB) is set as soon as practicable after contract execution, which also allows for major elements of the contract master schedule, including payment and delivery milestones, to be incorporated into the PMB. A review of the MAA will be programmed into the agreement to adjust it, if required, to incorporate any changes arising from the contract negotiations.

Acquisition Phase capability milestones

5.2.11.   Within the Acquisition Phase, there are a number of capability milestones, defined below, that must be met by CDG, the CM/JCA and the acquisition agency in order to achieve AIOS.

5.2.12.   **Capability states.** Capability states are the endorsed capability outcomes to be realised through the AIOS process at the project level. The capability states range from Initial Operational Capability (IOC) to Final Operational Capability (FOC). IOC is when the first subset of a capability system that can be operationally employed is realised. FOC is when the final subset of a capability system that can be operationally employed is realised. IOC and FOC are capability states endorsed at Second Pass approval, and are reported as having been reached by the CM/JCA. Where a project requires additional intermediate capability states, they are identified as Operational Capability 2, 3, (OC2, OC3 – noting that OC1 is IOC). All capability states are to be detailed in the Capability Realisation Plan (CRP).

5.2.13.   **Operational release milestones.** Operational Release (OR) milestones represent the consideration given by the CM/JCA (or the nominated representative) to the maturity of the FIC comprising the capability system within the project subset level. Initial Operational Release is the milestone at which the CM/JCA is satisfied that the initial operational and materiel state of the capability system - including any deficiencies in the FIC - are such that it is sufficiently safe, fit for service and environmentally compliant to proceed into a period of Operational Test and Evaluation (OT&E) leading to an endorsed capability state. OR is the operational acceptance by the CM/JCA (the customer) and acknowledges that a capability system, or subset, has proven effective and suitable for the intended role and is ready for operational service. The CM/JCA will have decided by demonstration through OT&E that the capability is suitable and effective for its intended role. Initial Operational Release (IOR) and OR Operational Release (OR) are detailed in the CRP.

5.2.14.   **Transition milestones.** Transition milestones are significant events in the AIOS process and can show changes in asset management arrangements, acquisition and sustainment arrangements or authority/control over a mission system or other major items of acquisition project supplies. Transition milestones must be managed to align with release milestones, as this provides a clear objective for planning and management across key stakeholders. Also, this can minimise delays caused by the misalignment of FIC at the critical release milestone juncture. After the acquisition agency transfers the assets to the CM/JCA, the CM/JCA then conducts OT&E and decides upon OR. Transition milestones are detailed in the CRP.

5.2.15.   **Materiel release milestones.** Materiel Release (MR) milestones are agreed prior to solicitation and finalised at Second Pass approval, and specify transition milestones that mark the completion and release of acquisition project supplies required to support the achievement of OR. The MR milestones describe what constitutes the materiel (and associated sustainment) to be delivered at the milestone. The MR are agreed between the CM/JCA, CDG and DMO and documented in the MAA.

Chapter 5 – Acquisition, In-Service and Disposal Phases

5.2.16.   **Contractual milestones.** Contractual milestones focus on the acquisition process. The primary contractual milestones are *System Acceptance* and *Contractual Delivery*. System Acceptance is the acknowledgment by the acquisition agency that an acquired system complies with contractual and MAA requirements and the system is ready to be transitioned to the In-Service Phase. Contractual Delivery is the physical movement of supplies from the contractor into the acquirer's possession.

5.2.17.   The general arrangement of AIOS milestones is illustrated in Figure 5-2.
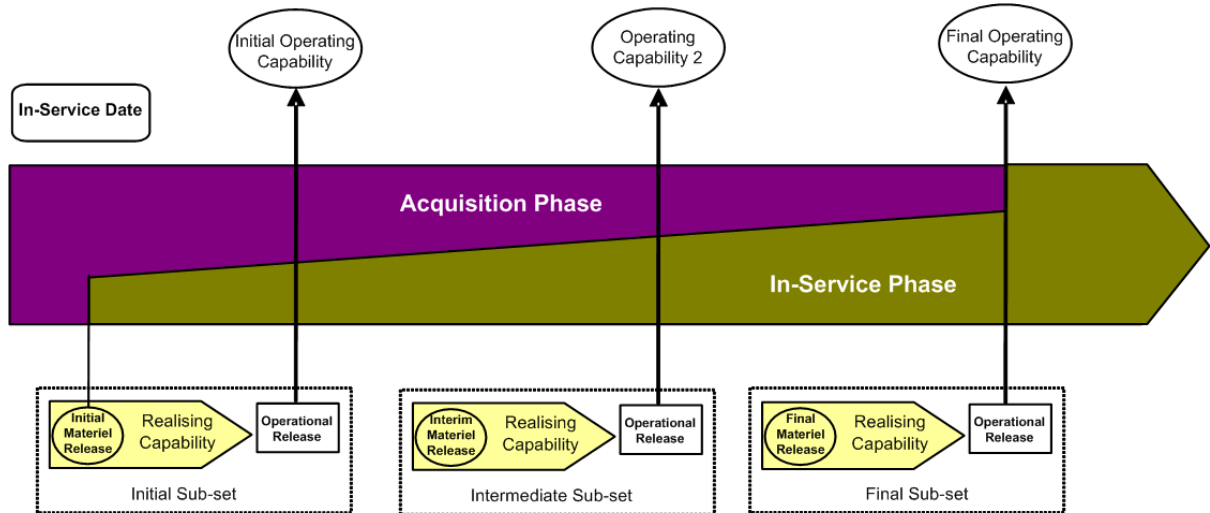
Figure 5-2: AIOS milestones—general arrangement

Project Reporting

5.2.18.   The CM/JCA is responsible for oversight and coordination, particularly recording the overall integration of the FIC, in relation to a project's progress through the Acquisition Phase and the AIOS process. They are also responsible for regularly reporting project performance, as well as any exception reporting, through the Secretary of the Department of Defence and Chief of the Defence Force to Government.

5.2.19.   The CM/JCA will report to Government through an annual omnibus MINSUB report on the full range of capability projects for which an individual CM/JCA is responsible. All CM/JCA reports will be collated into a single MINSUB, coordinated by Vice Chief of the Defence Force and submitted through the Secretary of the Department of Defence and Chief of the Defence Force. This will be supported by individual CM/JCA reports to the Defence Committee/Defence Capability and Investment Committee on a quarterly basis.

5.2.20.   The key governance mechanisms that allow the CM/JCA to monitor the progress of a project by the acquisition agency are:

a.   act as Chair of the Capability Management Steering Group (CMSG);

b.   provide representation at the acquisition agency's Project Management Steering Group (PMSG) and other Integrate Project Team (IPT)/ project office meetings for the individual project as necessary; and

c.   formal reporting of the progress of each project provided to the CM/JCA by the acquisition agency and FIC providers.

5.2.21.   In relation to the DMO, the MAA normally contains provision for monthly reporting against key project performance measures as indicators of a project's overall health. The report discusses four factors:

a.   project costs and budgets;

b.   schedule, particularly delivery against key milestones such as IMR and FMR, which are necessary DMO predecessors to IOC and FOC;

c.   key capability measures / measures of effectiveness; and

d.   customer-furnished supplies.

5.2.22.   The CMSG should review the Joint PD and MAA for each project at least biannually for Acquisition Category (ACAT) I projects and annually for ACAT II, III and IV projects to ensure currency.

Section 5-3 Managing Changes to the Project

Changes to the Capability Baseline

5.3.1.   The CM/JCA, in conjunction with the Acquisition Agency, is responsible for recommending and obtaining approval from Defence or Government for any proposed changes that alter the specific project scope, cost, workforce, schedule or risk parameters agreed by Government. The Joint PD will reflect the specific Government guidance given to Defence at project approval. This will guide whether Defence must return to Government to gain approval for the proposed change.

5.3.2.   During the Acquisition Phase, it would be unrealistic to assume that the Capability Baseline will not change. Changes to the baselines may result from:

a.   a change to Defence's strategic goals and priorities;

b.   change in the regulatory environment;

c.   change to Government policy;

d.   overly optimistic or 'cutting-edge' requirements not being realised; or

e.   minor changes in scope to resolve errors or ambiguities in the requirements (during design, development or production) or to address changes in external Defence systems.

5.3.3.   All proposed changes to the capability baseline must be cleared by the CM/JCA before the acquisition agency approves any engineering change proposal, contract change proposal, waiver or deviation that affects the approved baseline. When applicable, the Joint PD and MAA also must be amended accordingly. Regulatory change that would impact on the acquisition agency's ability to deliver the equipment must be raised to the PMSG, and subsequently to the CMSG, so that appropriate action can be taken.

Real Cost Increases and Decreases

5.3.4.   Approved projects may seek an increase or decrease in a project's approved budget – a Real Cost Increase (RCI) or Real Cost Decrease (RCD) – as a result of either changes in the scope of the project or a change in the cost (including workforce) of a project element. It should be noted that Government has a very high expectation that projects will be delivered within the funds agreed at Second Pass – essentially projects should be considered as 'cost capped'. Seeking approval of an RCI should be considered as a very serious activity and only pursued if all other viable alternatives have been exhausted.

5.3.5.   An RCI is usually funded from the DCP and competes for funds against as yet unapproved projects. Therefore, an RCI should not be assumed to have priority for funding over an unapproved project as it will be subjected to the same level of scrutiny as other capability decisions. For scope changes, CDG must be able to justify the increase on a capability basis. For unanticipated cost increases, the acquisition agency provides the justification.

5.3.6.   The RCI proposal should address the requirement for the increase and provide options and risk assessments for completion of the project if the proposal is not approved or only partially approved. Where there is a change to scope, Defence Science and Technology Organisation (DSTO) is consulted regarding any changes to the Science and Technology (S&T) Plan and whether a Technical Risk Assessment (TRA) needs to be undertaken or a revised Technical Risk Certificate (TRC) issued.

5.3.7.   The process for approving an RCI or RCD is:

a.   endorsement by the CMSG/PMSG; and

b.   submission to the appropriate approval authority (either within Defence or Government), determined by the value of the RCI sought and whether it is within the bounds agreed by Government at Second Pass.

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Section 5-4 Acceptance into Operational Service

5.4.1.   The CM/JCA is responsible for monitoring, coordinating, delivering and reporting the transformation of FIC elements to support AIOS and to deliver the FOC. AIOS is the process by which the FIC comprising a capability system are proven to meet endorsed capability requirements. The plan to deliver the FOC is documented in the CRP.

Transition Teams

5.4.2.   For a significant capability, or a grouping of related capabilities, the CM/JCA may establish a transition team (TT) or Capability Implementation Team (CIT) (normally after Second Pass) to implement the CRP. For very large or complex projects, planning for the transition team may need to begin before First Pass, as the appropriate staff, resources and facilities may take some years to get in place to meet the timeframes for the introduction of the capability.

5.4.3.   Each CM/JCA approaches this transformation slightly differently. However, there are generally some common considerations that lead to the need for a TT or CIT:

a.   the capability is a significant one;

b.   the capability or grouping of capabilities has a significant budget;

c.   the capability requires a significant net workforce or workforce mix change or other major change to workforce;

d.   the new capability is to be transitioned to service coincident with the management of the transition to retirement of an outgoing capability (eg Super Hornet introduction and F-111 withdrawal);

e.   the capability has joint interfaces to be managed, which may see the appointment of a Capability Coordinator (CC) with overall responsibility (eg Joint Amphibious CIT headed by Navy); or

f.   the aggregation of a number of related capabilities requires coordination (including across DMO projects) to achieve AIOS.

5.4.4.   Where a capability does not warrant establishing a TT or CIT, the CM/JCA may consider establishing a FIC working group.

Operational Test & Evaluation

5.4.5.   Operational Test and Evaluation (OT&E) provides the CM with objective evidence of the suitability and effectiveness of the capability system before that system is employed in an operational role, and assists in developing doctrine and procedures for its employment. The Australian Defence Force OT&E framework is described in Defence Instruction General Operational 43-1 *Defence Test and Evaluation Policy*.

5.4.6.   The results of OT&E are also used to inform business case closure, providing a comparison of the capability outcomes (as delivered) against the capability approved at Second Pass. Where the capability system has not achieved the endorsed capability state, CDG will facilitate the review of factors affecting OR and, in conjunction with the CM and relevant organisations, develop options to manage the capability shortfall in the interim and remedy it in the longer term.

5.4.7.   Conversely, OT&E may show that the expected level of capability has been exceeded and that other opportunities exist to utilise the capability in scenarios not previously considered or thought possible. CDG will then work with the CM to analyse those opportunities and consider the impact on any other capabilities, whether in-Service or under development.

Section 5-5 - Business Case Closure

5.5.1.　　At Second Pass the Government approved the FOC for the project, which is generally achieved once all elements of FIC have been implemented to the satisfaction of the CM/JCA. Achievement of FOC is, therefore, the final milestone before the business case approved by Government at Second Pass can be closed.

5.5.2.　　The CM/JCA is responsible for business case closure. The acquisition agency initiates closure of the major system FIC elements of the project (for which it is responsible) when the requirements of the Joint PD have been met. As FOC may occur some time after the acquisition agency has delivered its project obligations, FOC achievement is not a prerequisite for acquisition project closure. While it may be cost effective to close a project office and transfer management responsibility to a sustainment area, this alone does not constitute project or MAA closure.

5.5.3.　　All parties identified in the Joint PD must sign off that they have completed all of their respective requirements. The mechanism for this is a Project Closure Report for Defence Services and Groups (non-major system FIC providers) and the MAA Closure Report[28] for the DMO.

5.5.4.　　The key steps to Business Case closure include:

a.　　**MAA Certificate of Closure (for DMO only).** The MAA Certificate of Closure certifies that the terms of the MAA have been satisfactorily met. The MAA Certificate of Closure will detail any funds to be returned to the DCP, outline any outstanding project issues and the agreed resolutions and request closure of the relevant elements of the Joint PD;

b.　　**Project Closure Report (PCR).** The PCR certifies that terms of the Joint PD have been met and requests closure of the relevant elements of the Joint PD. The PCR details any **funds** that can be returned to the DCP and outlines the outstanding project issues and the agreed resolutions;

c.　　**CM approval.** CEO DMO or the relevant acquisition agency Group Head forwards the PCR or MAA Certificate of Closure respectively, to the CM for consideration and approval; and

d.　　**Business Case closure.** The CM uses the approved MAA Certificate of Closure or the PCR to prepare a Business Case closure decision brief in order to formally close the business case.

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[28]　　Note that the DMO also has a Project Closure Report that is a prerequisite for the MAA Closure Report. This report is not required for business case closure.

Section 5-6 - In-Service

5.6.1.   The process for developing and approving capability upgrades and LOT extensions is the same as that described in Chapters Two to Four of this handbook, where needs are identified, included in the DCP and options considered and refined through a two pass process.

5.6.2.   As for any Defence Capability Plan project, the involvement of the CM/JCA, the acquisition agency and all other key stakeholders is essential during the development of a business case for a capability upgrade or Life of Type extensions.

Section 5-7 - Disposal

Disposal Planning

5.7.1. Disposal is an integral part of the life-cycle management of a capability platform and, as such, planning for disposal of the capability system must commence early in the life-cycle of the capability. Ideally, disposal consideration should commence during the initial acquisition planning and requirements determination stages when any caveats or restrictions applicable to the transfer of technology or re-sale of equipment are identified. Disposal planning should then continue throughout the In-Service phase, culminating with a fully mature plan when the Planned Withdrawal Date for the equipment is confirmed.

5.7.2. Early disposal planning assists in minimising support costs and enables consideration of operational, maintenance, and environmental implications of the materiel system's disposal. A major factor in the disposal phase is minimising the operational impact on the materiel systems involved, and in-service activities must consider the most cost-effective way to sustain the remaining capability systems while progressively downsizing the capability. Such responsibilities also need to be effectively aligned with the arrival of the new capability.

5.7.3. Capability Systems Division Project Managers are to ensure that disposal is a consideration when developing the options presented at First and Second Pass and that appropriate budget allowance is incorporated into the respective Net Personnel Operating Costs estimates. This is particularly important when there may a requirement to dispose of restricted technologies or hazardous materials that necessitate specific, and possibly expensive, disposal processes.

5.7.4. Further information on disposal policies and process is provided in Defence Instruction General Logistics 4-3-008 *Disposal of Defence Assets* and the *Electronic Supply Chain Manual.*.

Chapter 6
Improving Capability Development

Section 6.1 - The Strategic Case for Change

6.1.1   Capability Development Group (CDG) promotes a culture of continuous improvement where Capability Development processes are continually reviewed and refined and change is managed as business-as-usual. Over the last few years the Australian Government has commissioned a series of reviews including the Kinnaird[29], Mortimer[30] and Black[31] which provided recommendations for improving Defence processes for capability development, procurement and sustainment. These and internal reviews, such as the P3M3®[32] (Portfolio, Program, Project Management Maturity Model) Assessment and Defence Capability Plan (DCP) Review, have been considered and incorporated into a reform agenda so that CDG can improve internal efficiencies and effectiveness. This agenda is being progressed through the Capability Development Improvement Program (CDIP), the vision of which is to improve CDG's operational efficiency and obtain greater value from the resources provided to Defence by the Government.

6.1.2   In July and August 2011 CDG undertook a maturity assessment of portfolio, program and project management processes within CDG through the P3M3® model. The assessment reviewed CDG's project, program and portfolio management capability to improve the effectiveness of the organisation, process, methods and procedures as they applied to the Requirements Phase of the Defence Capability Systems Life Cycle (CLSC). From the P3M3 assessment a Roadmap was developed to progress recommendations. The proposed P3M3 Roadmap for capability improvement was considered as part of the DCP Review.

6.1.3   Many of the P3M3 improvements recommended in the P3M3 Roadmap directly support the reform activities and review recommendations that have been made. CDIP is implementing the P3M3 Roadmap (outlined in Section 6.3) to deliver continuous improvement and meet various reform agendas. A further P3M3 assessment will be undertaken in 2013 to consider the progress of, and the next steps for, the improvement of CDG's reform program.

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[29] Defence Procurement Review, 2003
[30] Going to the Next Level: Defence Procurement and Sustainment Review, 2008
[31] Review of the Defence Accountability Framework, 2011
[32] The P3M3 model has been mandated by Department of Finance and Deregulation for all federal government agencies to use to assess their portfolio, program and project management maturity for information technology.

Section 6.2 - Capability Development Reform and Review Context

6.2.1   The capability development process has been the subject of a number of parliamentary inquiries, independent reviews and ANAO audits which have focused on improving operational efficiency and obtaining greater value from the resources provided. Outlined below is a summary of those conducted between 2000 and 2012.

6.2.2   **Defence Governance, Acquisition and Support Review, 2000.** As a result of this review the Defence Materiel Organisation was established.

6.2.3   **Kinnaird Review, 2003**. The review made a series of findings and recommendations, including; establishing Capability Development Group; defining and assessing capability; the management of capability; and the procurement and ongoing support of Defence equipment. For more information refer to the Kinnaird Review.

6.2.4   **Joint Committee of Public Accounts and Audit (JCPAA), 2008.** The JCPAA inquiry considered Defence's progress in implementing the reforms recommended by the Kinnaird Review. For more information refer to the JCPAA Inquiry into financial reporting and equipment acquisition at the Department of Defence and Defence Materiel Organisation report.

6.2.5   **Mortimer Review, 2008.** Mortimer evaluated Defence's progress under the Kinnaird reforms in addition to examining Defence's current acquisition and sustainment processes. The Government's response endorsed a 20-point plan of action to improve the way Defence develops, acquires and sustains capability. For more information refer to the Mortimer Review and The Response to the Report of the Defence Procurement and Sustainment Review.

6.2.6   **Pappas Review (Audit of the Defence Budget), 2009.** The two major aims of this Review were to advise Government on the efficiency and effectiveness of, and future risks associated with, the Defence budget; and to recommend better ways to manage the Defence budget. The recommendations from the Pappas Review are the foundation of Defence's Strategic Reform Program. For more information refer to the Defence Budget Audit.

6.2.7   **Strategic Reform Program (SRP), 2009.** The SRP is a Defence-wide program. to deliver savings of $20 billion over the decade 2009-10 to 2018-19 and approve accountability, planning and productivity.

6.2.8   **Black Review, 2011.** In 2010, the Secretary and CDF commissioned Associate Professor Dr Rufus Black to undertake a review of accountability in Defence. The Review assessed institutional and personal accountability in relation to aspects of Defence administration. Government has accepted the Review's recommendations in full. For more information refer to the Black Review.

6.2.9   **Portfolio, Program and Project Maturity Model (P3M3), Assessment and Roadmap, 2011.** A formal P3M3 assessment of CDG's Portfolio, Program and Project (3P) management capability was conducted.

6.2.10   **Defence Capability Plan (DCP) Review, 2011.** In 2011, the Minister requested a review of the DCP to ensure its continuing effectiveness and relevance.

6.2.11   **Senate Inquiry into Defence Procurement, 2012.** The Inquiry's aim was to identify how Defence procurement procedures could be further improved. Government agreed to 24 of the 28 recommendations. For more information refer to Procurement Procedures for Defence Capital Projects.

6.2.12   **Independent Project Analysis, 2012.** A DMO commissioned study comparing Defence Project performance with commercial Industry. It found that the delivery of Defence "Projects since the Kinnaird Review was close to global Industry and faster than the average Australian project".

Section 6.3 - Capability Development Improvement Program

6.3.1   Through CDIP, CDG is aligning and consolidating initiatives across all reform programs and review recommendations with the aim of having one overarching program, encapsulating all recommendations under formally managed and reported initiatives. This work is ongoing and initiatives will be opened and closed as required.

6.3.2   **CDIP Coordination.** The CDIP is managed by a single directorate that was established to create a strategic and integrated change management approach for CDG's role in Capability Development. This directorate manages all inputs to CDIP including the CDIP Working Group, CDIP Board and the CDIP Governance Framework.

6.3.3   **CDIP Working Group**. The Working Group has representatives from each initiative as well as other key Defence stakeholders. The Working Group encourages a programmatic view of the initiatives, highlighting interdependencies and providing a forum for discussion and agreement across Defence of outcomes for progression within the Governance framework.

Governance

6.3.4   **CDIP Governance Framework.** A governance framework will be implemented in 2013. The CDIP Governance Framework will classify initiatives according to strategic focus, complexity and timeframe. Initiatives will be progressed and monitored through a Five Phase Process:

a.   Phase One – Initiation

b.   Phase Two – Development

c.   Phase Three – Definition

d.   Phase Four – Implementation

e.   Phase Five – Finalisation

6.3.5   Through these phases each initiative is required to document the benefits to be realised, present a plan for their realisation and conduct an assessment of outcomes after implementation. Each initiative is required to report regularly to the CDIP Board which will conduct a review when initiatives are transitioning to a new phase. An Implementation Plan is also written during the definition phase and this document will be the reference point for reporting progress and achievement. This Framework provides the tools to enable CDIP to: differentiate between levels and types of change; identify the phases involved in achieving defined and managed change; adopt a standard approach for defining and implementing change; and manage benefits, including evidence to assess outcomes and improvements to the Capability Development process.

6.3.6   **CDIP Board.** Provides a command and control function for the management of CDIP. The CDIP Board is chaired by Chief Capability Development Group, and includes Head Capability Systems, First Assistant Secretary Capability Investment and Review and the Executive Director Group Support (Head CDIP) as permanent members.

Lessons Learned

6.3.7   CDIP will also manage a 'Lessons Learned' undertaking. Through the development and publishing of project Case Studies it will promote a 'Lessons Learned' process and culture as part of its continuous improvement of Capability Development business processes. The first of these case studies is to be published in 2013 and will provide personnel the opportunity to learn from recent projects and practically apply lessons to future projects.

Section 6.4 - Portfolio, Program and Project Management

Overview of P3M3®

6.4.1 Organisational portfolio, program and project competence underpins efficient, effective, and timely project delivery to help an organisation ensure its resources are optimised to *do the right projects* (the focus of portfolio management), and *do projects right* (the focus of program and project management).

6.4.2 The Portfolio, Program, and Project Management Maturity Model [33,34,35] (P3M3) uses five maturity levels, from level one - having an awareness of process - to level five – optimised processes. It is an overarching model containing three individual models:

a.   Portfolio Management model.

b.   Program Management model.

c.   Project Management model.

6.4.3 Although connected, these models can be assessed independently of each other. The models are represented at Figure 6.1.
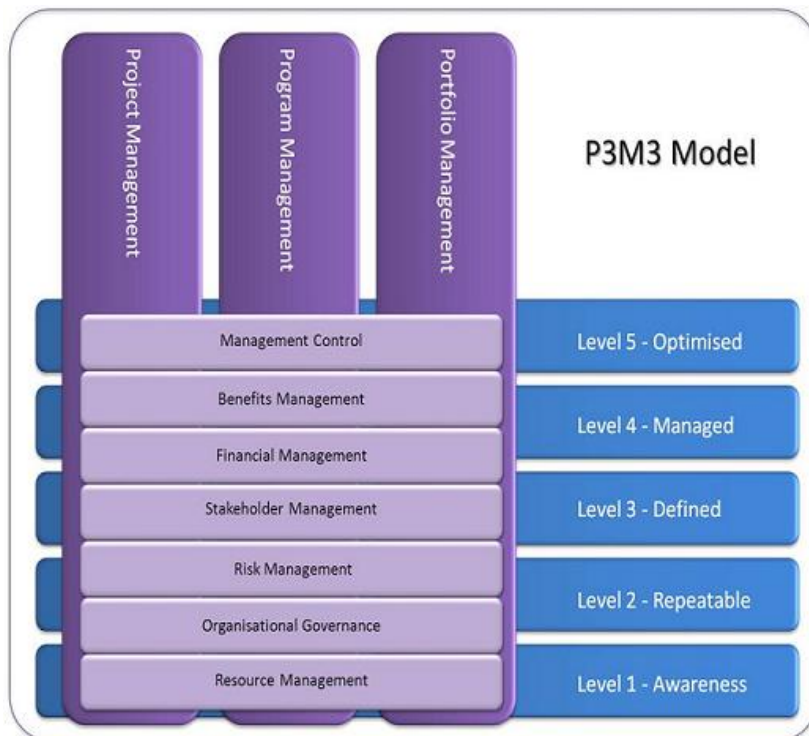
Figure 6.1: P3M3 Model

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[33]   Owned by the Office of Government Commerce (OGC) in the UK

[34]   For more information on the P3M3 Model see OGC P3M3 Site

[35]   P3M3 was developed to complement other UK Office of Government Commerce (OGC) best practice guidance such as Prince2, Managing Successful Programmes (MSP), and Portfolio, Programme and Project Offices (P3O). The basis for P3M3 is the process maturity framework Capability Maturity Model Integration (CMMI) developed by the Carnegie Mellon University's Software Engineering Institute.

Chapter 6 - Improving Capability Development

6.4.4   In the P3M3 model the organisation is measured in seven different process perspectives; management control, benefits management, financial management, stakeholder management, risk management, organisational management, and resource management. By using the P3M3 model, an organisation can determine which specific attributes best characterise the way it currently manages project, programs, and portfolios to determine its baseline maturity.

6.4.5   P3M3 was adopted by CDG as the framework for assessment as it has been mandated by Government [36] for all Federal Government agencies to use as a model for assessing their current organisational maturity and development of associated capability improvement plans.

CDG Portfolio, Program and Project Maturity

6.4.6   As noted at paragraph 6.1.2 a P3M3 assessment was carried out to identify improvements to CDG's project, program and portfolio management capability. The Group's capabilities were assessed through interviews with a range of stakeholders and a review of project management standards and project documentation. For each model, the seven different process perspectives were assessed.

6.4.7   A capability maturity level was then calculated separately for each model, as follows:

a.   **Portfolio Management - Level 1: Awareness of Process**. Portfolio Management is assessed at Level 1 with the organisation recognising the Portfolio but demonstrating little in the way of documented process or standards for managing the portfolio. The introduction of a formal Portfolio Management Office to own and drive these processes would improve this significantly.

b.   **Program Management - Level 1: Awareness of Process**. Program Management is assessed at Level 1 with no consistent approach to managing programs differently from projects, although identifying project interdependencies is starting to be seen as a critical driver for successfully delivering the DCP. The report noted that there are a number of benefits to taking a program management approach in managing the DCP from improved joined up capability outcomes to the ability to leverage professional skills and efficiently use stakeholder time.

c.   **Project Management - Level 2: Repeatable Process**. Project Management has been assessed at Level 2 with a documented stage-based project delivery lifecycle, and key disciplines such as organisational governance and financial management in place. A number of Level 3 attributes are in place or emerging across all perspectives. There are further opportunities to rationalise documentation, put in place supporting project management infrastructure and support, and work on the efficiencies and effectiveness of elements such as the committee structures and approval process which will drive organisational improvement.

6.4.8   Figure 6.2 displays the assessment by process perspective and by model. The overall rating for each model is based on the lowest rating within the individual process perspectives.

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[36]   Through Department of Finance and Deregulation (DoFD) (see link)
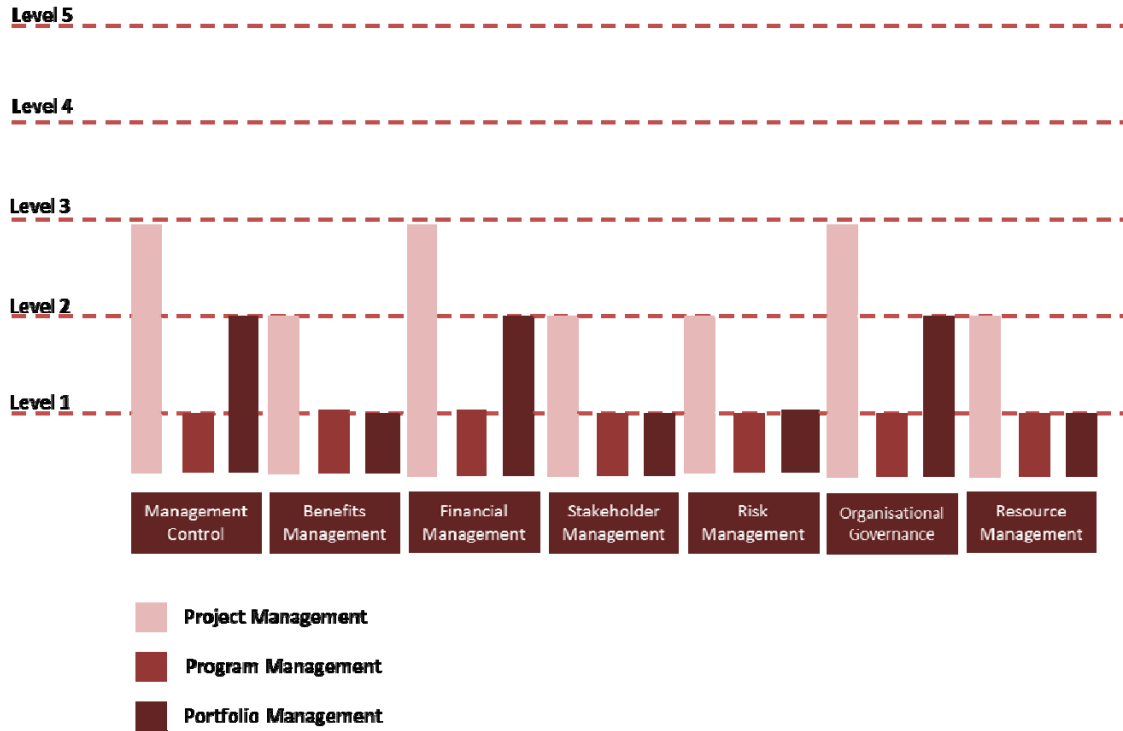
Figure 6.2: CDG P3M3 assessment

P3M3 Roadmap

6.4.9   The P3M3® Roadmap outlines the proposed improvement targets and suggests how these target levels may be achieved. It recommends a target state based on existing problem areas identified in the P3M3 assessment and those P3M3 elements which best support the implementation of recommendations made by recent reviews. The identified target state capabilities are set out in Figure 6.3.
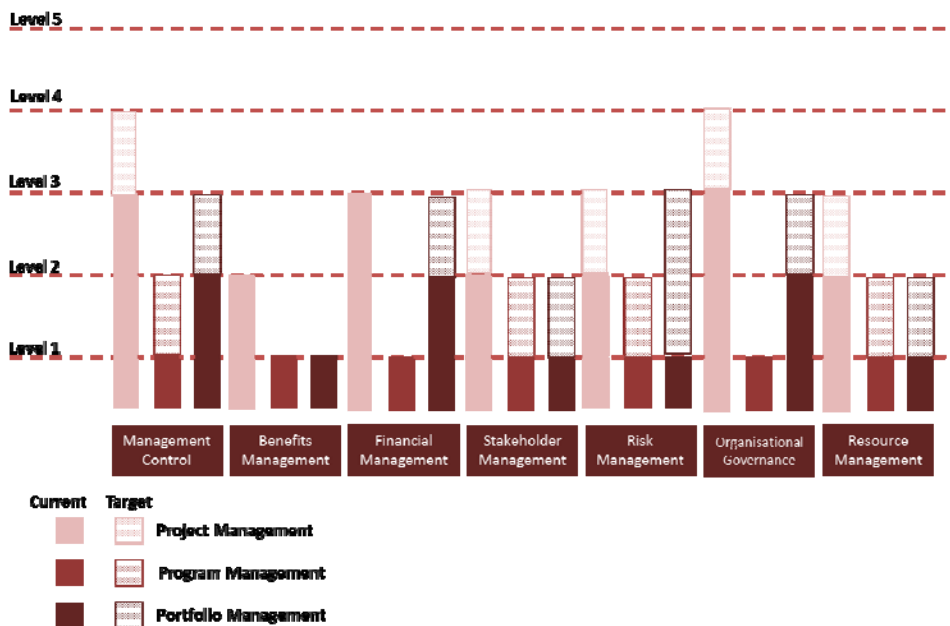
Figure 6.3 CDG P3M3 - future state

Chapter 6 - Improving Capability Development

6.4.10   The target state for each model is:

a.   **Project Management**: consolidate at 'Level 3 – Defined Process' in most process perspectives, with 'Level 4 – Managed Process' in key perspectives around controlling project delivery, and ensuring decision-making processes associated with project performance are better integrated into broader organisational performance management.

b.   **Program Management**: improve to 'Level 2 – Repeatable Process' in key process perspectives to better leverage opportunities for coordination between related projects (management control, stakeholder, risk, resources)

c.   **Portfolio Management**: improve to 'Level 3 – Defined Process' in key process perspectives that support better managing projects as a strategic portfolio (management control, financials, risk, organisational portfolio standards)

6.4.11   In order to achieve these targets, the P3M3 assessment identified a number of generic attributes that will enable CDG to achieve increases in the maturity level of process perspectives:

a.   Experience/competency-based appointment into key project roles such as Project Manager and Project Executive/Sponsor.

b.   Formalised methods to build individual staff skills/competencies in Portfolio, Program and Project Management.

c.   Appropriate and standardised planning and estimating processes.

d.   Information management and tools to support the project delivery environment.

Approach

6.4.12   The roadmap recommended six coordinated work streams:

a.   **WS1 - Quick Win Opportunities** - In the immediate term, progress with improvement as a low-key exercise to address "quick-win" opportunities identified during the P3M3 Assessment in priority order, and prepare for integrating improvement activity into the wider Reform agenda. These quick wins include: proactive forecasting of Committee Schedule; review and rationalise capability development document set and tailor according to complexity, scale and risk of projects; update fortnightly report format to better show project performance (schedule, risk, cost, etc.), Portfolio Dependencies Map[37], etc;

b.   **WS2 - Establish "Centre of Excellence" Function** - Establish the functions and structure to own, plan, coordinate, improve and deploy portfolio, program and project capability in CDG;

c.   **WS3 - Develop Guidance** – Develop policies, standards and guidance to support improved delivery practises. Leverage and align standards with other delivery partners in the Defence capability project lifecycle (Strategy Group, Defence Materiel Organisation, Chief Information Officer Group etc);

d.   **WS4 - Develop Tools** – Define requirements and select appropriate tools to better support, automate, and control capability project delivery;

e.   **WS5 - Establish Delivery Management Function** – Establish the functions and structure to better support efficient and effective delivery of capability projects in CDG from a program and portfolio perspective. This includes standing up a Portfolio Delivery Office to provide planning, analysis, oversight and governance support at CDG portfolio-level; and

f.   **WS6 - Business Integration** – A formal transition management and sustainment function for moving improvements into business-as-usual.

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[37]   A map of the recommendations that were relevant to CCDG from external and internal reviews against capability issues such as People, skilling and information management and various reform programs and initiatives that are in progress.

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6.4.13   The following table relates the work streams to current tasks in CDG:

Work stream	Improvement	Implementation
WS1	Committee Schedule	The CDMRT[38] on the DSN has implemented the Committee Schedule.
	Project Document Suite (PDS)	The PDS has been reviewed and rationalised. It will be implemented during 2013.
	Tailor PDS	Tailoring of the PDS occurs at the Project Initiation and Review Board and is reviewed during project development.
	Project reporting	Project Reporting has been implemented on CDMRT.
	Portfolio Dependencies Map[37]	The CDMRT is implementing a Project Dependencies Map.
WS2	Centre of Excellence	The Project Coordination Directorate in ICD Branch has been stood up to provide this function.
WS3	Develop Guidance	DCDH Update – comprehensive update of changes so far. Project Document Suite Guide (Initiative 2) in process of being implemented. Planned DCDM for 2013 and a process for updating guidance as business-as-usual.
WS4	Define tools	The CDMRT is the initial step in providing tools for capability project management. A schedule tool has also been developed and will be rolled out during 2013. Cost estimation is being investigated.
WS5	Delivery Management	Integrated Capability Development (ICD) Branch: established to support the integration of capability within the DCP, improve the focus on project interdependency, promote program planning to enable the delivery of coherent joint capabilities and monitor capability development of DCP Projects being managed by CIO and I&S Groups.
WS6	Business Integration	CDIP Governance Framework

Table 6.1: Work Streams

P3M3 Roadmap Relationship to Reviews and CDIP

6.4.14   The P3M3 Roadmap compared the internal and external reforms and reviews with the P3M3 model and process perspective which would support the implementation of the reforms. This is shown in Table 6.2 which also maps CDIP initiatives to the review focal points.

Review / Reform Focus	P3M3 Model / Process Perspective	Specific Improvement Opportunity Identified	CDIP Initiative
Function of committees and strategic decision making	Portfolio / Project Management – Organisational Governance	Project / Portfolio governance committees hierarchy / roles / business rules	Establish a Portfolio Management Office Review Committee Roles and Business Rules

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38   Capability Development Management and Reporting Tool.

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Review / Reform Focus	P3M3 Model / Process Perspective	Specific Improvement Opportunity Identified	CDIP Initiative
Broader decision making and contestability	Portfolio / Project Management - Management Control	Portfolio Office to support decision making Review prior to committee decision making	Establish a Portfolio Management Office Improving Committee Effectiveness Enhancing the Project Initiation and Review Board
Frame strategic direction	Portfolio Management – Benefits Management	Introduction of Benefits Management framework and Realisation process	CDIP Framework with Benefits Management and Realisation strategy and mandated links to CDG strategic objectives
Translate policy into measurable outcomes	Project / Program Management – Benefits Management	Introduction of Benefits Management framework and Realisation process	CDIP Framework with Benefits Management and Realisation strategy and mandated links to CDG strategic objectives
Providing the right people to accountable leaders	Portfolio Management – Resource Management	Seeded expertise into Program Teams Competency Centres	Professionalisation and skilling Accountability / Performance Agreement
Ensuring the right information is available	Project Management – Management Control	EPM System / Performance Management improvements	Knowledge Management Information Management Alignment Integrated Master Schedule
Ensuring people are prepared for their roles	Project / Program Management – Resource Management	Seeded expertise into Program Teams Competency Centres	Professionalisation of the Capability Workforce
Measure and review outcome	Project / Program Management – Benefits Management	Introduction of Benefits Management framework and Realisation process	CDIP Framework with Benefits Management and Realisation strategy and mandated links to CDG strategic objectives
Change to DCIC Committee Mandate	Project Management – Organisational Governance	Review of Committee Hierarchy and Business Rules	Improving Committee Effectiveness
Greater use of the IPT	Project / Program Management – Stakeholder Management	Co-ordination of Program Stakeholder groups	Establishment of the Integrated Capability Branch in Capability Systems Division
Portfolio Performance Management	Portfolio Management – Resource Management	Performance Management and Project Reporting	Establish a Portfolio Management Office Establishment of Early Warnings and Indicators Framework

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Review / Reform Focus	P3M3 Model / Process Perspective	Specific Improvement Opportunity Identified	CDIP Initiative
Specialist Career paths	Portfolio Management – Resource Management		Professionalisation of the Capability Development Workforce
Management of over programming and slippage	Portfolio Management – Financial Management	Integration of portfolio financial analysis with schedule and capability	Contingency Management
Management of Contingency	Portfolio Management – Financial Management		Contingency Management
Management tool reform	Portfolio Management – Financial Management	Enterprise toolset	Master Schedule and Portfolio reporting

Process Information management Alignment |
DCP Project Prioritisation	Portfolio Management – Management Control	Review prior to committee decision making	DCP Prioritisation initiative to re-commence in 2013
DCP Alignment	Portfolio Management – Management Control	Portfolio and dependency management	DCP Prioritisation initiative to re-commence in 2013
Opportunity Buys	Portfolio Management – Financial Management	Cost forecasting and management of funds	

Table 6.2: P3M3 Road map, Internal and External Reforms and CDIP Initiative

Acronyms and Abbreviations

Acronyms and Abbreviations

Acronym	Expanded Acronym	Acronym	Expanded Acronym
A		CAB	Cost Analysis Branch
ABC	Acquisition Business Case	CABSUB	cabinet submission
ACAT	Acquisition Category	CBRN	chemical, biological, radiological and nuclear
ACCS	Australian Capability Context Scenarios	CC	Capability Coordinator
ADDP	Australian Defence Doctrine Publication	CCDG	Chief Capability Development Group
ADF	Australian Defence Force	CCM	Capability Coordination Model
ADFLM	ADF Logistics Manager	CDAF	Capability Development Advisory Forum
ADO	Australian Defence Organisation	CDD	Capability Definition Document
ADSO	Australian Defence Simulation Office	CDF	Chief of the Defence Force
ADTEO	Australian Defence Test & Evaluation Office	CDG	Capability Development Group
AFS	average funded strength	CDMRT	Capability Development Management Reporting Tool
AIC	Australian Industry Capability	CDS	Chief Defence Scientist
AIOS	Acceptance Into Operational Service	CDSG	Capability Development Stakeholder Group
AMS	Australian Military Strategy	CEO DMO	Chief Executive Officer, Defence Materiel Organisation
APMP	Acquisition Project Management Plan	CFO	Chief Finance Officer
ASIA	Assistant Secretary Investment Analysis	CGRB	Capability Gate Review Board
ASIS	Acquisition and Support Implementation Strategy	CMSG	Capability Management Steering Group
AUSDAF	Australian Defence Architecture	CI	critical issue
B		CIO	Chief Information Officer
BCCDB	Business Case Closure Decision Brief	CIOG	Chief Information Officer Group
C		CIP	capability implementation plan
		CIR Div	Capability Investment and Resources Division
C&P	Capability and Plans Branch	CJLOG	Commander Joint Logistic Command
		CM	Capability Manager

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Acronyms and Abbreviations

Acronym	Expanded Acronym	Acronym	Expanded Acronym
CN	Chief of Navy	DCDM	Defence Capability Development Manual
CN	Congressional Notification	DCIC	Defence Capability and Investment Committee
COI	critical operational issue		
COO	Chief Operating Officer Branch	DCP	Defence Capability Plan
COSC	Chiefs of Service Committee	DEAP	Director Emerging Aerospace Projects
COTS	Commercial Off The-Shelf		
CPD	Chief of the Defence Force Preparedness Directive	DEC	Defence Estate Committee
		DEPIC	Defence Estate Performance and Investment Committee
CRP	Capability Realisation Plan		
CSA	Customer Supplier Agreements	DEPSEC IS	Deputy Secretary Intelligence and Security
CS Div	Capability Systems Division	DEPSEC S	Deputy Secretary Strategy
CS Div PM	Capability Systems Division Project Manager	DGAD	Director General Aerospace Development
CSIR	Corporate Services Infrastructure Requirement	DGCP	Director General Capability and Plans
CSLC	Capability Systems Life Cycle	DGICD	Director General Integrated Capability Development
CSO	Chief Security Officer		
CSS	Capability Scope Summary	DGLD	Director General Land Development
CTD	Capability and Technology Demonstrator	DGMD	Director General Maritime Development
CTO	Chief Technology Officer	DGSIM	Director General Simulation
CTOD	Chief Technology Officer Division	DID	Defence item description
CTP	critical technical parameter	DIGO	Defence Imagery and Geospatial Organisation
D		DII	Defence information infrastructure
DAF	Defence Architecture Framework	DIO	Defence Intelligence Organisation
DBC	detailed business case	DISC	now DEC
DC	Defence Committee	DMFP	Defence Management and Financial Plan
DCC	Defence Capability Committee		
DCDH	Defence Capability Development Handbook	DMO	Defence Materiel Organisation
		DNCF	Defence Network Compliance Framework

Acronyms and Abbreviations

Acronym	Expanded Acronym	Acronym	Expanded Acronym
DoFD	Department of Finance and Deregulation	FELSA	Front End Logistic Support Analysis
DPG	Defence Planning Guidance	FIC	Fundamental Inputs to Capability
DPG	Defence People Group	FMR	Final Materiel Release
DPPM	Defence Procurement Policy Manual	FMS	Foreign Military Sales (USA)
DSA	Defence Security Authority	FOC	Final Operational Capability
DSCA	Defense Security Cooperation Agency (USA)	FOT	Force Options Testing
DSD	Defence Signals Directorate	FPS	Function and Performance Specification
DSRG	Defence Support and Reform Group	FSDD	Force Structure Development Directorate
DSTO	Defence Science and Technology Organisation	FSM	Force Structure Matrix
DWMFA	Directorate of Workforce Modelling, Forecasting and Analysis	FTE-A	Full Time Equivalent Average

G

		GFE	Government Furnished Equipment
		GFF	Government Furnished Facilities

E

EA	Enterprise Architecture	GI	Geospatial Information

H

EIA	Environmental Impact Assessment		
EMP	Environmental Management Plan	HCS	Head Capability Systems
EP&E Branch	Estate Policy and Environment Branch	HSI	Human Systems Integration
		HUMINT	Human Intelligence
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*		

I

EPT	Emerging Project Team	IA	Implementing Agency
ETP	Early Test Plan	IA	Investment Analysis
EW	Electronic Warfare	I&S	Intelligence and Security
		IBC	Initial Business Case

F

		ICT	Information and Communications Technology
FASCIR	First Assistant Secretary, Capability Investment and Resources Division	IMR	Initial Materiel Release

Acronyms and Abbreviations

Acronym	Expanded Acronym	Acronym	Expanded Acronym
IOC	Initial Operational Capability		
IOR	Initial Operational Release		**N**
IPT	Integrated Project Team	NPOC	Net Personnel and Operating Costs
ISD	In-Service Date	NSC	National Security Committee of Cabinet
ISR	Intelligence, Surveillance and Reconnaissance		
			O
ITR	Invitation To Register Interest	OCD	Operational Concept Document
	J	OED	Offer Expiry Date
JCA	Joint Capability Authority	OP	Operational Procurement
JCC Div	Joint Capability Coordination Division	OPP	Open Plan Professional
JDSC	Joint Decision Support Centre	OR	Operational Release
JLC	Joint Logistics Command	OT&E	Operational Test And Evaluation
JOA	Joint Operational Architecture	OTS	Off-The-Shelf
Joint PD	Joint Project Directive		**P**
	L	P&A	Price and Availability
LCCA	Life Cycle Costing Analysis	PBS	Product Breakdown Structure
LOA	Letter Of Acceptance	PCR	Project Closure Request
LOR	Letter Of Request	PCP	Project Capability Proposal
LOT	Life Of Type	PD	Project Directive
LSC	Logistics Support Concept	PDCP	Public Defence Capability Plan
	M	PDF	Project Development Fund
MAA	Materiel Acquisition Agreement	PDS	Project Document Suite
MINSUB	Ministerial Submission	PFPS	Preliminary Function and Performance Specification
MOTS	Military Off-The-Shelf	PG	Project Guidance (document)
MR	Materiel Release	PID	Project Initiation Document (security)
		PIRB	Project Initiation and Review Board

Acronyms and Abbreviations

Acronym	Expanded Acronym	Acronym	Expanded Acronym
PMB	Performance Measurement Baseline		**S**
PM&C	Department of the Prime Minister and Cabinet	S&T	science and technology
PMP	Project Management Plan	SBA	special billing arrangements
PMSG	Project Management Stakeholder Group	SBC	Strategic Business Case
POC	Personnel and Operating Costs	SCCG	Security Classification and Categorisation Guide
POCD	Preliminary Operational Concept Document	SCNS	Secretaries Committee on National Security
PRIM	Project Risk and Issues Management	SET	Stakeholder Engagement Team
PSI	Project Security Instruction	SIE	Single Information Environment
		SOFAIRP	So Far as is Reasonably Practicable
PSP	Professional Service Provider	SOW	Statement Of Work
PSPG	People Strategies & Policy Group	SPO	System Program Office
PSTA	Project Science and Technology Advisor	SRO	Senior Responsible Officer
P3M3	Portfolio, Program, Project Management Maturity Model	STSA	Science and Technology Support Agreement
PWD	Planned Withdrawal Date		
	R		**T**
RA	Rapid Acquisition	T&E	Test And Evaluation
RCD	real cost decrease	TCD	Test Concept Document
RCI	real cost increase	TEMP	Test Evaluation and Master Plan
RFI	Request For Information	TIE	Tactical Information Exchange
RFP	Request For Proposal	TRA	Technical Risk Assessment
RFT	Request For Tender	TRA	Technical Regulatory Authority
ROM	rough order of magnitude	TRC	Technical Risk Certification
RPDE	Rapid Prototyping, Development and Evaluation		**U**
		UOP	Urgent Operational Procurement
		USG	United States Government

Acronyms and Abbreviations

Acronym	Expanded Acronym
	V
VCDF	Vice Chief of the Defence Force
V&V	Verification and Validation
	W
WBS	Work Breakdown Structure
WHS	Work Health and Safety
WRA	Workforce Risk Assessment
	Y
YOD	Year Of Decision

Glossary

Glossary

Term	Definition
A	
Acceptance Into Operational Service (AIOS)	The process by which the fundamental inputs to capability comprising a capability system are proven to meet endorsed capability requirements, usually specified in an Operational Concept Document, and assembled so that in all aspects the capability has been realised and is acceptable for operational service.
Acquisition	Purchasing, leasing or other ways by which the acquisition agency procures a materiel capability or system for use by the ADF.
Acquisition Agency	For the DCP, the entity that is responsible for acquiring the major system or part of that system for Defence. Normally the DMO, but may also be CIOG, I&S or DSRG.
Acquisition Business Case (ABC)	Part of the Second Pass approval documentation, the ABC provides an overview of the proposed option, describing the nature of the option, the capability effects, key advantages and a detailed timeline that includes costing and risk assessment. Information on proposed industry participation over the life cycle is also included.
	The business case consists of all supporting documentation that is used to acquire the capability. The documentation includes the CDD, the APMP, the acquisition strategy, the cost templates, and plans such as the risk plan, the industry plan, etc. It does not include the project plans to achieve First and Second Pass.
Acquisition Category (ACAT)	The DMO ACAT framework is based on four acquisition categories that provide a graduated scale from the most demanding and complex projects to those that are less so. The largest, most demanding and complex projects are categorised as ACAT I and ACAT II; less demanding projects are categorised as ACAT III and ACAT IV.
Acquisition Phase	The third of the five-phase Defence capability life cycle. The Acquisition Phase is the process of procuring an appropriate materiel system to meet the identified requirements while achieving the best value for money over the life of the system.
Acquisition Project Supplies	The goods and services to be supplied by DMO or Defence in accordance with the MAA. The supplies typically comprise the materiel system and any and all other goods and services required for the production, release and delivery of the materiel system.
Acquisition and Support Implementation Strategy (ASIS)	The Acquisition and Support Implementation Strategy (ASIS) is the DMO's document that describes the strategy for the procurement and implementation of the materiel elements of the Capability System, including the strategy for implementing the required support arrangements.

Glossary

Term	Definition
Approving Authority	The mechanism that Government endorses a DCP project at First/Second/Combined Pass. For the majority of DCP Projects, this will either be the National Security Committee of Cabinet (NSC) or the 'two-minister' process of the Minister for Defence and the Minister for Finance and Deregulation.
Australian Defence Architecture Framework (AUSDAF)	The AUSDAF provides the framework for executing Defence's approach to Enterprise Architecture.
Australian Defence Force (ADF)	The Royal Australian Navy, the Australian Army, and the Royal Australian Air Force.
Australian Industry Capability Program	The systematic identification of opportunities for Australian industry in the generation and sustainment of indigenous industrial capabilities to support the ADF. Specifically, prospective suppliers and Defence are required to fully examine the scope for involvement of Australian industry on a cost-effective basis. In addition, opportunities for local industry to compete for the provision of goods and services within local and global supply chains are to be actively considered.
Average Funded Strength (AFS)	The average number of full-time equivalent Permanent Force members and Reservists on Continuous Full Time Service paid over a number of pay periods commencing from the start of a financial year. Average Funded Strength is the measure used for ADF workforce allocations. See also Workforce Guidance Trails.

B

Branch Head	See CDG Branch Head.

C

Capability	The power to achieve a desired operational effect in a nominated environment within a specified time and to sustain that effect for a designated period.
Capability Baseline	The system requirements defined by the capability definition statement (CDS) on entry to the DCP and by the Capability Definition Documents (CDD) on First and Second Pass approval.
Capability Coordinator (CC)	The role of the CC is to coordinate the generation and sustainment of a designated capability, where the fundamental inputs to that capability, particularly the major systems, are owned or managed within several different Services or Groups. Capabilities without clear boundaries, such as Electronic Warfare and Cyber Warfare, are candidates for coordination under the CC construct. The CC does not necessarily own or control any of the FIC associated with the capability for which they have responsibility.

Glossary

Term	Definition
Capability Definition Document (CDD)	The CDD define the capability system baseline, and comprise the Operational Concept Document (OCD), the Function and Performance Specification (FPS) and the Test Concept Document (TCD) or Early Test Plan (ETP).
Capability Definition Statement (CDS)	The document that defines the capability need on entry to the DCP. It is further refined into the CDD during the development process.
Capability Development	Those activities involved in defining requirements for future capability, principally during the Requirements Phase of the capability systems life cycle.
Capability Development Board (CDB)	See Capability Gate Review Board.
Capability Development Advisory Forum (CDAF)	The aim of the CDAF is to make Australian industry an integral part of the capability development process, ensuring that industry aspects are considered early, appropriately and consistently. It allows industry to put its views early in the capability development process, and enables Defence to test the strength of capability proposals. The CDAF is co-chaired by Head Capability Systems and CEO DMO.
Capability Development Group (CDG)	CDG has the responsibility for taking capability proposals from initial Government consideration and financial endorsement (DCP entry) to final approval by Government (Second Pass approval). CDG has a close relationship with DMO and oversees a number of the Defence Procurement Review recommendations.
Capability Development Stakeholder Group (CDSG)	The CDSG is the formal means for obtaining senior-level stakeholder involvement in, and commitment to, capability development projects. The CDSG is chaired by the relevant CDG Branch Head during the Requirements Phase. It includes one-star/SES Band 1 representation from DMO and the CM, and should include senior representatives from the organisations represented on the Integrated Project Team (IPT).
Capability Gate Review Board (CGRB) *Previously known as the Capability Development Board*	The CGRB endorses the capability proposal, including supporting business cases and project documentation, as the basis for developing the Ministerial or Cabinet Submission (MINSUB/CABSUB) to be provided for Government consideration and approval. CGRB is generally the last opportunity for significant issues to be raised by, and discussed with, senior stakeholders (and only when resolution at lower levels has not been possible).
Capability Investment and Resources Division (CIR Div)	CIR Div provides independent analysis and review of capability issues, including the overall balance of investment in capability (current and future), the future structure of the ADF, major investment proposals, preparedness, and priorities.

Glossary

Term	Definition
Capability Manager (CM)	A Capability Manager (CM) raises, trains and sustains capabilities. In relation to the delivery of new capability or enhancements to extant capabilities through the Defence Capability Plan, the CM is responsible for delivering the agreed capability to Government, through the coordination of the Fundamental Inputs to Capability (FIC). The CMs are CN, CA, CAF and DEPSEC I&S.
Capability Manager Stakeholder Group (CMSG)	The CMSG is the formal means by which the Capability Manager will discharge the responsibilities to provide oversight and coordination of Fundamental Input to Capability (FIC) elements for capability development projects post Second Pass.
Capability Realisation Plan (CRP)	A project-specific plan developed and implemented by the nominated CM in accordance with the Joint Project Directive, and incorporating defined transition and capability release milestones.
Capability Scope Summary (CSS)	The CSS forms the first page of the cost estimate. It captures the known information of the project at each stage, such as schedule, scope and risks.
Capability State	An endorsed capability outcome to be realised through the AIOS process at the project level.
Capability System	The combination of the fundamental inputs to capability which are the standardised elements required to deliver capability.
Capability System Component	A part of the capability system. A component may be hardware or software, procedure, policy or a human element and may be subdivided into other components. Components can be any combination of subsystems, systems, projects or FIC elements
Capability Systems Division (CS Div)	A division within CDG. CS Div manages the development of future capability options to assist Government decision making on investment in major capital equipment for the ADF.
Capability Systems Life Cycle (CSLC)	A capability system's whole of life, from initial identification of a need to its disposal. Within Defence, the CSLC consists of the Needs, Requirements, Acquisition, In-service and Disposal phases.
CDG Branch Head	Directors General Maritime Development, Land Development, Aerospace Development, Integrated Capability Development; Assistant Secretary Capability and Plans, Assistant Secretary Investment Analysis, Assistant Secretary Cost Assurance Branch, Director-General Test and Evaluation: DGMD, DGLD, DGAD and DGICD, ASCP, ASIA, ASCAB and DGT&E respectively.
Chief Information Officer Group (CIOG)	CIOG provides specific policy and advice on the Single Information Environment aspects for major acquisition projects. CIOG (Information Systems Division) may also be given responsibility in lieu of DMO for acquiring particular SIE-related projects.

Glossary

Term	Definition
Contractual Delivery	The physical movement of supplies from the contractor to Defence; occurs at system acceptance.
Corporate Services and Infrastructure Requirement (CSIR)	The document within the DSRG process to progress any DSRG service or infrastructure requirement to the capability project. A CSIR Part 1 is developed by CDG as sponsor of a project. The infrastructure development process involves three stages: DSRG develops a CSIR Part 2 (strategic screen) of the project, a strategic business case (SBC) in Second Pass (and a detailed business case (DBC) after Government Second Pass approval).
Cost of Ownership	Is the sum of the acquisition, support, upgrade and disposal costs.
Critical Category	An employment category that is experiencing or is anticipated to experience a shortfall in numbers of personnel at required skill and rank levels, to the extent that this could severely limit the range of strategic and operational options available to achieve the Defence mission.
Customer Furnished Supplies	Supplies (goods and services) provided by customer groups under formal agreement(s) with the acquisition agency, that are to be incorporated in the delivered materiel system.

D

Term	Definition
Data Item Description (DID)	A template that specifies the format and content of a document to be produced.
Defence Capability and Investment Committee (DCIC)	Ensures that resourcing, including capital investment and operating costs, is consistent with Defence's strategic priorities and resourcing strategy.
Defence Capability Committee (DCC)	Considers and develops options for current and future capability, focusing on individual major capital investment projects.
Defence Capability Plan (DCP)	The DCP outlines Government's long-term Defence capability plans. It is a detailed, costed, 10-year plan comprising the unapproved major capital projects that aim to ensure that Defence has a balanced force that is able to achieve the capability goals identified in the Defence White Paper and subsequent strategic updates.
Defence Estate Committee (DEC) *Previously known as the Defence Infrastructure sub-committee*	The role of the DEC is to focus on the development of Defence's enabling infrastructure and related services. The DEC reviews all major proposals for capital investment in infrastructure as well as infrastructure proposals of strategic significance or related to capability development proposals, and review the through-life cost implications of infrastructure investment proposals, including garrison support, information, computing and communications support, and facilities maintenance, but excluding maintenance and logistics.

Glossary

Term	Definition
Defence Estate Performance and Investment Committee (DEPIC)	The DEPIC provides oversight of Defence estate plans, business reforms, estate performance metrics, significant or sensitive facilities projects, review alignment of the estate with SRP initiatives, and review alignment of projects with the Defence Capability Plan and other portfolio priorities, including whole of life considerations, options for project funding and any other matters the Chair deems relevant to the Committee's task.
Defence Infrastructure Sub-Committee (DISC)	See Defence Estate Committee
Defence Materiel Organisation (DMO)	A prescribed agency, the purpose of which is to equip and sustain the Australian Defence Force. DMO is accountable directly to the Minister for Defence on matters under the *Financial Management and Accountability Act 1997*, while remaining accountable to the Secretary, Department of Defence and Chief of the Defence Force for administration under the Public Service and Defence Acts.
Defence Science and Technology Organisation (DSTO)	The Australian Government's lead agency charged with applying science and technology to protect and defend Australia and its national interests. DSTO delivers expert, impartial advice and innovative solutions for Defence and other elements of national security.
Defence Strategic J4	Provides strategic logistics advice to the Secretary, Department of Defence and Chief of the Defence Force and Secretary on strategic planning, coordination, implementation and synchronisation of logistic support; and provides Defence logistics advice on capability development proposals, to ensure compatibility in the way Defence provides logistic support to operations. This includes through-life support arrangements and the ability to support the sustainability aspects of preparedness. Commander Joint Logistic Command (CJLOG) is the Defence Strategic J4.
Defence Strategic Workforce Plan	The Defence Strategic Workforce Plan articulates Defence's approach to workforce planning in support of the Defence White Paper and Defence's Strategic Reform Program (SRP).
Defence Trial	A specific trial conducted by the Australian Defence Test and Evaluation Office and performed on capabilities and systems that require test and evaluation (T&E) that is independent of a group or single service.
Defence White Paper	Defence White Papers are Australia's principal public policy documents regarding Defence. The White Paper presents the Government's long-term strategic direction and commitments for Defence as well as future capability requirements. The White Paper publicly enunciates policy guidance regarding
	the outcomes of Defence's strategy, capability and resource allocation processes. It also apportions Defence funding and workforce resources to achieve strategic interests and goals in accordance with priorities.

Glossary

Term	Definition
Definitive User Need	The authoritative statement of the Need a DCP project is to realise, normally done through a Capability Needs Statement.
Disposal Phase	The last of the five-phase Defence CSLC. This marks the end of the materiel system life.

E

Term	Definition
Early Test Plan (ETP)	Provides the basis for the acquisition agency development of the test and evaluation master plan (TEMP), and is the highest level document that considers T&E requirements within the capability system's life cycle.
Emerging Project Team (EPT)	A team linked to the major DMO divisions to provide improved teaming arrangements between DMO specialist skills and CDG professional mastery skills for all pre-First Pass projects.
Enterprise Architecture	Within Defence, Enterprise Architecture (EA) is an approach used to describe current and/or describe relationships between Defence's capabilities, business processes and enabling systems and technology.
Environmental Impact Assessment (EIA)	The process that considers the likely environmental effects of adopting a particular course of action or use of equipment. An EIA may be part of an internal Defence process (such as the Environmental Clearance Certificate), or external to Defence (such as approval under the *Environment Protection and Biodiversity Conservation Act 1999*).
Equipment	All materiel items except consumables. May be qualified by referring to items as major or minor capital equipment.
Evolutionary Acquisition	Enables capabilities to be upgraded in a planned way, from the delivery of a specified initial capability to eventual achievement of a full capability.
Exemplar	An Exemplar is an ideal and existing capability (a major system and associated FIC) that is employed for the purposes of preliminary costing, usually at DCP entry. However, an exemplar is not intended to exclude the exploration of other options to meet the identified capability gap and is open to revision throughout the Requirements Phase. Ultimately, the exemplar may be one of many capability options presented for Government approval and should not unduly limit options development within the Capability Development process.
Expected Life of Type	The expected economic life that will be obtained from a particular materiel system solution class. The expected life of type (LOT) covers the period from the initial operational capability (IOC) until the end of the expected useful life and, early in the capability development process, is the period against which economic judgments are made and life-cycle costing analysis (LCCA) is conducted. Prior to Second Pass, the expected LOT is replaced by the programmed LOT. Note that different materiel system solution classes may have different expected LOT.

Glossary

Term	Definition
F	
Final Materiel Release (FMR)	A milestone that marks the completion and release of DMO acquisition project supplies required to support the achievement of final operational capability (FOC). It is defined in the MAA.
Final Operational Capability (FOC)	The point when the final subset of a capability system that can be operationally employed is realised. FOC is a capability state endorsed at project approval at Second Pass, and reported as having been reached by the CM.
First Pass Approval	The process that gives Government the opportunity to narrow the alternatives being examined by Defence to meet an agreed capability gap. First Pass approval allocates funds from the Capital Investment Program to enable the options endorsed by Government to be investigated in further detail, with an emphasis on cost and risk analysis.
First Pass Documentation	The suite of documents required for First Pass submission to the Defence Capability Committee, before the preparation of a Cabinet submission.
First Pass Work Health and Safety Assessment (First Pass WHSA)	An assessment that analyses the types of safety related hazard, cause and risk relationships and their identified controls for each capability option as an input to the CGRB. The First Pass WHSA is an input to the risk register, the development of Preliminary Capability Definition Document requirements, and may inform the First Pass Workforce Plan.
Force-In-Being	The current state of the planned force structure, which is represented by the ADF as it currently exists.
Force Development Activity Schedule	A unified view of Needs investigation occurring across Defence. It is managed by the Force Structure Development Directorate in Strategy Group.
Force Structure Review (FSR)	A key part of the White Paper development process that occurs every five years, in line with the White Paper cycle. The FSR analyses and evaluates Australia's future Defence capability needs, and provides recommendations on the structure of the future ADF to Government.
Force Structure Matrix (FSM)	The FSM is a tool designed to capture and track identified force structure issues, and to focus organisational attention on known capability gaps. It is used to assist and institutionalise FSR processes.
Force Structure Workshops	Force Structure Workshops review and update the content of the FSM, align upcoming experimentation with force structure considerations, and identify opportunities for collaboration in investigations.

Glossary

Term	Definition
Full Time Equivalent-Average (FTE-A)	Full-time equivalent (FTE) is calculated based on the number of hours a civilian employee is paid in a pay period (not including allowances). The number of hours paid is divided by Defence's employee's standard fortnightly hours, to determine the equivalence paid of that to a full-time employee. Therefore, FTE is calculated by Earnings divided by 75 (Standard Hours). FTE-A is FTE divided by the number of pay periods that have occurred in the financial year
Function and Performance Specification (FPS)	Defines a validated set of requirements for the capability system, which will provide a basis for acquiring the system, satisfy the needs expressed in the OCD at an affordable cost, and invite maximum reasonable competition consistent with the acquisition strategy.
Fundamental Inputs to Capability (FIC)	The standard list for consideration of what is required to generate capability, comprising Personnel, Organisation, Collective Training, Major Systems, Supplies, Facilities and Training Areas, Support, and Command and Management. It is to be used by Australian Defence Organisation agencies at all levels and is designed to ensure that all agencies manage and report capability using a common set of management areas.

G

Government	Australian Government

H

Human Systems Integration (HSI)	The management and technical practice of integrating the areas of human factors engineering, crewing, personnel, training, systems safety and health hazards with Defence acquisition processes to ensure a safe, effective, operable and supportable capability.

I

Initial Business Case (IBC)	Part of the First Pass approval documentation. The IBC provides detailed supporting information on each option put forward for consideration by higher Defence committees and by Government. The IBC has annexes of supporting documentation that is used to acquire the capability.
Initial Materiel Release (IMR)	A milestone that marks the completion and release of DMO acquisition project supplies required to support the achievement of initial operational release (IOR). It is defined in the MAA.
Initial Operational Capability (IOC)	The point when the first subset of a capability system that can be operationally employed is realised. IOC is a capability state endorsed at project approval at Second Pass, and reported as having been reached by the Capability Manager.

Glossary

Term	Definition
Initial Operational Release (IOC)	The milestone at which the Capability Manager is satisfied that the initial operational and material state of the capability system—including any deficiencies in the fundamental input capability—are such that it is sufficiently safe, fit for service and environmentally compliant to proceed into a period of operational test and evaluation leading to an endorsed capability state.
In-Service Date (ISD)	The point in time that symbolically marks the beginning of the transition of the capability system, in part or full, from the Acquisition Phase to the In-service Phase. ISD generally coincides with delivery of the first major systems.
In-Service Phase	The fourth of the five-phase Defence Capability Systems Life Cycle. Begins when the capability system achieves IOC and extends to the Disposal Phase.
	The phase in which the individual FIC that make up the capability system are operated, supported, modified as necessary and managed by the CM. The In-service Phase begins when the capability system achieves IOC and extends to the planned withdrawal date (PWD).
Integrated Project Team (IPT)	A cross-function group of people with project-related skill sets, who are responsible for managing a capability proposal from First Pass approval to Second Pass approval. The IPT is led by the Capability Systems Division Project Manager assigned to the project.
Integration	The bringing together of components and ensuring that they function together. Components can be any combination of sub-systems, systems, projects or Fundamental Input to Capability elements.
Interface	The boundary where two items are required to pass information between them.
Interoperability	The ability of systems, units or forces to provide services to and accept services from other systems, units or forces and to use those services to enable them to operate effectively together.

J

Term	Definition
Joint Capability Authority	Vice Chief of the Defence Force exercises the role of Joint Capability Authority (JCA). The JCA responsibilities is twofold in that the JCA: • ensures that new and extant capabilities are developed in accordance with joint concepts and doctrine; and, • where necessary, appoints Capability Coordinators to be responsible for the delivery of capabilities that service the ADF and Defence.
Joint Project Directive (Joint PD)	A project-specific directive issued by the Secretary of the Department of Defence and the Chief of the Defence Force to the nominated Capability Manager, assigning overall responsibility, authority and accountability for realisation of the capability system to an in-service state.

Glossary

Term	Definition
K	
Key Defence Assets Register (KDAR**)**	The Key Defence Asset Register (KDAR) provides a register of key assets and the expected time frame of service. It does this by outlining the Planned Withdrawal Date (PWD) and Life of Type (LOT). The KDAR is the authoritative statement of those dates for listed assets, and provides guidance for other high level Defence plans (including, but not limited to, the Defence Capability Plan (DCP), the Assessment of Future Risks to Capability and Materiel Sustainment Agreements).
L	
Life Cycle	The whole life of a particular item, system or process from identification of a capability need to the end of its useful life. See Capability Systems Life Cycle.
Life of Type (LOT)	The estimated time, for planning purposes, for which an item will be a current service requirement. Life of Type is nominally an estimate of the date at which the item is no longer economically supportable.
M	
Materiel	All items of military equipment and related spares, repair parts and support equipment (excluding real property, installations and utilities), necessary to equip, operate, maintain and support military activities without distinction as to their application for administrative or combat purposes.
Materiel Acquisition Agreement (MAA)	An agreement between the Capability Manager, Capability Development Group and Defence Materiel Organisation (DMO) that states in concise terms what services and products the DMO (as supplier) will deliver to Defence, for how much and when.
Materiel Release (MR) *See also Initial Materiel Release (IMR) and Final Materiel Release (FMR)*	Materiel release (MR) milestones specific transition milestones that mark the completion and release of Acquisition Project Supplies required to support the achievement of Operational Release (OR). The MR are documented in the Materiel Acquisition Agency.
Materiel System	A subset of the capability system, being the combination of the mission system and the support system. The materiel system covers those aspects of the FIC that are supplied by the acquisition agency.
Minimal Level of Capability	The lowest level of task-specific capability with which a force element can achieve its Operational Level of Capability within Readiness Notice, encompassing the maintenance of core skills, safety and professional standards.
Mission System	That element of capability that directly performs the operational function. Includes platforms (e.g. ships, vehicles or aircraft), distributed systems (e.g. communications networks), and discrete systems that integrate into other mission systems (e.g. radar).

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Term	Definition
N	
Needs Phase	The Needs Phase is the first phase of the Capability Systems Life Cycle. It encompasses activities that identify current and future gaps within Defence's capability and proposes projects to address or manage those gaps through the Defence Capability Plan (DCP). This involves the identification of strategic priorities, the development and evaluation of concepts, the articulation of capability goals, and the development of capability programs and plans resulting in the DCP.
Net Personnel and Operating Costs (NPOC)	The difference between future and current mature operating costs associated with a capability, facility, system or specific item of equipment. It reflects the net difference between the cost estimates to operate a new, upgraded or replacement capability offset by the guidance (Defence Management and Financial Plan funding) available to operate the current capability, across all affected groups and the Defence Materiel Organisation.
O	
Off-The-Shelf (OTS)	Hardware or software that already exists, is in service with one or more other customers for an equivalent purpose and requires no, or minimal, change. Sometimes expressed as COTS (commercial off-the-shelf) or MOTS (military off-the-shelf).
Operational Capability (OC)	OC states are intermediate capability outcomes at the project level, where required, between the Initial Operational Capability of the first item and Final Operational Concept. They are identified as Operational Capability 2, 3, etc. (OC2, OC3).
Operational Concept Document (OCD)	The primary reference for determining fitness for purpose of the desired capability to be developed. A complementary document to the function and performance specification (FPS) and the test concept document (TCD) or Early Test Plan (ETP), which form the Capability Definition Documents (CDD) to define the capability baseline.
Operational Effectiveness	The ability of a system to perform its intended function over its intended operational spectrum, in the expected operational environment, and in the face of expected threats when operated by typical operational personnel.
Operational Level of Capability	The task-specific level of capability required by a force to execute its role in an operation at an acceptable level of risk.
Operational Release (OR)	The acknowledgment by the relevant CM that a capability system or subset has proven effective and suitable for the intended role and that in all respects is ready for operational service.

Glossary

Term	Definition
Operational Suitability	The capacity of a system, when operated and maintained by typical operational personnel in the expected numbers, and at the expected level of competency, to be reliable, maintainable, available, logistically supportable, compatible, interoperable, safe, environmentally compliant and ergonomically satisfactory.
Operational Test And Evaluation (OT&E)	Test and evaluation conducted under realistic operational conditions with representative users of the system, in the expected operational context, for the purpose of determining its operational effectiveness and suitability to carry out the role and fulfil the requirement that it was intended to satisfy.
Option	Each First Pass submission or memorandum must identify the National Security Council-agreed capability gap to be addressed and set out an Initial Business Case for each realistic broad solution class that addresses the capability gap. An option may be a different capability solution class or a different acquisition strategy (e.g. Foreign Military Sale or direct source).
Out-Turn	Value expressed in terms of future dollars, given a specific inflation rate.
P	
Personnel	When considered with operating cost refers to the dollar cost of the workforce.
Planned Withdrawal Date (PWD)	The point in time that symbolically marks the end of the transition of a capability system, in part or full, from the In-service Phase to the Disposal Phase.
Public Private Partnership (PPP)	PPP is a risk sharing relationship between the public and private sectors for the purpose of delivering timely public infrastructure and related non-core services, planning, financing, constructing and/or operating projects which would be regarded traditionally as falling within the responsibility of the public sector. A PPP is used mostly for major asset and infrastructure procurements. PPP arrangements are usually long-term over a 15-30 year period
Program	A group of related projects managed in a coordinated way to obtain benefits and control not available from managing them individually[39]. A program is concerned with doing the right projects, while project management is concerned with doing a project the right way.
Project Approval	In the context of the Defence Capability Plan, Government's approval of the project as detailed in the submission to Government at First and Second Pass, as appropriate. The Project Approval sets the basis of approval (ie baseline and parameters), including the funding provisions.

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[39] Project Management Institute, "The Standard for Program Management", 2006, ISBN 1-930699-54-9, p 4

Glossary

Term	Definition
Project Approval Authority	Government has approved ministerial thresholds for exercising Project Approval for Defence capital investment projects.
Project Capability Proposal (PCP)	The Project Capability Proposal (PCP) is the key document presented to Capability Gateway Review Board at First and Second Pass. The PCP contains the necessary information that enables committee members to make a decision, referencing, where necessary, supporting evidence in the Project Document Suite that to support the argument being made.
Project Development Funds (PDF)	PDF are funds available to pre First Pass projects for the Integrated Project Team formation and management, development of Capability Definition Documents, technical and trade studies, market studies, cost estimate studies, workforce analysis, and some travel. It is available on an annual basis. It is not to be used for post First Pass activities, non-project related activities, establishment of infrastructure and purchase of equipment.
Project Document Suite (PDS)	The Project Documentation Suite (PDS) contains the information requirements that support the Capability Development process. The PDS consists of an overarching document – Project Capability Proposal – and six parts: • Part 1 - Summary Information; • Part 2 - Project Start-Up; • Part 3 – Decision; • Part 4 – Technical; • Part 5 – Planning and • Part 6 – Governance.
Project Initiation and Review Board (PIRB)	The Project Initiation and Review Board formally begins the Requirement Phase of a Defence Capability Plan project. It provides confirmation of both the strategic and project scopes that were identified in the needs phase, and commit the resources required from Capability Development Group, the Capability Manager and the Acquisition agent to achieve First pass.
Project Risk and Issues Management Guide (PRIM)	The Capability Development Group (CDG) Project Risk and Issues Management (PRIM) Guide sets the process and approach for managing risk and issues within CDG's projects.
Project Management	The activity of managing projects undertaken by and/or contracted out by Defence to achieve stated objects through the application of planned strategies and processes within predefined constraints, including project scope, costs, time, quality and stakeholder satisfaction.

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Glossary

Term	Definition
Project Management Plan (PMP)	The PMP identifies and, where possible, defines the products to be delivered; the major activities to deliver the products; an assessment of the risks; the effort required; timescales; and the overall resources and costs. The PMP is a summary-level document supported by detailed subordinate planning documents.
Project Management Stakeholder Group (PMSG)	The DMO equivalent of the CDSG, formed after Second Pass.
Project Sponsor	In the context of the DCP, the project sponsor is responsible for getting the project approved by Government and getting Government's approval of any changes to that project approval. The project sponsor is usually the CDG Branch Head.

Q

Quicklook - RPDE	An RPDE Quicklook takes a similar approach to an RPDE task but with fewer steps and complexity, and provides advice within a report and in a shorter timeframe.
Quadrant Brief	A single page document that provided summary information on capability, cost, schedule and risk.

R

Rapid Prototyping Development and Evaluation (RPDE)	A RPDE task is endorsed and progresses through a series of reviews, referred to as 'steering gates'. A task results in a solution and/or a prototype, complete with a capability implementation plan (CIP).
Request for Proposal (RFP)	A formal invitation seeking industry interest, used to encourage the offer of innovative solutions and indicative costs to meet desired outcomes in a broadly based project proposal.
Request for Tender (RFT)	Used primarily to obtain tenders for clearly defined and specific requirements. It may be derived from an evaluation of earlier responses to invitations to register, requests for proposals, and industry briefings. Requests for tenders may be directed to the public at large or confined to one or more suppliers.
Requirements Phase	The second of the five-phase Defence CSLC. Defines the requirements, including operational support concepts and specifications.
Resource	Any physical or virtual entity such as workforce, equipment, ICT, logistics funding etc required for the completion of a project (see Fundamental Inputs to Capability).

S

Science and Technology (S&T) Plan	Outlines the science and technology required to support the project. May include treatment strategies for risks identified in the technical risk assessment.

Glossary

Term	Definition
Second Pass Work Health and Safety Assessment (Second Pass WHSA)	An assessment that analyses the types of safety related hazard, cause and risk relationships and their identified controls for each capability option as an input to the CGRB. The Second Pass WHSA is an input to the risk register, the development of Capability Definition Document requirements, and may inform the Second Pass Workforce Plan.
Second Pass Approval	The final milestone in the Requirements Phase, at which point Government endorses a specific capability solution and approves funding for the Acquisition Phase. The project cannot proceed to the Acquisition Phase until this approval is obtained from Government.
Security Classification and Categorisation Guide (SCCG)	Defence projects which involve material classified RESTRICTED, CONFIDENTIAL, SECRET and TOP SECRET are required to develop an SCCG, which identifies and grades the confidentiality requirements for official information and conveys those requirements to all those who handle the information, including project staff and contractors involved with the project. The SCCG is developed after First Pass, is generally included in request documentation passed to a contractor, and forms part of the eventual acquisition contract. It provides the necessary guidance to develop tender responses appropriately and to handle information or equipment the contractor accesses on behalf of Defence in accordance with Defence's security requirements.
Single Information Environment (SIE)	A capability consisting of information used by Defence and the means by which it is created, managed, manipulated, stored, protected and disseminated. All of Defence's information falls within one of two information domains: operations or management. Defence's information domains (DID) are supported by the Defence Information Infrastructure (DII), which comprises software, hardware and supporting ICT. Together, the DID and DII form the SIE. The SIE does not include the sensors, weapons systems or external systems that provide information to, and utilise information from, the SIE; however, it does include the interfaces that allow the passage of data and information between the SIE, sensors, weapons systems and external systems.
Solution Class	A generic solution type that does not incorporate any specific implementation elements or a manufacturer's solution. Examples include fighter aircraft, airborne radar, ground-based surveillance, space-based communications, ground transportation, and aircraft carriers.
Stakeholders	Those people and organisations who may affect, be affected by, or perceive themselves to be affected by a decision or activity. Note: The term 'stakeholder' may also include interested parties as defined in ISO 14050:1998 and AS/NZS 14004:1996.
Strategic Executive	Develops military strategy and strategic policy to provide a framework for the development of future Defence capability and to support military deployments, operations and exercises.

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Term	Definition
Support Concept (SC)	Describes the support system, including in conceptual terms, its goals, functions, organisations, arrangements, processes and the resources needed to achieve required supportability.
Support System	The sum of the existing support infrastructure and the additional support elements being generated to enable the mission system to be effectively operated and supported so that it can meet its operational requirements. It includes the organisation of hardware, software, materiel, facilities, workforce, data, processes and services. The support system embraces the support responsibilities undertaken by the Department of Defence, in-service support contractors and in-service support subcontractors.
Sustainability	A force's ability to continue to conduct operations, measured in terms of the workforce, equipment, facilities and consumables necessary for the force to complete its assigned operational tasks.
System	An integrated composite of people, products and processes that provides a capability to satisfy a stated need or objective. A system is a combination or assembly of hardware, software, principles, doctrines, methods, ideas, procedures and workforce, or a combination of them, arranged or ordered towards a common objective.
System Acceptance	The acknowledgment by the DMO project authority that an acquired materiel system complies with contractual and single-service requirements and is ready to be transitioned to the In-service Phase.
Systems Engineering	An interdisciplinary approach that encompasses the entire technical effort, and evolves into and verifies an integrated and life-cycle balanced set of systems, people, products, and process solutions that satisfy customer needs.

T

Term	Definition
Technical Risk	A risk that the system will not reach its goals for performance, cost or schedule due to technology risks, or to risks which arise in the integration of critical technologies and/or sub-systems dependent on them.
Technology Risk	A risk that an underpinning technology necessary for a capability will not mature within the required timeframe.
Tender Baseline	Includes the approved CDD (as the capability baseline), approved acquisition strategy and approved acquisition PMP.
Tender Quality Estimate	An estimate that can be executed in a contract or an FMS Case. It may be sourced from the market, as an offer from a supplier or from an LOA.

Glossary

Term	Definition
Test and Evaluation (T&E)	A process to obtain information to support the objective assessment of a capability system with known confidence, and to confirm whether or not a risk is contained within acceptable boundaries across all facets of a system's life cycle. A *test* is an activity in which a scientific method is used to obtain quantitative or qualitative data relating to the safety, performance, functionality, contractual compliance, and supportability of a system. *Evaluation* is the analysis of test results to determine (verify) or prove (validate) something.
Test and Evaluation Master Plan (TEMP)	A plan for traceability between T&E activities and the endorsed critical issues, to ensure that only the required testing is undertaken. Results of T&E planned in the TEMP are used to provide proof that new or upgraded capability meets its baseline and is safe and fit for purpose throughout its life cycle. The TEMP is a DMO sponsored document developed by acquisition agencies to support post Second Pass T&E activities.
Test Concept Document (TCD)	Articulates the proposed approach to test end evaluation of each option presented at First Pass.
Through-Life Costs	All the costs incurred once a capability, system or item of equipment has been introduced into service, including all the costs associated with ownership and disposal.
Through-Life Support	A whole-of-life management methodology that takes an integrated approach to all aspects of supportability and readiness of a capability or materiel system.
Two-Pass Capability Process	Rigorous system requiring Government's First Pass approval and Second Pass (project) approval for new acquisitions. Government considerations are dependent on comprehensive analyses of technology, cost (prime and whole-of-life) and schedule risks, subjected to external verification. The process ensures that Government is able to exert early influence over the Unapproved Major Capital Investment Program.

V

Term	Definition
Verification and Validation (V&V)	*Verification* is confirmation by examination and provision of objective evidence that specified requirements to which a product or service, or aggregation of products and services, is built, coded, assembled and provided have been fulfilled.
	Validation is confirmation by examination and provision of objective evidence that the specific intended use or application of a product or service is accomplished in an intended usage environment.

W

Term	Definition
White Paper	See Defence White Paper.
Work Breakdown Structure (WBS)	The common link that unifies the planning, scheduling, cost estimating, budgeting, contracting, technical, configuration management and performance reporting disciplines. It permits the Australian Defence Organisation and industry managers to evaluate progress in terms of contract performance.

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Term	Definition
Workforce	Relates to the numbers, skills, rank and level of staff required for a capability.
Workforce Estimate	A mandated table attached as an annex to the Workforce Plan that presents a detailed estimate of the workforce required for a capability from development to FOC. The workforce requirement is presented in units of AFS, FTE-A or Reserve Days and scheduled across financial years. All project stages (Capability Development, Acquisition, In-Service and Support, and DMO sustainment) are tabled independently for each Service, Group and DMO separately. The gross Workforce Estimate tables the entire future workforce required for the project. The net Workforce Estimate tables workforce increases or decreases and is calculated by subtracting the existing workforce allocation from the gross Workforce Estimate.
Workforce Guidance Trails	The means by which Workforce Guidance is recorded. The Workforce Guidance Trails provide a breakdown of ADF, APS and Contractor workforce guidance by Service / Group and financial year
Workforce Intelligence	Quantitative and qualitative information that supports decision-making on Defence workforce matters, obtained through a synchronised process of definition, collection, analysis and dissemination.
Workforce Mix	The relative proportion of military and civilian workforces in any given organisation. Can incorporate Permanent, Reserve, ongoing, non-ongoing and contractor personnel.
Workforce Plan	A mandated analysis of the total workforce required to support the development, acquisition, transition, implementation and sustainment of a capability. It examines and plans how the Defence workforce will get from its current state to where it needs to be in the future. It describes in detail the existing, transition and future workforce required in terms of workforce mix, numbers, training and skills, ranks and levels, and locations. It articulates clear and agreed workforce resource implications and their alignment with Government workforce allocations. In the development of the plan, workforce issues are examined, risks are identified and mitigation strategies are developed. The Workforce Plan is a key supporting document, on which the independent DEPSEC Defence People Workforce Risk Assessment is largely based.
Workforce Planning	The process which enables the development of a capable workforce in order to achieve sustained organisational performance and accountability.
Workforce Requirement	A description of the needed characteristics of a workforce. It refers to the number, mix, ranks/levels, employment categories, skills and training and any other necessary attributes required in order to meet the workforce demand.

Glossary

Term	Definition
Workforce Risk Assessment (WRA)	An independent assessment by Deputy Secretary Defence People of a capability proposal including the Workforce Plan and Workforce Estimate. The WRA considers all aspects of the workforce supply and demand environment for the individual capability proposal and across the DCP and Defence, to ascertain the risk to achieving and sustaining a fully developed capability. The WRA verifies the project's compliance with Defence workforce governance.
Workforce Sustainability	The theoretical ability of the workforce, including the numbers, ranks/levels and skills/qualifications, to provide for specified Defence requirements. For example, the comparison of an ADF category rank pyramid which occurs naturally given the assumptions of recruiting achievement, separation rates, promotion rates, time-in-rank etc; against the rank pyramid defined by the establishment; the greater the difference between the naturally occurring pyramid and the structure defined by the Service, the more likely a trade is to be unsustainable. See also Workforce Achievability.

Y

Year Of Decision (YOD)	The year in which Second Pass approval is scheduled.