Part 2. Defence Major Projects Report

Secretary's Foreword

I am pleased to provide the 2022-23 Major Projects Report (MPR) in conjunction with the Australian National Audit Office (ANAO), on 20 of Defence's major capability acquisition projects delivered by the Capability Acquisition and Sustainment Group (CASG) and the Naval Shipbuilding and Sustainment Group (NSSG).

The 16th annual MPR provides transparency on the progress of Defence's most complex acquisition projects. The MPR is a valuable tool to inform the Parliament and Australian public of Defence capability and related expenditure.

As at 30 June 2023, Defence, through CASG and NSSG, was managing 160 major and 10 minor acquisition projects with a total acquisition value of $143.9 billion. On 4 October 2022, Defence established NSSG to lead the delivery of maritime capability to the Australian Defence Force (ADF) and the management of continuous naval shipbuilding in Australia.

The 20 projects within the 2022-23 MPR have a combined total approved budget of $58.6 billion and total in-year budget of $4.3 billion. Of note are the following project achievements during 2022-23, which support delivery of important capability for the ADF:

- Collins Class Communications and Electronic Warfare (SEA 1439 Phase 5B2) achieved Initial Capability Delivery for Microwave Electronic Support in October 2022.
- Maritime Communications Modernisation (SEA 1442 Phase 4) delivered two ships, one in July 2022 and the other in March 2023.
- ANZAC Air Search Radar Replacement (SEA 1448 Phase 4B) achieved Material Release 3 (HMAS Perth) in November 2022.
- Medium Heavy Capability Field Vehicles, Modules and Trailers (LAND 121 Phase 3B) signed a contract with ECLIPS Pty Ltd in May 2023 for the delivery of Medium Heavy Gun Ammunition and Module Heavy Gun Stores.
- Main Battle Tank Upgrade / Combat Engineering (LAND 907 Phase 2 and LAND 8160 Phase 1) delivered the first batch of M1 Abrams seed stock vehicles to Anniston Army Depot in February 2023.
- Airborne Intelligence, Surveillance, Reconnaissance and Electronic Warfare (ISREW) Capability (AIR 555 Phase 1) delivered the Interim Operating Facility in Quarter 4 2022 and the Simulator Facility was completed in Quarter 1 2023.
- Advanced Growler – Airborne Electronic Attack Upgrade (AIR 5349 Phase 6) achieved Materiel Release 1 in December 2022.
- Battlespace Communications System (JOINT 2072 Phase 2B) achieved System Acceptance for Release 3 System Maintenance Release (Headquarters on The Move) in August 2022.

Defence commenced implementation of a range of enhancements throughout 2022-23 in support of the Government's priority to strengthen and revitalise the oversight of project performance. This

included the establishment of an Independent Projects and Portfolio Management Office (IPPMO), which provides centralised delivery group performance monitoring and reporting to senior Defence stakeholders and committees, to the Government, and to external bodies.

A revised Projects of Concern and Interest policy was implemented, including formal processes and 'early warning' criteria for placing projects on the Projects of Concern and Projects of Interest lists; monthly reporting; and establishment of ministerial summits with industry to discuss remediation plans.

In April 2023, the Government released the *Defence Strategic Review (DSR)*, which informs all aspects of Australia's strategic policy, defence planning and resourcing over the coming decades. Implementation of the Government's direction to Defence is underway and involves enterprise-wide transformation that will affect every part of the Defence organisation over time.

The DSR highlighted that Australia's strategic circumstances have markedly changed since the MPR was first implemented many years ago. As a result, based on security grounds, some information for certain projects will not be published. Defence has, however, provided all information to the ANAO to conduct assurance and analysis.

I acknowledge the ANAO's two qualifications and one emphasis of matter contained in Auditor-General's Priority Assurance Review that are addressed in the Defence Chapter.

I would like to take the opportunity to thank the Auditor-General, Mr Grant Hehir, and his staff for their contribution to the report.

Matt Yannopoulos
Acting Secretary
Department of Defence
23 January 2024

OVERVIEW

During 2022-23, Defence continued to manage a large and complex program of work across acquisition and sustainment programs to deliver capability to the ADF. CASG[1] and NSSG managed 160 major and 10 minor acquisition projects during 2022-23, worth a total acquisition cost of $143.9 billion. The 2022-23 acquisition budget of $9.5 billion was achieved.

During this reporting period, CASG and NSSG closed 20 major and six minor acquisition projects, with the major projects achieving a final spend of $11.3 billion over their life, against a budget of $12.1 billion. During Financial Year (FY) 2022-23, 11 major acquisition projects were approved, with an in-year acquisition budget of $648 million.

The 2022-23 MPR provides insight into 20 of the 160 major projects, with a total acquisition cost of $58.6 billion.

Strategic Circumstances

During this reporting period, on 24 April 2023, the Government released the DSR, the Government's response to the DSR and the National Defence Statement. The Government's response to the DSR sets out a blueprint for Australia's strategic policy, Defence planning and resourcing in the coming decades. In the six months following the release of the DSR, the Government has made some hard decisions necessary to cancel or reprioritise Defence projects and activities no longer suited to our strategic circumstances, as outlined in the DSR.

International Support

In May 2023, the Minister for Defence Industry announced a $160 million contract with Thales Australia, for an additional 78 Bushmaster protected mobility vehicles to be manufactured in Bendigo, Victoria. In October 2023, the Prime Minister announced sale of 14 Bushmaster vehicles to Fiji to support Fiji's deployment to international peacekeeping operations.

In October 2023, the Prime Minister, and the Deputy Prime Minister announced the Australian Government, with the support of Australian Defence industry, is providing a further $20 million package of military assistance to the Ukraine. The Defence Military Aid included both lethal and non-lethal capabilities. These capabilities were delivered through gifting of current ADF assets or procured and supplied through third-party agencies. All assistance provided to Ukraine by Defence Military Aid was subject to legal and international rules including the Geneva Conventions, International Traffic in Arms Regulations and Australian Export Controls.

[1] CASG figures include projects that were managed by CASG in 2022-23 and then subsequently moved to Guided Weapons and Explosive Ordnance Group from 2023-24.

Defence Industry

Defence and industry continue to effectively equip and sustain the ADF in an environment of constrained workforce in both capacity and skillsets.

Many of the impacts to acquisition and sustainment activities realised during the COVID-19 pandemic have eased, however, the management and cost of air and sea freight capacity when compared to pre-pandemic levels is a continuing issue.

Treatment of Classified and Sensitive Information

In accordance with the Joint Committee of Public Accounts and Audit (JCPAA) 2022-23 MPR Guidelines, Defence is responsible for ensuring that the information in the MPR is suitable for unclassified publication. The DSR highlighted that Australia's strategic circumstances have markedly changed since the MPR was first implemented. Defence has assessed that some details, both in respect of individual projects and in aggregate, would or could reasonably be expected to cause damage to the security, defence or international relations of the Commonwealth without sanitisation of the data. There are 12 projects in this MPR where some new or updated information has not been published on security grounds.

Defence provided the required information to the ANAO to conduct their assurance and analysis activities.

Key Achievements

Key achievements this year include:

- Collins Class Communications and Electronic Warfare (SEA 1439 Phase 5B) achieved Initial Capability Delivery for Microwave Electronic Support in October 2022.
- Maritime Communications Modernisation (SEA 1442 Phase 4) delivered two ships, one in July 2022 and other in March 2023.
- ANZAC Air Search Radar Replacement (SEA 1448 Phase 4B) achieved Material Release 3 (HMAS Perth) in November 2022.
- Medium Heavy Capability Field Vehicles, Modules and Trailers (LAND 121 Phase 3B) signed contract with ECLIPS Pty Ltd for delivery of Medium Heavy Gun Ammunition and Module Heavy Gun Stores in May 2023.
- Main Battle Tank Upgrade / Combat Engineering (LAND907 Phase 2 and LAND8160 Phase 1) delivered first batch of M1 Abrams seed stock vehicles to Anniston Army Depot.
- Airborne Intelligence, Surveillance, Reconnaissance and Electronic Warfare (ISREW) Capability (AIR555 Phase 1) delivered the Interim Operating Facility in Quarter 4, 2022 and the Simulator Facility was completed in Quarter 1, 2023.
- Advanced Growler – Airborne Electronic Attack Upgrade (AIR 5349 Phase 6) achieved Materiel Release 1 in December 2022.
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PROJECT PERFORMANCE

Complexity

The complexity of Defence projects continues to increase (Appendix A refers). In 2022-23, CASG and NSSG were managing 28 projects of the highest complexity Acquisition Category (ACAT I), up from 11 projects a decade ago. This is commensurate with an increase in the value of Defence's in-year acquisition and sustainment spending from $11 billion to $20 billion across the same decade (2013-2023).

The 20 MPR projects include 10 each for ACAT I and ACAT II, which is reflective of the increased complexity. By comparison, of the 28 projects in the 2010-11 MPR, only six were ACAT I.

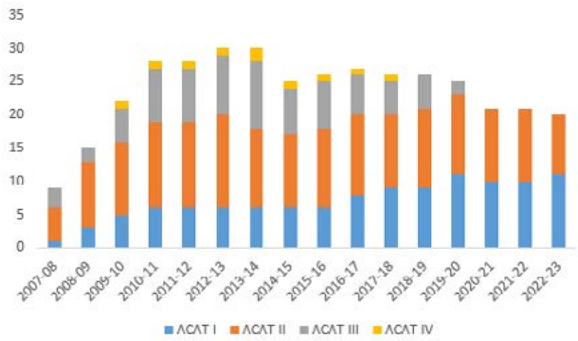

Figure 1 – ACAT complexity of MPR projects by financial year, as at 30 June 2023.

Cost

The Defence Chief Finance Officer provides overall financial assurance on the actual cost and budget data of individual projects included in this report. Project budgets approved by Government take into account the estimated impact of inflation over the life of a project, which is known as 'out turning'.

All financial data related to Defence's capital projects and capital programs provided within the 2022-23 Defence Portfolio Budget Statement (PBS), Portfolio Additional Estimates Statement (PAES), and Annual Report, are presented on an accrual basis.

Understanding Budget Variation

Real budget variations occur as a result of Government-endorsed changes to scope, real cost changes and scope transfers between projects. Subsequent Government approvals leading to real project budget variation includes activities such as:

- follow-on Second Pass approvals for additional phases of capability;
- tranched or rolling approval processes that have been agreed by Government; and
- merged or transferred cost or scope of projects to realise more efficient project management practices.

Foreign exchange rate variations do not represent real cost variations, as they are managed through funding adjustments on a 'no-win/no-loss' basis to offset realised foreign exchange losses or gains.

In rare instances, Real Cost Increases require a Government-approved budget variation due to unplanned cost and/or scope variation. Historically, the application of Real Cost Increases has been required only infrequently.

In-Year Cost

In accordance with MPR guidelines, the Project Data Summary Sheets (PDSS) reference a first estimate, the PBS, and a subsequent estimate, the PAES. The 2022-23 reporting was impacted by a Federal election in May 2022 that resulted in a May 2022 and an October 2022 budget.

The 2022-23 PAES, which would normally be tabled to Parliament in October 2022, was delayed and subsequently tabled in May 2023. As the October 2022 PBS more closely aligned with the MPR PAES timeframe, the October 2022 PBS financial figures have been used in this year's PDSS to reflect the 2022-23 PAES financial data.

Defence considers that the Final Budget Forecasts represent the baseline against which in-year project financial performance should be measured. The 20 MPR projects had a combined in-year budget of $4.3 billion, with actual achievement of $4.2 billion.

In 2022-23, the projects with largest financial variation between Actual Spend and Final Plan (greater than +/-$50m variance) are:

- *Offshore Patrol Vessel (SEA 1180 Phase 1).* Actual Spend of $291.7 million against a Final Plan of $344.1 million.
- *Battlefield Command System (LAND 200 Tranche 2).* Actual Spend of $102.1 million against a Final Plan of $168.0 million.
- *Heavy Armoured Capability (LAND 907 Phase 2 and LAND 8160 Phase 1).* Actual Spend of $80.0 million against a Final Plan of $142.4 million.
- *New Air Combat Capability (AIR 6000 Phase 2A/2B).* Actual Spend of $1,089.8 million against a Final Plan of $933.4 million.

Appendix C, Table C2 provides further detail of the in-year budget status of the 20 MPR projects.

Schedule

Defence sets ambitious schedule targets to ensure it can provide the ADF with leading edge capability. Schedule variation is reported based on the achievement of the Final Operational Capability (FOC) milestone. Schedule variation in early milestones, such as Initial Materiel Release (IMR) and Initial Operational Capability (IOC), do not necessarily result in a variation to the originally forecast FOC date. This is because schedule development will often accommodate overlap in design and production, long production lead times and the ability to redeploy assets or surge a workforce as one phase is completed and another commences. While the majority of projects continue without detriment, reasons for schedule variations can include changes in deliveries or scope, delays to

interdependent projects, technical reliability, contractual negotiations, integration issues, force majeure event or a deliberate management decision.

Causes of Schedule Variation during 2022-23

CASG projects continue to deliver successful capability outcomes. Project schedule is a primary focus considered through the Smart Buyer process and the early phases of the Capability Life Cycle. Schedule variations are reported based on the achievement of FOC. Where schedule slippage has occurred, project managers work with Defence, Industry and the Capability Manager Representatives to manage the impacts without compromising capability.

When analysing schedule performance there can be a tendency to focus on the numbers of months slipped rather than the drivers of that slippage. The MPR contains a group of distinct projects that are unique in nature. Schedule variation occurs for a number of reasons including late delivery, increase in scope, a force majeure event or a deliberate management decision. It also occurs because Defence set ambitious schedule targets to ensure it can provide the warfighter with leading edge capability. The projects listed in the MPR are the larger, more complex acquisition projects that contain inherent risk, and as such, are more likely to encounter schedule delay, compared to other projects.

The projects with the largest published FOC variations (greater than 12 months, and excluding projects where the information is not published on security grounds) are:

- *Collins Class Communications and Electronic Warfare Improvement Program (SEA 1439 Phase 5B2).* Microwave Electronic Support system experienced significant schedule delays from Government Second Pass Approval due to difficulties engaging with subcontractors in the project's early phases. IOC for Modernised Submarine Communications System Stage 1 and Stage 2 and Microwave Electronic Support has been further impacted by delays associated with cyber security accreditation and end-to-end sustainment requirements.
- *Civil Military Air Traffic Management System (CMATS) (AIR 5431 Phase 3).* The variances identified are the result of a number of cumulative factors, including a protracted negotiation period; schedule delays resulting from the post-contract inclusion of scope incorporated through Contract Change Proposals; and persistent schedule performance issues due to design and technical issues.
- *MQ-4C Triton Remotely Piloted Aircraft System (AIR 7000 Phase 1B).* An incremental approach to acquisition incurred a four-year delay to FOC, when the United States Navy prioritised other capabilities during the production pause.
- *Battlespace Communications Systems (JOINT 2072 Phase 2B).* As advised in the 2021-22 MPR, the FOC date is September 2023, due to extension of the project schedule as a result of COVID-19 related delays (no reported change in 2022-23 MPR).

Appendix C, Table C3 provides further detail of Schedule Variation all for the 20 MPR projects.

Materiel Scope and Capability

It is important to understand the difference between materiel scope and capability. Capability in Defence terms is 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.

Materiel scope is the delivery of the materiel element of capability. Falling outside the materiel scope are other fundamental inputs to capability, such as workforce, facilities or supporting IT infrastructure.

Calculating 'expected scope delivery' in a percentage term does not distinguish the relative impact some scope may have on overall capability, either up or down. Likewise, measuring the materiel delivery of a project against the final intended capability effect, without considering other fundamental inputs to capability, does not present a true picture of the forecast capability.

The 'traffic light' assessment of each element is indicative of the current confidence that the materiel scope outcome will be met:

- *Green.* A high level of confidence that the capability outcome will be met.
- *Amber.* The capability outcome being under threat but still considered manageable and able to be met.
- *Red.* At this stage, the capability outcome is unlikely to be fully met.
- *Blue.* An increase of materiel scope.

Of the 20 projects in this MPR:

- nine projects reported 100 percent in having a high level of confidence that the materiel scope outcome will be met (Green);
- three projects are reported to have measures which are at risk (Amber);
- four projects are reported to have measures which an element that is unlikely to be fully met (Red);
- one project is reported to have both measures which are at risk (Amber) and an element that is unlikely to be fully met (Red);
- one project is reporting that it is unlikely to be fully met (Red); and
- one project is currently in the design phase, and has not been assessed.

Table 1 captures the projects reporting amber or red measures.

Of note, it is acknowledged that the ANAO has qualified the LAND 200 Tranche 2 Battlefield Command System (BCS) PDSS, stating that '*The disclosed degree of confidence that materiel capability will be met has not changed from the prior year despite evidence that there has been a reduction in materiel capability and scope delivery*.'

Defence acknowledges that the BCS has been the subject of a number of delays in both the Battle Management System (BMS) and Tactical Communications Network (TCN) components of the project since approval in 2017.

In 2023, the project closed the BMS contract through a commercial agreement between Elbit Systems Limited and the Commonwealth, leaving the L3Harris Technologies TCN element as the remaining component of the BCS to be delivered.

In addition to closure of the BMS during the period of this report, the Commonwealth continues to work with L3Harris Technologies relating to the inability to achieve contracted milestones affecting the schedule for TCN Systems Acceptance.

The effect of these actions in the BMS and TCN components of the BCS has meant that during the MPR process, only incremental improvements to capability have been achieved, leaving the current overall capability and scope assessment essentially the same as that in last year's report.

In relation to remaining open commercial issues, Defence remain in negotiation with L3Harris Technologies to reach a solution for the TCN delay. Once this delay is resolved, an overall assessment of the BCS capability delivered and the Capability Manager's requirements will be able to be undertaken.

Table 1 – Details of Projects Reporting Amber or Red Measures.

#	Project	Traffic Light	Narrative for Amber / Red Rating
1	Offshore Patrol Vessel SEA 1180 Phase 1	Amber	The OPV weapon systems include the main gun and two 50 calibre machine guns with the Seaboats used for Constabulary Operations. The interim main gun for the Arafura OPVs will be the existing Navy 25mm Typhoon Mod 0 from Armidale Class Patrol Boats until a replacement gun is identified.
2	Medium Heavy Capability, Field Vehicles, Modules and Trailers LAND 121 Phase 3B	Amber	IOC was achieved with caveats due to delays in achievement of air certification. Achieving air certification by FOC remains a medium risk after mitigation. Schedule management remains a key focus and is being closely managed by CASG and the Capability Manager. The Capability Manager has advised that the Command Post Heavy module scope under LAND 121 Phase 3B is being reconsidered, and an alternate project for delivery may be identified.
3	Protected Mobility Vehicles Light (Hawkei) LAND 121 Phase 4	Red	In October 2021, Government approved the reduction to project scope of two Hawkei vehicles to support an export opportunity. This represents a reduction of 0.2% of the number of vehicles to be delivered by the project. This reduction has not yet been updated within the MAA. Defence continues to support Thales Australia's pursuit of export opportunities, and will receive royalty fees from any future overseas sales of the Hawkei.
4	Battlefield Command System LAND 200 Tranche 2	Amber	Defence and Elbit Systems of Australia discussions regarding the remaining scope under the Battle Management System (BMS) contract have concluded. This agreement had a slight positive effect on the Battlefield Command System (BCS) and no effect on the 'at risk' or 'not delivered' aspects of the project. The reduced scope required Elbit Systems of Australia to deliver the Release 1.1 software as it existed on 30 June 2022, with the remaining scope removed. The Tactical Communications Network (TCN) Contract is currently subject to a Default Notice, which is the primary driver for the amber assessment against the remaining scope of the BCS. Resolution of the ongoing contract negotiations with L3Harris Technologies will see this assessment updated.
		Red	The project will not deliver the Weapons Integrated Battle Management System capability. The remaining 38 PMV-M Gate Way vehicles originally within the project's scope are proposed to be delivered by a future project. As the Elbit Systems of Australia agreement had no negative effect on the agreed project scope, it has not had an impact on this rating. Assessment against the remaining TCN scope in the BCS will depend on resolution of open contract issues with L3Harris Technologies.
5	JORN Mid-Life Upgrade AIR 2025 Phase 6	Red	The project has received Government approval for the removal from scope of a Commonwealth-developed Optional Capability Enhancement that has not achieved an appropriate level of technical maturity.
6	Joint Strike Fighter AIR 6000 Phase 2A/2B	Red	On 5 April 2023, Government approved the transfer of the completion of limited capability from AIR 6000 Phase 2A/2B to AIR 6000 Phase 6 (F-35A Through Life Capability Upgrades).

7	MQ-4C Triton Remotely Piloted Aircraft System AIR 7000 Phase 1B	Amber	Elements of the funded developmental capabilities are not expected to be progressed into the platform due to the prioritisation of other capabilities.
8	Multi-Role Helicopter AIR 9000 Phase 2/4/6	Red	FOC will not be declared. The MRH-90 Taipan has not been able to meet the ADF's capability requirements and will be replaced by MH-60R Seahawk through project SEA 9100 Phase 1 Improved Embarked Logistics Support Helicopter, and UH-60M Black Hawk by LAND 4507 Phase 1 MRH Rapid Replacement Project.
9	Battlespace Communications Systems JOINT 2072 Phase 2B	Red	This relates to the JOINT 2072 Phase 2B ground based and tethered Terrestrial Range Extension System (TRES) scope. The project scope for ground based TRES will be delivered via an acquisition project known as the Mobile Retransmission System (MRS). This acquisition is being conducted by Land C4 Sustainment System Program Office using project funds. The tethered TRES project scope will not proceed following the conduct of risk reduction activities. The scope of the contract was varied via a Contract Change Proposal, in agreement with the Capability Manager, amending the number of HQOTM Vehicles from 18 to 16. Two further HQOTM Vehicles will be delivered by the project via the Integrated Battlespace Communications System Network contract (Support). It is planned that this delivery will be complete by mid-2024. FOC will be declared with a caveat that the two remaining HQOTM vehicles will be delivered via the I-BTN sustainment program (funded by JOINT 2072 Phase 2B).

ACQUISITION GOVERNANCE

Performance Governance

Defence governs and assures project delivery through a range of policies and practices to respond to the outcomes of the DSR, subsequent Government direction and Defence requirements for the acquisition, sustainment and support of defence capability.

On 10 October 2022, the Deputy Prime Minister and the Minister for Defence Industry announced six measures to strengthen and revitalise the oversight of project performance, including:

- establishing an independent projects and portfolio management office within Defence;
- requiring monthly reports on Projects of Concern and Projects of Interest to the Minister for Defence and the Minister for Defence Industry;
- establishing formal processes and "early warning" criteria for placing projects on the Projects of Concern and Projects of Interest lists;
- fostering a culture in Defence of raising attention to emerging problems and encouraging and enabling early response;
- providing troubled projects with extra resources and skills; and
- convening regular Ministerial summits to discuss remediation plans.

Defence has progressed the implementation of all six measures in support of the Government's priority to enhance the early identification of performance risks and issues, including establishment of the IPPMO within CASG. The IPPMO provides independent decision support and assurance functions and consolidated performance assessment and reporting as a service to all Defence Delivery Groups.

As part of these measures, in February 2023, Defence published a revised policy on the Projects and Products of Interest and Concern regime (the *Delivery Group Performance Management and Reporting, and Management of Projects and Products of Interest and Concern* policy). The revisions include more vigilant line management oversight of performance and the identification, management and mitigation of risk in project and product delivery; and the implementation of the requirement for agreed remediation plans. The policy established a tiered approach to the identification, management and mitigation of risks in Defence Delivery Groups' project and product delivery.

The updated policy emphasises the need for honesty, openness and transparency in performance reporting – providing visibility of current and emerging issues, and elevating matters, as necessary, for senior level or external assistance – while reinforcing the primary responsibility of accountable line managers for performance and delivery. To support adherence to the policy, Defence is seeking to foster a stronger culture of trust, sharing of issues and concerns, and confidence in support from senior managers.

The development of a new monthly performance report on Projects of Concern and Interest, including projects with exceptions, and a quarterly performance report, both to the Minister for Defence Industry, ensures timely analysis and advice about ongoing and emerging project performance risks and issues. Defence is iteratively improving the format of reports and the quality of information as we develop and optimise our systems, resources and analytical capabilities.

Defence had three Projects of Concern in 2022-23:

- *Civil-Military Air Traffic Management System (AIR 5431 Phase 3).* Listed as a Project of Interest in June 2018, its elevation to a Project of Concern was announced by the Minister for Defence Industry on 27 October 2022. Ministerial Summits to discuss the project were held on 2 December 2022, 31 March 2023, 19 September 2023 and 8 December 2023.
- *MRH 90 Multi Role Helicopter (AIR 9000 Phases 2, 4 and 6).* The project was first reported as a Project of Concern in November 2011.
- *Satellite Ground Station East and Wideband SATCOM Network Management System (JOINT 2008 Phase 5B2)*[2]. Listed as a Project of Interest in May 2021, its elevation to a Project of Concern was announced by the Minister for Defence Industry on 22 May 2023.

Since 30 June 2023, Offshore Patrol Vessel (SEA 1180 Phase 1) was elevated to a Project of Concern in October 2023 and MRH 90 Multi Role Helicopter (AIR 9000 Phases 2, 4 and 6) was removed from Projects of Concern list in November 2023.

Australian Industry Policy

The Australian Industry Capability (AIC) program provides a framework to give Australian businesses the best possible opportunity to compete for Defence work. The program obliges Defence tenderers to include Australian businesses in their tenders and contracts to give Australian industry the best possible opportunity, recognising that providing the best capability for Defence and value for money will continue to drive decisions. Defence industry policy and AIC program obligations reflect the policy at the time that Defence releases a tender to the market will apply to the relevant contract.

Smart Buyer

Defence's Smart Buyer program, introduced in late 2016, supports projects and products in their early planning phases through consideration of key strategy drivers, which in turn supports the development of robust project execution strategies. Smart Buyer uses a flexible methodology that has been adapted to address a variety of situations, including the establishment of projects, programs and sustainment activities. All projects approaching investment committee for Gate 0, 1 and 2 consideration are subject to Smart Buyer Framework. These strategies are subsequently tested in the Independent Assurance Reviews (IAR) that follow. During 2022-23, there were 63 projects / programs that underwent a Smart Buyer activity.

[2] Satellite Ground Station East and Wideband SATCOM Network Management System (JOINT 2008 Phase 5B2) is not part of 2022-23 MPR.

Independent Assurance Reviews

IAR consider the health and outlook of projects throughout their life. Depending on the risks or issues identified during the course of the review, which in all cases will consider the key aspects of certainty of scope, credibility of schedule and adequacy of funding, a formal Board meeting may be held to better understand the positions of the various parties. The Board Chairperson makes recommendations or proposes actions for senior management consideration regarding the ongoing conduct of the project or product under review, including whether it should be considered a candidate for elevation to Project of Interest or Project of Concern status. In 2022-23, 104 IARs were conducted, covering 136 project phases or sustainment activities which includes 13 of the 20 MPR projects.

Both the Smart Buyer and IAR programs draw on a common pool of experienced external reviewers. Review members have extremely varied professional backgrounds but typically have extensive senior management experience gained in either the Australian Public Service, ADF, Industry or academia, and have a very sound understanding of Defence and Government processes.

An IAR for the project exiting MPR, Multi-Role Helicopter AIR 9000 Phase 2/4/6, was conducted in February 2023 and no further IAR is planned due to Government's decision to withdraw the helicopters from service.

Risk Management

The CASG Risk Reform Program was acknowledged by CASG senior management in March 2022. The program modernised CASG risk management practices, while delivering a Risk Management System that:

- Implemented cohesive and structured application of the ISO31000:2018 risk management;
- Defines the level and depth of risk planning for specific project, product and business scenarios;
- Introduced the CASG Risk Management Manual and common risk language;
- Standardised a structured approach for risk planning and management;
- Provided a selection of appropriate methods, techniques and approaches; and,
- Incorporated an information management system that mandated risk based decision making processes, actions and reporting.

The CASG Risk Management Manual mandates the use of the CASG risk tool (Predict!) for new and existing projects[3], products and business areas.

Predict! delivers a modern risk management platform for MPR projects, retiring the use of offline spreadsheets and facilitating improved risk management and governance processes throughout the capability lifecycle.

[3] Some projects and products scheduled to complete activities in 2021-22 were exempt from the requirement to transfer to using *Predict6!*

Defence continues to mature risk management policy, practices and guidance, while delivering training and support for risk managers and practitioners.

Contingency Funding

Defence contingency management policy requires that where a major project is unable to manage a contingency event within its approved budget allocation, it must enter a formal process to access contingency provisions. The CASG Risk Management Manual specifies the requirement for a major project to maintain a contingency budget log, an artefact required for the contingency application process.

The contingency log is assessed as part of the contingency application process to ensure that major projects maintain a record of management decisions relating to the emergence and realisation of contingent events. This enables the project to be able to access contingency.

Five 2022-23 MPR projects reported the use of contingency that was linked to risks in their respective logs. Defence continues to assess compliance for all major projects.

Lessons

Since the release of the 2022 CASG Lessons Policy (with which all MPR projects must comply), Defence has continued to improve the way that lessons are captured and shared for major projects.

Observations, insights and lessons are captured within the Defence Lessons Repository.

Under the 2022 CASG Lessons Policy, major projects must develop a Lessons Collection and Management Plan, which draws on information in the Defence Lessons Repository relevant for their project planning and management. The Plan also requires the project to record their own observations, insights and lessons. This process supports the planning of future projects.

In addition to policy, there are a range of other ways that lessons information is shared and utilised. Lessons panels are held on specific projects, where the project team and their leaders provide insights and advice to an audience of senior leaders and project teams across CASG. Case studies are also developed to share knowledge more broadly. Additionally, systemic themes from the Defence Lessons Repository are analysed and fed back into policy and training.

Defence is undertaking specific action to record the lessons from previous exited Major Projects in the Defence Lessons Repository. This includes the issues identified regarding compliance with contingency management and lessons policies.

In the 2021-22 MPR, not all projects included lessons in their PDSS. Those lessons that were included in PDSS were project level lessons, that were predominately not ‘systemic’ or ‘strategic’ in nature, and which were in the main not included in the Defence Lesson Repository. As these lessons were not in the Defence Lessons Repository, the opportunity for these lessons to be validated as ‘systemic’ or ‘strategic’ ‘Lessons Learned’ had not occurred.

In the 2022-23 MPR, projects applied the updated 2022 CASG Lessons Policy when responding to 2022-23 MPR Guidelines, with no project identifying a 'systemic' or 'strategic' 'Lessons Learned', as defined by the policy.

In the 2022-23 MPR, 18 projects have identified in their PDSS three key project level lessons (observations, insights or lessons identified) that have potential 'systemic' or 'strategic' relevance. Two projects have identified two lessons and one lesson respectively in their PDSS. Additionally, projects identify and record project level lessons that are periodically reviewed for inclusion in the Defence Lesson Repository. These project lessons have been entered into the Defence Lessons Repository as required under Defence's lessons program and will continue to be reviewed and updated.

Lessons in the Defence Lessons Repository will then be formally assessed during the Lesson Remediation Phase in order to be validated as 'Lessons Learned'.

Defence has reinforced with project teams the requirement for capturing lessons, both at the project level and in Defence's Lesson Repository, and is monitoring this and providing assistance to ensure this occurs. Projects will continue to identify project level observations, insights or lessons that are not included in the Defence Lessons Repository, but are periodically reviewed and assessed for inclusion.

Defence maintains that its reporting of 2022-23 MPR project lessons is consistent with the 2022 CASG Lessons Policy and complies with the requirements of the 2022-23 MPR Guidelines.

Major Projects Report

In May 2023, Defence established the Major Projects Report Directorate, with the responsibility for coordinating Defence's submission. The Directorate championed the creation of standardised PDSS templates, standardised financial reports and the development of internal guidance materials for projects preparing PDSSs. Defence's internal review process included a new quality assurance process that certified project Branch and Division Head and Capability Manager representative review of both the pre and post 30 June PDSS. This resulted in significantly increased engagement by all Defence leaders in the MPR process.

Defence met all ANAO timelines but acknowledges that the process adopted in the 2022-23 MPR of undertaking all three reviews of post 30 June 2023 PDSS within the space of one week presented a unique challenge and resulted in compressed response and clarification timeframes. The process was previously conducted over several weeks, affording the opportunity for Defence to appropriately gather information and for the ANAO to respond within each review cycle.

Resulting from the compressed review period, it is acknowledged that quality issues did arise during Defence's preparation of iterations of PDSSs for ANAO review, in the post 30 June period. It is also noted that ANAO were not able to assess many of those issues within the compressed review cycle

but rather raised issues subsequently. Defence acknowledges the flexibility of the ANAO to ensure that the final information was materially correct and resulted in quality PDSS.

Appendix A – Acquisition Complexity Categories

Defence categorises its acquisition projects to enable it to differentiate between the complexities of business undertakings, focus management attention, provide a basis for professionalising its workforce and facilitate strategic workforce planning. The Acquisition Category (ACAT) framework provides a recognised, consistent and repeatable methodology for categorising projects and aligning project managers' certified experience and competencies to the complexity and scale of projects under management.

The ACAT level of a project is assessed against six project attributes:

- *Acquisition Cost.* The approved budget for the project.
- *Project Management Complexity.* The complexity of project management necessary for its execution.
- *Schedule Complexity.* The inherent complexity brought about by delivery pressures on the project.
- *Technical Difficulty.* The complexities associated with technical undertakings such as design and development, assembly, integration, test and acceptance.
- *Operation and Support.* The complexity associated with preparing the organisation and environment in which the system will be operated, supported and sustained.
- *Commercial Experience.* The readiness and capability of industry to develop, produce and support the required capability, and the complexity of the commercial arrangements being managed.

Projects are graded into one of four categories:

- *ACAT I.* Major capital acquisitions in the Integrated Investment Program (IIP) that are Defence's most strategically significant. They normally have very high project and schedule management complexity and very high levels of technical difficulty, operating, support and commercial arrangements.
- *ACAT II.* Major capital acquisitions in the IIP that are strategically significant to Defence. They normally have high levels of complexity in several of the project attributes.
- *ACAT III.* Major or minor capital equipment acquisitions that have a moderate strategic significance to Defence. They normally have moderate levels of complexity in several of the project attributes.
- *ACAT IV.* Major or minor capital equipment acquisitions that have a lower level of strategic significance to Defence. They normally have low levels of complexity in several of the project attributes.

As the complexity of a project will vary over its life cycle, Defence reviews project acquisition categories at defined milestones between entry into the IIP and project completion.

Appendix B – List of Projects Exited from the Major Projects Report, since inception

Table B1 – List of projects exited from the MPR, since inception.

#	Project Number	Project	First Reported in the MPR (FY)	Last Reported in the MPR (FY)	Govt. Approved Budget ($m)	Expenditure to Date ($m)	Remaining Budget ($m)	FMR Achieved / Forecast	FOC Achieved / Forecast	Reason for Exit
1	SEA 1000 Phase 1B	Future Submarines	2019-20	2021-22	3,104.4	3,101.9	2.5	N/A	N/A	Project Cancelled
2	SEA 1390 Phase 2.1	Guided Missile Frigate Upgrade Implementation	2007-08	2013-14	1,453.8	1,374.7	79.0	Mar-16	Mar-16	JCPAA Approval[4]
3	SEA 1390 Phase 4B	SM-1 Missile Replacement	2010-11	2013-14	416.1	356.5	59.7	Feb-15	Jun-15	JCPAA Approval[5]
4	SEA 1429 Phase 2	Replacement Heavyweight Torpedo	2009-10	2017-18	428.7	337.5	91.2	Oct-18	Dec-18	JCPAA Approval[6]
5	SEA 1439 Phase 3	Collins Class Submarine Reliability and Sustainability	2009-10	2019-20	422.3	415.6	6.7	Dec-22	Jun-23	JCPAA Approval
6	SEA 1439 Phase 4A	Collins Replacement Combat System	2007-08	2017-18	438.8	438.8	-	Oct-18	Dec-18	JCPAA Approval[7]
7	SEA 1444 Phase 1	Armidale Class Patrol Boat	2007-08	2012-13	537.2	530.3	6.9	Nov-07	Oct-12	FOC achieved
8	SEA 1448 Phase 2A	ANZAC Anti-Ship Missile Defence (2A)	2009-10	2017-18	386.7	379.6	7.1	Jul-18	Aug-18	JCPAA Approval[8]
9	SEA 1448 Phase 2B	ANZAC Anti-Ship Missile Defence (2B)	2009-10	2018-19	678.6	645.4	33.2	Nov-18	Jun-19	FOC achieved
10	SEA 1654 Phase 3	Maritime Operational Support Capability	2017-18	2021-22	1,075.2	897.8	177.4	Sep-21	Q2 2024	JCPAA Approval[9]
11	SEA 4000 Phase 3	Air Warfare Destroyer Build	2008-09	2019-20	9,107.9	8,314.0	793.9	Jun-20	Jun-21	JCPAA Approval
12	LAND 17 Phase 1A	Artillery Replacement	2010-11	2013-14	158.5	158.5	-	Sep-13	Oct-14	JCPAA Approval
13	LAND 19 Phase 7A	Counter-Rocket Artillery and Mortar	2011-12	2012-13	265.7	186.1	79.6	Jan-13	Jan-13	FOC achieved
14	LAND 53 Phase 1BR	Night Fighting Equipment Replacement	2018-19	2019-20	576.0	515.4	60.6	Mar-23	Sep-23	JCPAA Approval
15	LAND 75 Phase 3.4	Battlefield Command Support System	2010-11	2014-15	315.7	271.9	43.8	Mar-15	Apr-15	JCPAA Approval
16	LAND 75 Phase 4B	Battlefield Command System	2015-16	2017-18	316.4	280.8	35.6	Dec-17	Dec-17	FOC achieved
17	LAND 116 Phase 3	Bushmaster Protected Mobility Vehicle	2007-08	2016-17	1,250.6	1,036.1	214.5	Oct-17	Jan-17	FOC achieved
18	LAND 121 Phase 3A	Overlander Vehicles (Light)	2009-10 (PH 3); 2012-13 (PH 3A)	2016-17	1,017.6	900.5	171.1	Oct-16	Oct-16	FOC achieved
19	AIR 87 Phase 2	Armed Reconnaissance Helicopter	2007-08	2016-17	1,867.8	1,867.8	-	Mar-14	Apr-16	FOC achieved with Caveats
20	AIR 5077 Phase 3	Wedgetail	2007-08	2014-15	3,885.2	3,769.6	115.7	Feb-15	May-15	FOC achieved

[4] Approval granted in 2014 based on a risk assessment performed by the then DMO and endorsed by the Capability Manager, which concluded the overall risk rating for remaining work was low.
[5] Approval granted in 2014 based on a risk assessment performed by the then DMO and endorsed by the Capability Manager, which concluded the overall risk rating for remaining work was low.
[6] Approval granted in 2018 based on a risk assessment performed by CASG and endorsed by the Capability Manager, which concluded the overall risk rating for remaining work was low.
[7] Approval granted in 2018 based on a risk assessment performed by CASG and endorsed by the Capability Manager, which concluded the overall risk rating for remaining work was low.
[8] Approval granted in 2018 based on a risk assessment performed by CASG and endorsed by the Capability Manager, which concluded the overall risk rating for remaining work was low.
[9] Approval granted in 2022 based on a risk assessment performed by CASG and endorsed by the Capability Manager, which concluded the overall risk rating for remaining work was low.

#	Project Number	Project	First Reported in the MPR (FY)	Last Reported in the MPR (FY)	Govt. Approved Budget ($m)	Expenditure to Date ($m)	Remaining Budget ($m)	FMR Achieved / Forecast	FOC Achieved / Forecast	Reason for Exit
21	AIR 5349 Phase 1/2	Bridging Air Combat Capability	2008-09	2012-13	3,661.4	3,045.9	615.5	Dec-12	Dec-12	JCPAA Approval
22	AIR 5349 Phase 3	EA-18G Growler Airborne Electronic Attack Capability	2013-14	2019-20	3,507.8	2,903.0	604.8	Aug-22	Aug-22	JCPAA Approval
23	AIR 5376 Phase 2	F/A 18 Hornet Upgrade	2007-08	2013-14	1,882.5	1,663.8	218.7	Sep-12	Oct-14	JCPAA Approval
24	AIR 5376 Phase 3.2	F/A 18 Hornet Upgrade Structural Refurbishment (Hornet Refurb)	2008-09	2010-11	319.1	319.1	-	N/A	N/A	JCPAA Approval[10]
25	AIR 5402	Air to Air Refuel	2008-09	2015-16	1,818.7	1,764.3	54.4	May-16	Jul-16	FOC achieved
26	AIR 5418 Phase 1	Follow On Stand Off Weapon	2009-10	2013-14	319.0	287.1	31.9	Sep-13	Jan-14	FOC achieved
27	AIR 7000 Phase 2B	Maritime Patrol and Response Aircraft System	2014-15	2019-20	5,644.9	4,590.5	1,054.4	Jun-22	Jun-22	JCPAA Approval
28	AIR 7403 Phase 3	Additional KC-30A Multi-role Tanker Transport	2015-16	2018-19	836.4	662.7	173.7	Oct-19	Dec-19	JCPAA Approval
29	AIR 8000 Phase 2	Battlefield Airlift - Caribou Replacement	2013-14	2021-22	1,426.0	1,043.6	382.4	Jun-22	Jun-22	FOC achieved
30	AIR 8000 Phase 3	C-17 Heavy Airlift	2008-09	2011-12	1,423.4	1,423.4	-	Dec-11	Dec-11	FOC achieved
31	AIR 9000 Phase 5C	Additional Medium Lift Helicopter	2010-11	2016-17	637.8	448.2	189.6	Jul-17	Jul-17	FOC achieved
32	AIR 9000 Phase 8	Future Naval Aviation Combat System Helicopter	2011-12	2019-20	3,048.8	2,593.6	455.2	Dec-23	Dec-23	JCPAA Approval
33	JOINT 2008 Phase 4	Next Generation SATCOM Capability	2009-10	2013-14	869.5	569.1	300.4	Jun-14	Jul-15	JCPAA Approval
34	JOINT 2008 Phase 5A	Indian Ocean Region UHF SATCOM	2010-11	2020-21	421.3	385.4	35.9	Sep-21	Mar-22	JCPAA Approval
35	JOINT 2043 Phase 3A	High Frequency Modernisation	2007-08	2013-14	580.2	498.1	82.1	Nov-17	Nov-17	JCPAA Approval[11]
36	JOINT 2048 Phase 3	Amphibious Watercraft Replacement	2013-14	2018-19	236.8	183.3	53.5	Dec-16	Nov-19	JCPAA Approval
37	JOINT 2048 Phase 4A/4B	Amphibious Ships (LHD)	2008-09	2018-19	3,092.4	2,875.6	216.8	Oct-19	Nov-19	JCPAA Approval
38	JOINT 2072 Phase 2A	Battlespace Communications Systems Phase 2A	2012-13	2018-19	438.2	376.2	61.9	Jan-19	Dec-19	JCPAA Approval
39	JOINT 9000 Phase 7	Helicopter Aircrew Training System	2015-16	2018-19	481.6	385.8	95.8	Apr-19	Dec-20	JCPAA Approval

[10] Approval granted after project scope and budget were approved for transition to the in-service sustainment support system in 2010-11.
[11] Approval granted in 2014 based on a risk assessment performed by the then DMO and endorsed by the Capability Manager, which concluded the overall risk rating for remaining work was low.

Appendix C – Data Tables[12]

Table C1 – Project Budget Status, as at June 2023.

#	Project Number	Project Name	ACAT	Government Approved Budget at Second Pass ($m)	Subsequent Government Approvals Scheduled ($m)	Subsequent Government Approvals – Scope Variation	Real Cost Variation ($m)	Transfers ($m)	Foreign Exchange Variation ($m)	Price Indexation ($m)	Total Approved Project Budget ($m)	2022-23 In-Year Budget ($m)
(a)	(b)	©	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l) =Sum (e) to (k)	(m)
1	SEA 1180 Phase 1	Offshore Patrol Vessel	II	3,639.1	-	-	-	0.0	25.0	-	3,664.1	344.1
2	SEA 1439 Phase 5B2	Collins Class Communications and Electronic Warfare Improvement Program	II	599.2	-	-	2.5	-	12.2	0.4	614.2	32.0
3	SEA 1442 Phase 4	Maritime Communications Modernisation	II	385.6	-	-	-	-	50.8	-	436.4	28.9
4	SEA 1448 Phase 4B	ANZAC Air Search Radar Replacement	II	427.8	-	-	-	0.0	1.7	-	429.5	25.6
5	SEA 3036 Phase 1	Pacific Patrol Boat Replacement	II	503.3	-	-	-	1.2	(1.6)	-	502.9	64.5
6	SEA 5000 Phase 1	Hunter Class Frigate Design and Construction	I	6,184.0	-	-	-	(19.0)	(16.8)	-	6,148.2	725.1
7	LAND 19 Phase 7B	Short Range Ground Based Air Defence	II	1,274.3	-	-	-	-	(41.5)	-	1,232.8	182.3
8	LAND 121 Phase 3B	Medium Heavy Capability, Field Vehicles, Modules and Trailers	I	2,549.2	735.6	-	(30.0)	-	144.9	-	3,399.7	26.3
9	LAND 121 Phase 4	Protected Mobility Vehicle – Light	I	1,944.9	-	-	-	-	26.2	0.4	1,971.5	155.7
10	LAND 200 Tranche 2	Battlefield Command System	I	930.0	-	-	-	-	41.4	-	971.4	168.0
11	LAND 400 Phase 2	Mounted Combat Reconnaissance Capability	I	5,762.7	-	-	-	-	(105.3)	-	5,657.3	616.4
12	LAND 907 Phase 2 / LAND 8160 Phase 1	Main Battle Tank Upgrade/ Combat Engineering	II	2,065.7	-	-	-	-	217.3	-	2,283.0	142.4
13	AIR 555 Phase 1	Airborne Intelligence, Surveillance, Reconnaissance and Electronic Warfare (ISREW) Capability	II	2,166.3	-	-	(2.9)	46.1	150.8	-	2,360.2	212.0
14	AIR 2025 Phase 6	Jindalee Operational Radar Network (JORN) Mid-Life Upgrade	II	1,117.9	6.1	8.2	-	155.8	0.0	-	1,288.0	105.4
15	AIR 5349 Phase 6	Advanced Growler – Airborne Electronic Attack Upgrade	I	3,221.9	-	-	-	(3.4)	(18.4)	-	3,200.1	50.9
16	AIR 5431 Phase 3	Civil Military Air Traffic Management System	I	731.4	-	-	240.7	34.4	3.6	-	1,010.0	127.9
17	AIR 6000 Phase 2A/2B	New Air Combat Capability	I	2,751.6	10,515.4	0.0	(2.9)	(39.4)	2,848.9	351.0	16,424.6	933.4
18	AIR 7000 Phase 1B	MQ-4C Triton Remotely Piloted Aircraft System	II	2,071.4	270.1	-	(3.5)	17.7	47.8	0.2	2,403.7	226.9
19	AIR 9000 Phase 2/4/6	Multi-Role Helicopter	I	957.2	2,565.6	31.5	(204.4)	(239.3)	(135.9)	679.8	3,654.5	91.6
20	JOINT 2072 Phase 2B	Battlespace Communications System	I	915.7	-	-	-	1.0	30.7	-	947.4	54.1
			Total	**40,199.2**	**14,092.7**	**39.7**	**(0.6)**	**(44.9)**	**3,281.5**	**1,031.8**	**58,599.6**	**4,313.3**

[12] As per the JCPAA 2022-23 MPR Guidelines, financial figures in the Defence Chapter have been rounded to one decimal point. Financial tables may include totals and percentages that are impacted due to the rounding of the original financial.

Table C2 – Project In-Year Financial Status, as at June 2023.

#	Project Number	Project Name	PBS ($m)	October PBS ($m)	Final Plan (FP) ($m)	Actual Spend (AS) ($m)	Variation PBS minus AS ($m)	Variation FP minus AS ($m)	Variation FP minus AS (%)
1	SEA 1180 Phase 1	Offshore Patrol Vessel	364.4	514.6	344.1	291.7	72.7	52.4	15
2	SEA 1439 Phase 5B2	Collins Class Communications and Electronic Warfare Improvement Program	26.9	43.1	32.0	21.5	5.4	10.5	33
3	SEA 1442 Phase 4	Maritime Communications Modernisation	32.6	25.3	28.9	24.3	8.3	4.6	16
4	SEA 1448 Phase 4B	ANZAC Air Search Radar Replacement	23.1	26.7	25.6	15.6	7.5	10.0	39
5	SEA 3036 Phase 1	Pacific Patrol Boat Replacement	53.7	51.0	64.5	49.5	4.2	15.0	23
6	SEA 5000 Phase 1	Hunter Class Frigate Design and Construction	600.4	724.9	725.1	742.1	(141.7)	(17.0)	(2)
7	LAND 19 Phase 7B	Short Range Ground Based Air Defence	212.3	157.6	182.3	190.0	22.2	(7.7)	(4)
8	LAND 121 Phase 3B	Medium Heavy Capability, Field Vehicles, Modules and Trailers	49.1	27.3	26.3	26.3	22.7	(0.1)	0
9	LAND 121 Phase 4	Protected Mobility Vehicle Light	170.3	152.8	155.7	153.9	16.4	1.8	1
10	LAND 200 Tranche 2	Battlefield Command System	164.0	200.4	168.0	102.1	61.9	65.8	39
11	LAND 400 Phase 2	Mounted Combat Reconnaissance Capability	508.8	685.7	616.4	569.6	(60.8)	46.8	8
12	LAND 907 Phase2 / LAND 8160 Phase1	Main Battle Tank Upgrade/ Combat Engineering	-	181.3	142.4	80.0	(80.0)	62.4	44
13	AIR 555 Phase 1	Airborne Intelligence, Surveillance, Reconnaissance and Electronic Warfare (ISREW) Capability	308.8	181.0	212.0	192.5	116.3	19.4	9
14	AIR 2025 Phase 6	Jindalee Operational Radar Network (JORN) Mid-Life Upgrade	92.1	92.0	105.4	103.5	(11.4)	1.9	2
15	AIR 5349 Phase 6	Advanced Growler – Airborne Electronic Attack Upgrade	63.7	48.5	50.9	90.1	(26.4)	(39.2)	(77)
16	AIR 5431 Phase 3	Civil Military Air Traffic Management System (CMATS)	122.8	130.6	127.9	92.3	30.5	35.6	28
17	AIR 6000 Phase 2A/2B	New Air Combat Capability	1,261.4	976.4	933.4	1,089.8	171.6	(156.4)	(17)
18	AIR 7000 Phase 1B	MQ-4C Triton Remotely Piloted Aircraft System	285.5	238.2	226.9	265.8	19.7	(38.8)	(17)
19	AIR 9000 Phase 2/4/6	Multi-Role Helicopter	116.0	106.3	91.6	77.5	38.6	14.2	15
20	JOINT 2072 Phase 2B	Battlespace Communications System	57.1	73.5	54.1	51.0	6.1	3.1	6
		Total	**4,512.9**	**4,637.0**	**4,313.3**	**4,229.1**	**283.8**	**84.2**	**2**

Table C3 – Project Schedule Status, as at June 2023.

#	Project Number	Project Name	Second Pass	Originally Estimated IOC	Forecast IOC *As at 30 Jun 23*	IOC Variation (months)	Originally Estimated FOC	Forecast FOC *As at 30 Jun 23*	FOC Variation (months)
(a)	(b)	(c)	(d)	(e)	(f)	(g) =(f)-(e)	(h)	(j)	(k) = (j)-(h)
1	SEA 1180 Phase 1	Offshore Patrol Vessel	Nov 17	Dec 22	Aug 24	20	Jun 30	Jun 30	Nil
2	SEA 1439 Phase 5B2	Collins Class Communications and Electronic Warfare Improvement Program	Stage 1 – Jun 15 Stage 2 – Mar 17	Jun 21	Delayed from Dec 22	NFP	Dec 24	Jun 27	30
3	SEA 1442 Phase 4	Maritime Communications Modernisation	Jul 13	Dec 18	Delayed from Oct 22	NFP	Dec 23	Delayed from Apr 25	NFP
4	SEA 1448 Phase 4B	ANZAC Air Search Radar Replacement	Jun 17	Jun 20	Jul 21	13	Jun 24	Delayed from May 24	(1)
5	SEA 3036 Phase 1	Pacific Patrol Boat Replacement	Apr 16	Oct 18	Nov 18	1	Nov 23	Sep 24	10
6	SEA 5000 Phase 1	Hunter Class Frigate Design and Construction	Jun 18	IOC and FOC dates not agreed yet.					
7	LAND 19 Phase 7B	Short Range Ground Based Air Defence	Feb 19	Jun 23	NFP	NFP	Jun 26	Jun 26	Nil
8	LAND 121 Phase 3B	Medium Heavy Capability, Field Vehicles, Modules and Trailers	Phase 3 – Aug 07 Phase 3B – Jul 13	Dec 19	Dec 19	Nil	Dec 23	Dec 26	36
9	LAND 121 Phase 4	Protected Mobility Vehicle Light	Aug 15	Dec 19	May 21	17	Jun 23	Jun 24	12
10	LAND 200 Tranche 2	Battlefield Command System	Sep 17	Sep 21	Delayed from Mar 24	NFP	Jun 22	Delayed from Aug 25	NFP
11	LAND 400 Phase 2	Mounted Combat Reconnaissance Capability	Mar 18	Jun 22	Jun 22	Nil	Jun 27	Jun 27	Nil
12	LAND 907 Phase 2 / LAND 8160 Phase 1	Main Battle Tank Upgrade/ Combat Engineering	Dec 21	NFP	NFP	NFP	NFP	NFP	NFP
13	AIR 555 Phase 1	Airborne Intelligence, Surveillance, Reconnaissance and Electronic Warfare (ISREW) Capability	Sep 17	NFP	NFP	NFP	NFP	NFP	NFP
14	AIR 2025 Phase 6	Jindalee Operational Radar Network (JORN) Mid-Life Upgrade	Dec 17	Apr 24	NFP	NFP	Jan 29	NFP	NFP
15	AIR 5349 Phase 6	Advanced Growler – Airborne Electronic Attack Upgrade	Dec 22	NFP	NFP	NFP	NFP	NFP	NFP
16	AIR 5431 Phase 3	Civil Military Air Traffic Management System (CMATS)	Dec 14	Jun 20	Q4 2025	65	Jun 23	Q1 2028	56
17	AIR 6000 Phase 2A/2B	New Air Combat Capability	Stage 1 – Nov 09 Stage 2 – Apr 14	Dec 20	Dec 20	Nil	Dec 23	NFP	NFP
18	AIR 7000 Phase 1B	MQ-4C Triton Remotely Piloted Aircraft System	Tranche 1 – Jun 18 Tranche 2 – Mar 19 Tranche 3 – May 20 Tranche 4 – Nov 20 Tranche 5 – May 23	Jul 24	Jul 25 - Jun 26	23	Dec 25	Jul 30 - Jun 31	66
19	AIR 9000 Phase 2/4/6	Multi-Role Helicopter	Phase 2 – Aug 04 Phases 4 & 6 – Apr 06	Navy – Jul 10 Army – Apr 11	Navy – Feb 15 Army – Dec 14	55 44	Navy – Dec 12 Army – Jul 14	FOC will not be declared	
20	JOINT 2072 Phase 2B	Battlespace Communications System	May 15	Sep 17	Mar 18	6	Sep 20	Sep 23	36

Appendix D – One Defence Capability System

The Capability Life Cycle commenced in April 2016 to address First Principles Review Recommendation 2, which called for Defence to 'Establish a single end-to-end capability development function within the Department to maximise the efficient, effective and professional delivery of military capability'. The Capability Life Cycle has now been effectively integrated with other capability processes, such as program management, interoperability and force design, resulting in the One Defence Capability System.

The One Defence Capability System is an integrated system that ensures Defence capability decisions optimise capability outcomes within resource limitations. The One Defence Capability System progresses through four phases shown in Figure D-1, which connect Government's priorities through to prepared forces that are available to be committed to operations. At any point in time, individual capabilities will be at different stages of maturity across the four phases. The phases are:

- Strategy and Concepts phase which connects the Government's assessment of strategic risks and other priorities, through to alternative concepts and force design.
- Risk Mitigation and Requirement Setting phase which sees development of solutions to address the priorities identified through Integrated Force Design, including options, detailed specifications and risk management strategies.
- Acquisition phase which sees the capability acquired, delivered, integrated, and brought into service.
- In-Service and Disposal phase which sees the maintenance of capabilities at the appropriate level of preparedness, in accordance with the Chief of the Defence Force's Preparedness Directive, available to be force-assigned to Chief of Joint Operations, or other operational commander, as required for operational employment.

Defence projects follow the One Defence Capability System. Government's response to the DSR requires options to be developed to change Defence's capability acquisition system so that it meets Defence requirements, reflective of the current strategic circumstances. Defence has commenced this work, which will be considered in 2024 and likely result in updates to the One Defence Capability System.

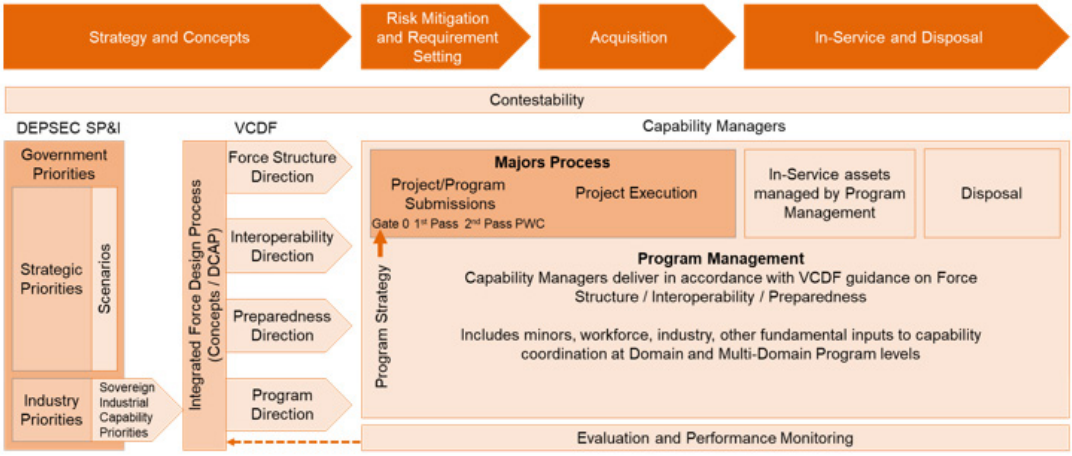

Figure D1 – One Defence Capability System.

The projects in this year's MPR are in the Acquisition phase, but refer to decisions made in the Risk and Requirement Setting phase. Details about the Gates and Passes are listed in the Glossary.

The endorsed definitions used in relation to project milestones are:

- *Caveat.* In relation to the declaration of IOC or FOC or other capability milestone, is a plan, stipulation, condition or limitation to mitigate the capability impact of a Deficiency.
- *Deficiency*. In relation to the declaration of IOC or FOC or other capability milestone, is a shortfall between the Government agreed requirements and that which is provided at the milestone.

These definitions, along with additional guidance on responsibilities for declaring the achievement of key milestones, are the authorised terms describing a delta or deviation from project milestones being achieved.

In the 2022-23 MPR, three projects continue to use the legacy term 'exception' but will adhere consistently to these definitions for all future project milestones.

Where new definitions are required they will be considered by the Vice Chief of the Defence Force and updated in Defence policy.

Appendix E – Lessons Learned

The 2022-23 Guidelines state that *'for each project that has been removed, the lessons learned at both the project level and the whole-of-organisation level should be included as a separate section in the following Defence MPR.'*
Table E1 – Lessons Learned – Projects Exited from the MPR, for 2021-22.

#	Project	Categories of Systemic Lessons	Project Lesson
1	SEA 1000 Phase 1B Future Submarines	Control Management	• Careful selection of Acquisition Contractors with relevant experience and knowledge, underpinned by strong commercial agreements, is essential to protect the Commonwealth's interests. • The program must be an informed customer, closely monitoring Contractor progress with strong and pro-active management.
		Requirements Management	• Research into program failure and lessons learned from submarine design by allied nations ensured SEA1000 Phase 1B was aware of the necessity of having a set of good requirements to achieve success in design and development.
		Governance	• Following the decision to cancel the program, SEA1000 found it necessary to promptly engage with staff as part of a board lessons observed process, before they commenced departing the program.
2	SEA 1654 Phase 3 Maritime Operational Support Capability[13]	Execution Planning	• This was a Military off-the-shelf (MOTS) rapid acquisition project that needed a greater focus on capability requirements in the planning phase. There was too much reliance on Class Certification and the use of a 'reference ship'. A number of detailed requirements in the capability could have been discovered by closer examination of the reference ship and inclusion of those requirements in the tailoring document that supported the Class Certification requirement set.
		Procurement Planning	• With an offshore build and a MOTS procurement strategy, it is important to examine the equipment selection in the early phases, to ensure availability of spare parts from Australian sources when operational. Much of the equipment was supplied locally from the builder's traditional suppliers, some of which did not have equivalent products available here in Australia, making sustainment of the class more challenging than it needed to be.
		Off Shore Build	• The Commonwealth's resident owners engineering and construction oversight team at the builder's premises was too small during the build phase, which led to a number of build quality issues being missed and appearing in the first years of operation. The builder's quality assurance process was not tight enough, and the project needed a greater presence to see that, to demand early correction of the build deficiencies. The COVID pandemic and return to Australia of expat staff exacerbated this issue.
		Acceptance Testing	• With delays to commencement of the acquisition, and the need to maintain the existing ships in service, the contract was changed to commercial delivery of the ships to Australia. Due to COVID restrictions communications and combat system construction was carried out in Australia and when then ships finally entered service, the extensive test and evaluation process was curtailed due to wider fleet priorities. Notwithstanding the changes to the planned schedule, the lack of completion of the formal and extensive first of class trials process should not be curtailed, as this process would have unearthed many of the capability deficiencies early in the warranty period, when remediation would reduce the impact to fleet operational demands.
3	AIR 8000 Phase 2 Battlefield Airlift - Caribou Replacement	Commercial Management	• For a Foreign Military Sales (FMS) program, the level of Commonwealth contract and financial management involvement and oversight of industry is very low in comparison to that for Direct Commercial Sale contracts, yet both procurement methods confront similar issues. In the case of C-27J, US Government divestiture further accentuated project risk and complexity, increasing the need for ongoing engagement of the United Stated Air Force (USAF) FMS program office to ensure Commonwealth requirements and risks are adequately understood and managed. The closure of the USAF's project office and cessation of USAF C-27J activities further reduces the ability of the United States Government to achieve customer requirements normally delivered under the FMS system. • Contracting with commercial entities that have no previous experience with how the Commonwealth contracts, manages, controls, and reviews contract performance requires significant awareness, education and adjusting by both parties. Commonwealth acknowledgement that outcomes can be achieved without following the Commonwealth's usual or embedded processes requires substantial effort by Commonwealth personnel to accept the change, mentor and educate other Commonwealth entities, and to act with restraint towards the contractor. Similarly, Defence processes are not easily mapped to a civilian entity's system. This requires substantial detailed communication and time commitment by Subject Matter Experts in that field - this takes time and effort that may not have been foreseen.
		Program, Project & Product Management	• The practice of approving projects with staffing to be found from within existing Divisional resourcing can result in 'late to need' or understaffing at critical project planning and execution phases that is counterproductive to achieving project outcomes. Further, the recruitment process lead times for candidates can create extended vacancies within the project workforce, exacerbated by the short notice that personnel are obliged to provide for internal transfers. While outsourced services may be suitable in some instances to mitigate this risk, they are not always available, the most efficient, or affordable, and come with additional administrative overhead. In particular, rapidly approved projects, such as AIR8000 Phase 2, which gained combined Government Pass approval, should be priority staffed as outlined in the approved project workforce plan, on which the Materiel Acquisition Agreement schedule was developed. • Accelerated project approval, through a combined Government 1st and 2nd Pass, carries additional project execution risk given the likelihood that data fidelity and planning maturity will be otherwise inherently lower. As such, all effort should be made to understand the associated risk premium versus the benefit an accelerated project approval offers. In the case of AIR8000 Phase 2 the potential impact of USAF divestiture was not fully appreciated across the full breadth and depth of the project. Any assumption that because procurement is via FMS it is low risk must be fully tested. • Although C-27J is a mature in-production aircraft, the project was required to update a number of systems to achieve the directed outcomes for FMR/FOC. Where a project has a challenging acquisition and implementation period, the Sponsor and Capability Manager must be closely engaged to ensure the requirements set maintains relevance over time, especially leading up to key capability milestones.

[13] The project is currently completing closing phase and has commenced a lessons review activity. The lessons listed are preliminary and yet to be validated.

Appendix F – Glossary

Acquisition Categories	See Appendix B.
Additional Estimates	Where amounts appropriated at Budget time are required to change, Parliament may make adjustments to portfolios through the Additional Estimates Acts.
Australian Defence Force (ADF)	The Royal Australian Navy, the Australian Army, and the Royal Australian Air Force.
Australian Industry Capability (AIC)	A framework to give Australian businesses the best possible opportunity to compete for Defence work, recognising that providing the best capability for Defence and value for money will continue to drive decisions.
Australianised Military off-the-shelf (MOTS)	An adapted Military off-the-shelf product where modifications are made to meet particular ADF operational requirements.
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 is generated by the Fundamental Inputs to Capability.
Capability Manager (CM)	A Capability Manager has the responsibility to raise, train and sustain capabilities. In relation to the delivery of new capability or enhancements to extant capabilities through the Defence Integrated Investment Program, Capability Managers are responsible for delivering the agreed capability to Government, through the coordination of the fundamental inputs to capability. Principal Capability Managers are Chief of Navy, Chief of Army, Chief of Air Force, and Chief of Joint Capabilities.
Capital Equipment	Substantial end items of equipment such as ships, aircraft, armoured vehicles, weapons, communications systems, electronics systems or other armaments that are additional to, or replacements for, items in the Defence inventory.
Caveat	In relation to the declaration of IOC or FOC or other capability milestone, is a plan, stipulation, condition or limitation to mitigate the capability impact of a Deficiency.
Contract Change Proposal (CCP)	This is a formal written proposal by the Commonwealth or the contractor, prepared in accordance with the terms and conditions of the contract, to change the contract after the effective date. After agreement by the parties, the contract is amended in accordance with the processes established in the contract.
Corporate Governance	The process by which agencies are directed and controlled, and encompasses; authority, accountability, stewardship, leadership, direction and control.
Deficiency	In relation to the declaration of IOC or FOC or other capability milestone, is a shortfall between the Government agreed requirements and that which is provided at the milestone.
Developmental	A product that is not available off-the-shelf and has to be developed specifically to meet the ADF's particular operational requirements.
Direct Commercial Sale (DCS)	US Direct Commercial Sale involves commercial contracts negotiated directly with a US Defense contractor. DCS agreements are not administered by the US Government and do not involve a government-to-government agreements. Instead, the entity deals with the US

	contractor and that contractor is responsible for obtaining an export license from the Office of Defense Trade Controls, within the US Department of State, to conduct each sale.
Exception	A legacy term used by projects in reporting limitations in milestone achievement prior to the use of 'Caveat' or 'Deficiency' terms.
Final Materiel Release (FMR)	A milestone that marks the completion and release of those Acquisition Project supplies required to support the achievement of FOC.
Final Operational Capability (FOC)	The capability state relating to the in-service realisation of the final subset of a capability system that can be employed operationally. Declaration of FOC is made by the Capability Manager, supported by the results of operational test and evaluation and declaration by the Delivery Group(s) that the fundamental inputs to capability have been delivered.
Fixed Price Contract	A fixed price contract is unalterable in all respects for the duration of the contract, except where the parties agree to a contract amendment which alters that contract price.
Foreign Military Sales (FMS)	The US Department of Defense's Foreign Military Sales program facilitates sales of US arms, Defense services, and military training to foreign governments.
Forward Estimates	The level of proposed expenditure for future years (based on relevant demographic, economic and other future forecasting assumptions). The Government requires forward estimates for the following three financial years to be published in each annual Federal Budget paper.
Function and Performance Specification	A specification that expresses an operational requirement in function and performance terms. This document forms part of the capability documentation.
Gate 0	The decision point at which the Investment Committee considers an investment proposal developed by a Capability Manager. It may agree to a proposal to develop a range of options with agreed timeframes, requirements and financial commitments to proceed to a Gate 1 decision, or, agree a single option for acceleration to proceed directly to Gate 2.
Gate 1	If required, it is the decision point where the Investment Committee considers the progress made since Gate 0. The Investment Committee either clears the proposal for Government consideration, or provides direction to remediate projects.
Gate 2	The stage where the Integrated Project Manager initiates formal engagement with industry, in accordance with the agreed delivery strategy. The Investment Committee considers the updated proposal and either clears the proposal for Government consideration (Second Pass), or provides direction to remediate projects.
Government First Pass	If required, it is the Government decision to select a specific option(s) and proceed with agreed timeframes, technical requirements and financial commitments to Gate 2.
Government Second Pass	A final milestone in the Risk Mitigation and Requirement Setting and Planning Phase at which point Government endorses a specific capability solution and approves funding for the Acquisition and In-Service and Disposal Phases.
Initial Materiel Release (IMR)	A milestone that marks the completion and initial release of Acquisition Project supplies required to support the achievement of IOC.

Initial Operational Capability (IOC)	The capability state relating to the in-service realisation of the first subset of a capability system that can be employed operationally. Declaration of IOC is made by the Capability Manager, supported by the results of operational test and evaluation and declaration by the Delivery Group(s) that the fundamental inputs to capability have been delivered.
Issues	An issue is an unplanned event that has happened and require management action.
Lesson	Lessons consist of project observations, insights or lessons identified.
Lessons Learned	Lessons Learned are validated observations, insights or lessons identified that are likely to represent a systemic or strategic level lesson.
Materiel Acquisition Agreement (MAA)	An agreement between a Capability Manager and CASG/NSSG which states in concise terms what services and products will be delivered, for how much and when.
Materiel Release (MR)	A Materiel Release is a specific type of transition milestone, relating to the completion and release of the Acquisition Project Supplies, required to support achievement of FOC for a defined Capability State. The constitution of a MR, its achievement criteria and applicable specifications, references and comments are documented in the respective MAA. CASG will propose the MR for the Capability Manager's consideration and endorsement.
Memorandum of Understanding (MOU)	A Memorandum of Understanding is a document setting out an agreement, usually between two government agencies.
Minor Capital Acquisition Project	A Defence project in which the proposed equipment falls within the definition of capital equipment but does not meet the criteria in the definition of a major project.
Naval Shipbuilding and Sustainment Group (NSSG)	Is part of the Department of Defence which exists to meet the maritime capabilities and supply requirements as identified by Defence and approved by Government.
Not Applicable (N/A)	Used where information is neither available, relevant nor applicable.
Not for Publication (NFP)	Information that both in individual PDSS and in the aggregate, would or could reasonably be expected to cause damage to the security, Defence or international relations of the Commonwealth.
Off-the-Shelf	A system or equipment that is available for purchase, which is already established in-service with another military or government body or commercial enterprise and requires only minor, if any, modification to deliver interoperability with existing ADF assets.
Operational Concept Document (OCD)	The primary reference for determining fitness-for-purpose of the desired capability to be developed. This document forms part of the Capability Definition Document.
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.
Out Turned Costs / Out-Turning	Defence establishes cost estimates using out-turned costs (i.e. inclusive of agreed or estimated contract price indexation) to ensure that estimates include allowances for future inflationary cost increases and foreign exchange.

Platforms	Refers to air, land, or surface or sub-surface assets that are discrete and taskable elements within the ADF.
Portfolio Budget Statement (PBS)	A document presented by the Minister to the Parliament to inform Senators and Members of the basis for Defence budget appropriations in support of the provisions in Appropriation Bills 1 and 2. The statements summarise the Defence budget and provides detail of outcome performance forecasts and resources in order to justify agency expenditure.
Prime System Integrator	The entity that has prime responsibility for delivering the mission and support systems.
Project or Product of Interest (POI)	When more significant risks or issues, and/or more significant actual or anticipated breaches of project/product parameters are observed, consideration is given to placing the project or product on the Project of Interest List by the Delivery Division Head to the Group Head and advised to the Minister for Defence Industry.
Project or Product of Concern (POC)	When more significant risks or issues, and/or more significant actual or anticipated breaches of project/product parameters are observed, consideration is given to placing the project or product on the Project of Concern List by the Delivery Division Head to the Group Head. Listing as a Project of Concern is decided by the Minister for Defence Industry, on advice from the department.
Public Governance, Performance and Accountability Act (PGPA) 2013	The *Public Governance, Performance and Accountability Act 2013* came into effect on 1 July 2014 and superseded the *Financial Management and Accountability Act 1997*. It is a Commonwealth Act about the governance, performance and accountability of, and the use and management of public resources by, the Commonwealth, Commonwealth entities and Commonwealth companies, and for related purposes.
Risk	A risk is an uncertain event (or set of events) which, should they occur, will have an effect on the achievement of objectives. This effect may not be detrimental. A risk can be either a threat or an opportunity.
Risk – High	A high risk is one that requires the development and implementation of treatment strategies as soon as possible aimed at reducing the risk level. A high risk must be reviewed and reported on a regular basis and may require escalation.
Risk – Very High	A very high risk is one where the impact of this risk occurring would be so severe that the source of the risk must cease or be isolated immediately. A very high risk requires escalation, and treatment strategies to be implemented prior to commencement or continuation of work.
To Be Advised (TBA)	Used where information is yet to be determined, confirmed or to be approved.
Variable Price Contracts	Variable price contracts provide for the contractor to be paid a fixed fee for performance of the contract, subject to certain variations detailed in the contract. Variable price contracts may allow for variations in exchange rates, labour and/or material costs.