Project Data Summary Sheet[1]

Project Number	**AIR7000 Phase 1B**
Project Name	**MQ-4C TRITON REMOTELY PILOTED AIRCRAFT SYSTEM**
First Year Reported in the MPR	2019-20
Capability Type	New
Capability Manager	Chief of Air Force
Government 1st Pass Approval	Jul 06
Government 2nd Pass Approval	Jun 18 (Tranche 1) Mar 19 (Tranche 2) May 20 (Tranche 3) Nov 20 (Tranche 4)
Budget at 2nd Pass Approval	$2,071.4m
Total Approved Budget (Current)	$2,403.7m
2022–23 Budget	$226.9m
Complexity	ACAT II

Section 1 – Project Summary

1.1 Project Description

AIR7000 Phase 1B will acquire up to six MQ-4C Triton aircraft and support systems through a Cooperative Program with the United States Navy (USN). The Triton is a High Altitude Long Endurance (HALE) Remotely Piloted Aircraft System (RPAS) that will complement the P-8A Poseidon to deliver the Maritime Patrol and Response capability. Government approval for the acquisition of four MQ-4C Triton aircraft and associated support systems was provided through a series of tranche approvals from 2018 through 2023. Acquisition of further two aircraft and associated support is subject to future Government approvals.

1.2 Current Status

Cost Performance

In-year

The project spent $265.8m against an in-year approved budget of $226.9m. Resulting in a variance of $38.8m. The end-of-year overspend was driven by the booking of accruals at year-end, accelerated Memorandum of Understanding (MoU) payments, and higher than expected amortisation against Triton prime contracts.

Project Financial Assurance Statement

As at 30 June 2023 project AIR7000 Phase 1B has reviewed the approved scope and budget for those elements required to be delivered by Defence. Having reviewed the current financial and contractual obligations of Defence for this project, current known risks and estimated future expenditure, Defence considers, as at the reporting date, there is sufficient budget remaining for the project to complete against the agreed scope.

Contingency Statement

The project has not applied contingency in the Financial Year (FY) 2022-23.

Schedule Performance

The project was declared a Project of Interest (POI) in March 2020 due to the USN announcing a two-year production funding pause, in February 2020, for its Triton program (United States (US) Fiscal Years 2021 and 2022). Production funding has now been lifted and USN has confirmed its funding commitment to Triton program. This allowed the project to be removed from the POI list in August 2022.

To balance the developmental technology risk, emerging capabilities and the needs of the joint force, the Government approved an incremental approach to acquisition, which has extended the timeline for Final Operational Capability (FOC).

The first three Air Vehicles (AV) are expected to be delivered by the planned Initial Operational Capability (IOC) date of FY 2025-26 (only two AV are required to be delivered for IOC). An additional fourth aircraft was approved by the Government in April 2023.

Defence is currently on track to achieve the revised IOC of FY 2025-26. The flow-on effect of a one-year delay was detailed in the May 2020 Cabinet Submission and accepted by Government. Post resumption of the production funding by the US, Public Works Committee (PWC) Approval was received for the construction of the Triton Facilities in November 2022.

Materiel Capability/Scope Delivery Performance

The project is expected to achieve the current approved capability scope of four AV and systems. Achievement of the full capability of six AV is subject future Government decisions.

The USN's delivery of Integrated Functional Capability (IFC-4.0) has been split into two increments. The capabilities included in IFC-4.0 Increment 1 are all required to meet Australia's IOC and will be included in the baseline configuration for Australia's first

Notice to reader

1. Forecast dates and Sections: 1.2 (Materiel Capability/Scope Delivery Performance), 1.3 (Major Risks and Issues), 4.1 (Measures of Materiel Capability/Scope Delivery Performance), and 5 (Major Risks and Issues) are excluded from the scope of the ANAO's review of this Project Data Summary Sheet. Information on the scope of the review is provided in the *Independent Assurance Report* by the Auditor-General in **Part 3** of this report.

three aircraft. It is expected that IOC will be achieved with the delivery of Increment 1. Increment 2 will deliver new and upgraded capabilities to the MQ-4C Triton Intelligence (MULTI-INT) platform. Elements of the funded developmental capabilities are not expected to be progressed into the platform due to prioritising other capabilities.

Note

Forecast dates and capability assessments are excluded from the scope of the Auditor-General's Independent Assurance Report.

1.3 Project Context

Background

The AIR7000 Program replaces the Maritime Patrol and Response capability with a complementary mix of crewed P-8A Poseidon (AIR7000 Phase 2B) maritime patrol aircraft and the MQ-4C Triton RPAS (Phase 1B), designed to operate as a 'family of systems'.

In July 2006, the Government agreed to participate with the USN under a Project Agreement to develop the Broad Area Maritime Surveillance (BAMS) capability. In 2008, the Northrop Grumman Global Hawk variant (now designated the MQ-4C Triton) was selected by the USN as the winning tender for the BAMS program. In February 2009, the Government deferred AIR7000 Phase 1B due to delays in the USN BAMS program but continued to monitor Triton performance in the USN program.

In February 2014 Government agreed that Defence continue development of a single capability option for AIR7000 Phase 1B for up to seven MQ-4C Triton. The approved acquisition strategy for the MQ-4C Triton was procurement via Foreign Military Sales (FMS). However, the 2014 submission to Government advised of Defence's intent to investigate the value proposition of entering into a Cooperative Program with the USN.

In June 2018, Government provided Second Pass (Tranche 1) approval to procure the first of six AV, supporting systems and spares, and approval to enter a Triton Development, Production and Sustainment (DPS) Cooperative Program. Second Pass approval (Tranche 2) for the second AV was provided in March 2019.

In February 2020 the US Federal Defense budget proposed a pause in production funding for the USN MQ-4C Triton project for two years (US Fiscal Years 2021 and 2022). US Congressional approved budget reduced the impact of the proposed budget cuts, however uncertainty in the US Program initiated a delay in the decision to proceed with the facilities program for AIR7000 Phase 1B. As a result, an interim solution has since been developed. During 2020, Government approved a third AV (Tranche 3) and interim support services for the initial seven years of operations (Tranche 4).

In October 2022, the project updated the Materiel Acquisition Agreement (MAA) to align FOC dates with those approved by Government in 2020. In November 2021, the US Federal Budget reinstated production and development funding for the US Navy MQ-4C Triton project which has restored confidence and reduced risk associated with the acquisition strategy. In April 2023, the Government approved a fourth AV.

Uniqueness

The MQ-4C Triton is the largest RPAS to be operated by the Royal Australian Air Force (RAAF). It is a HALE-RPAS optimised for use in the maritime environment, and provides far greater on-station endurance at greater ranges when compared to conventionally piloted aircraft.

The MQ-4C Triton is a developmental platform and the IFC-4.0 configuration is still undergoing flight test activities for the USN. Full engineering and technical documentation for the IFC-4.0 configuration are becoming available and is expected to be delivered throughout 2023. The Australian engineering, verification and validation and acceptance planning will remain in development while the USN completes their developmental activities.

Acquiring Triton through a Cooperative Program enables Defence to gain insights and influence on design and development that reduces risks associated with transition into service and promotes interoperability with our major security partner. The RAAF MQ-4C RPAS will be identical to the USN MQ-4C RPAS, except for minor configuration differences due to national requirements (such as different aircraft marking schemes). Other support elements, such as training devices and spares, will also remain as common as technically possible.

The MQ-4C Triton is categorised as a Specific Type A Uncrewed Aircraft System (UAS) under the Defence Aviation Safety Regulations (DASR). Specific Type A UAS must comply with the DASR initial and continuing airworthiness regulations to an extent that is proportionate to the complexity of the operating environment and the robustness of the UAS design. Safety of design for an Australian Defence Force (ADF) UAS Operating Permit (UASOP) is based on risk characterisation and control.

Australian airspace is regulated and managed differently to the US. The MQ-4C Triton requires a unique and deliberate program of integration into Australian airspace and the surrounding international airspace zones.

Major Risks and Issues

The project is currently managing the following major risks:

- There is a risk that the current network infrastructure, combined with the level of development required to integrate the Triton system into the Defence Single Information Environment (SIE), will require design and certification effort that may not be achievable by the capability milestone dates.
- There is a risk that the complexity and novelty of a large RPAS may lead to delays in the issue of an Operating Permit and achievement of dependent capability milestones. Immature data to adequately quantify Sustainment Costs.
- There is a risk that the planned sustainment budget may be affected by insufficient data maturity leading to an impact on achieving Air Force support requirements and overall program affordability.
- Australian Triton aircraft will initially be delivered with some systems requiring further qualification to allow operation in all airspace and environmental conditions. There is a risk that the qualification and retrofitting of these systems may result in a delay to FOC.
- There is a risk that facilities design and construction management costs will affect the affordability of Triton facilities.
- Facilities schedule currently on the critical path. A number of issues have contributed to the current position, including a previous pause to the facilities program due to US Triton program uncertainties and a change of operational concept.

Other Current Related Projects/Phases
AIR7000 Phase 2 - Maritime Patrol and Response Aircraft System. The acquisition of 14 P-8A Poseidon and through Life Support system. Triton and Poseidon will form part of a 'Family of Systems' to replace the AP-3C Orion Capability.
JP2289 - Joint Information Environment.
Note
Major risks and issues are excluded from the scope of the Auditor-General's Independent Assurance Report.

Section 2 – Financial Performance[2]

2.1 Project Budget (out-turned) and Expenditure History

Date	Description	$m		Notes
	Project Budget			
Jul 06	Original Approval (Government First Pass Approval)	3.9		1
Feb 14	Government Intermediate Consideration	18.4		2
Mar 16	Government Interim Consideration	1.5		3
Jun 18	Government Second Pass Approval – Tranche 1	901.1		4
Jun 18	Real Variation – Transfer	1.0		5
Apr 19	Real Variation – Transfer	0.7		5
Jul 19	Government Second Pass Approval – Tranche 2	320.8		6
Jun 20	Government Second Pass Approval – Tranche 3	626.1		6
Mar 21	Government Second Pass Approval – Tranche 4	197.8		7
	Total at Second Pass Approval		**2,071.4**	
May 09	Price Indexation	0.2		8
Aug 09	Real Variation – Real Cost Decrease	(1.3)		9
Jun 20	Real Variation – Real Cost Decrease	(2.2)		10
Feb 22	Real Variation – Budgetary Adjustment	17.7		11
Mar 23	Exchange Variation	47.8		12
Apr 23	Subsequent Government Approval – Additional AV	270.1		13
Jun 23	**Total Budget**		**2,403.7**	
	Project Expenditure			
Prior to Jul 22	Contract Expenditure – US Government (Triton Prime Contracts)	(233.6)		
	Contract Expenditure – US Government (DPS MoU)	(181.4)		
	Contract Expenditure – US Government (PA-1 Sense and Avoid Capability)	(63.5)		
	Contract Expenditure – US Government (USN Production Engineering and Logistics Support)	(34.8)		
	Contract Expenditure – US Government (Diminishing Manufacturing Source (DMS) Items)	(27.2)		
	Other Contract Payments / Internal Expenses	(119.9)		14
			(660.4)	
FY to Jun 23	Contract Expenditure – US Government (Triton Prime Contracts)	(97.1)		
	Contract Expenditure – US Government (DPS MoU)	(29.9)		
	Contract Expenditure – US Government (USN Production Engineering and Logistics Support)	(11.3)		
	Contract Expenditure – US Government (DMS Items)	(2.5)		
	Other Contract Payments / Internal Expenses	(124.8)		15
			(265.8)	
Jun 23	**Total Expenditure**		**(926.1)**	
Jun 23	**Remaining Budget**		**(1,477.6)**	

Notes	
1	Government First Pass Approval to initiate the project and enter a Project Agreement with USN for development of a BAMS capability.

Notice to reader

2. As per the JCPAA 2022-23 MPR Guidelines, financial figures in the PDSS have been rounded to one decimal point. Section 2 financial tables may include totals and percentages that are impacted due to the rounding of the original financial data.

2	Government Intermediate Pass Approval, to continue development of a single capability option for AIR7000 Phase 1B and establishment of a FMS Technical Services Case.
3	Government Interim Pass, to continue project development of submission, including negotiation of a Cooperative Program MoU, for Second Pass approval.
4	Government Second Pass Approval Tranche 1 Funding. Tranche 1 approval to fund one AV, three Main Operating Base (MOB) Mission Control Systems (MCS), two Forward Operating Base (FOB) MCS and associated support systems and spares.
5	Funding transfers from Defence Science and Technology Group to Capability Acquisition and Sustainment Group (CASG).
6	Government Second Pass Approval Tranche 2 and 3 to fund a total of two additional AV and associated support systems.
7	Tranche 4 approved initial sustainment funding for the first seven years.
8	Until July 2010, indexation was applied to project budgets on a periodic basis. The cumulative impact of this approach was $0.2m, applied only to the portion of the budget approved at Government First Pass Approval.
9	Government decision to defer the project, excess funds returned to Government after the completion of First Pass approved scope.
10	Force Structure Plan amendment in June 2020.
11	Air Force Headquarters (AFHQ) budgetary adjustment made to allow for greater flexibility for reprogramming and reduce pressure on the Air Force operating budget.
12	Movements in the budget resulting from updates to the applied foreign exchange rate.
13	Government approval for an additional AV, increasing project approved budget.
14	Other contract payments/internal expenses to support the Triton capability before July 2022. Comprised of project management expenses ($56.2m), Government Furnished Equipment (GFE) ($24.8m), Initial Support ($14.8m), Mission Systems Trainer (MST) ($11.4m), Chief Information Officer Group (CIOG) ($7.0m), US provided training ($2.3m), Initial sparing ($2.1m), Australian Minotaur Integration Capability (AMIC) ($0.7m), FOB trailerisation ($0.3m), Non-US training of ($0.3m), and AFHQ expenses ($0.023m).
15	Other contract payments/internal expenses to before July 2023. Comprised of AV expenses ($60.1m), GFE ($28.8m), project management ($17.3m), Initial sparing of ($5.5m), Initial Support ($4.6m), AMIC ($2.3m), MST ($1.6m), US provided training ($1.5m), AFHQ expenses of ($1.3m), FOB trailerisation ($1.2m), Non-US training ($0.6m), and CIOG ($0.1m).

2.2A In-year Budget Estimate Variance

Estimate PBS $m	Estimate PAES $m	Estimate Final Plan $m	Explanation of Material Movements
285.5	238.2	226.9	Portfolio Budget Statement (PBS) to Portfolio Additional Estimates Statement (PAES): The variation was a result of alterations in the USN spares delivery schedule and foreign exchange changes. PAES to Final Plan: Changes made to account for anticipated spend relating to spares.
Variance $m	(47.2)	(11.3)	Total Variance ($m): (58.5)
Variance %	(16.5)	(4.7)	Total Variance (%): (20.5)

2.2B In-year Budget/Expenditure Variance

Estimate Final Plan $m	Actual $m	Variance $m	Variance Factor	Explanation
		-	Australian Industry	The project expended $265.8m against an in-year budget of $226.9m. Resulting in a variance of $38.8m. The end-of-year overspend was driven by the booking of accruals at year-end, accelerated MoU payments, and higher than expected amortisation against Triton Prime contracts.
		-	Foreign Industry	
		-	Early Processes	
		-	Defence Processes	
		38.8	Foreign Government Negotiations/Payments	
		-	Cost Saving	
		-	Effort in Support of Operations	
		-	Additional Government Approvals	
226.9	265.8	**38.8**	**Total Variance**	
		17.1	**% Variance**	

2.3A Details of Project Major Contracts – Price

Contractor	Signature Date	Price at		Type (Price Basis)	Form of Contract	Notes
		Signature $m	30 Jun 23 $m			
US Government (DPS MOU)	Jun 18	200.0	221.7	Cost Ceiling (Capped)	MoU	1
US Government (DMS Items)	Nov 18	0.5	23.1	Variable	MoU	2, 3
US Government (Triton Prime Contracts)	May 19	37.5	464.6	Variable	MoU	3, 4
US Government (USN Production Engineering and Logistics Support)	May 19	0.7	76.4	Variable	MoU	3, 5

US Government (PA-1 Sense and Avoid Capability)	May 19	61.3	63.5	Cost Ceiling (Capped)	MoU	1, 6

Notes	
1	DPS MoU and Project Arrangement 1 (PA-1) funding is limited to a cost ceiling, which can only be changed upon mutual written consent of the Participants. Australia is responsible for paying a proportion of the total costs based on the relative number of Australian aircraft in the overall fleet.
2	DMS Items is a US Government managed program to address availability and obsolesce of components. Additional Australian aircraft and the developmental nature of the program required an uplift to the initial funded amount.
3	Contract value as at 30 June 2023 is based on actual expenditure to 30 June 2023 and remaining commitment at current budget exchange rates. This includes adjustments for indexation (where applicable). The incremental funding of these activities will see a progressive increase to the price.
4	In May 2020 the scope of the contract was expanded to include three AV, one MOB MCS and one FOB MCS.
5	Production Engineering and Logistics Support requests are made on an annual basis. The value of this contract will increase annually.
6	PA-1 Sense and Avoid (SAA) capability has fully expended all funding to the US Government.

2.3B Details of Project Major Contracts – Contracted Quantities and Scope

Contractor	Contracted Quantities as at		Scope	Notes
	Signature	30 Jun 23		
US Government (DPS MOU)	N/A	N/A	Australia's contribution to shared costs from FY 2017-18 to FY 2027-28 includes contribution to DPS for common efforts, and project overhead and administration costs.	1
US Government (DMS Items)	Various	Various	DMS is managed through monitor and risk mitigation efforts, life-of-type procurements, design changes to substitute new parts and other treatments. Signature allowed DMS treatments to be applied for Australian supplies within the US DMS program.	2
US Government (Triton Prime Contracts)	Various	Various	For Low Rate Initial Production 5 aircraft and ground system long-lead components. Australian elements of the awarded contract include three AV, two MOB MCS and one FOB MCS.	-
US Government (USN Production Engineering and Logistics Support)	N/A	N/A	USN labour and services including, but not limited to; Non Recurring Engineering efforts in support of aircraft and system production, logistics modelling and forecasting.	-
US Government (PA-1 Sense and Avoid Capability)	N/A	N/A	Australia's contribution to shared costs from FY 2018-19 to FY 2023-24 for the development of the SAA capability (including weather radar) to enable greater access to airspace and environmental conditions.	-

Major equipment accepted and quantities to 30 Jun 23
Nil

Notes	
1	No equipment delivered as part of this MoU and Project Arrangement.
2	DMS supplies and non-recurring engineering will be incorporated into production aircraft and systems before delivery.

2.4 Australian Industry Capability

Summary
The project has no contracted Australian Industry Capability (AIC) targets or an AIC Plan for its US Government Cooperative Program acquisition as the US Cooperative Program arrangement does not include the contractual provision or obligations for Australian Industry Content.
Note
AIC Plans for contracts worth more than $20 million are published on Defence's website. Australian Industry Capability is excluded from the scope of the Auditor-General's Independent Assurance Report.

Section 3 – Schedule Performance

3.1 Design Review Progress

Review	Major System/Platform Variant	Original Planned	Current Contracted	Achieved/ Forecast	Variance (Months)	Notes
System Requirements	Triton MULTI-INT System Requirements Review 2	N/A	N/A	Dec 15	N/A	1
Preliminary Design	Triton MULTI-INT Preliminary Design Review	N/A	N/A	Dec 16	N/A	1
Critical Design	Triton MULTI-INT Critical Design Review	N/A	N/A	Nov 17	N/A	1

Notes	
1	These milestones were achieved by the USN as part of the developmental program schedule prior to AIR7000 Phase 1B Second Pass approval and Australia joining the Cooperative Program.

3.2 Contractor Test and Evaluation Progress

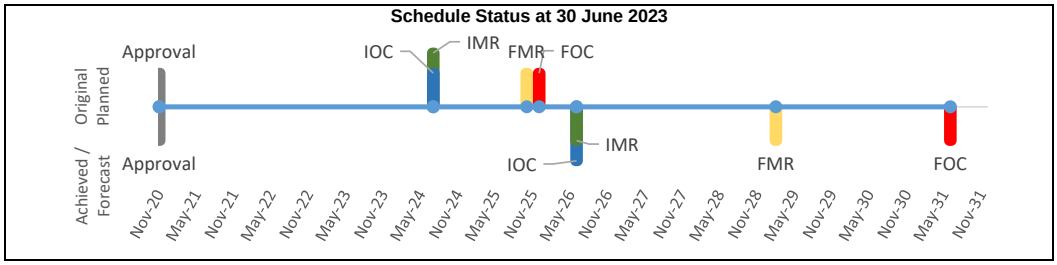
Test and Evaluation	MWajor System/Platform Variant	Original Planned	Current Contracted	Achieved/ Forecast	Variance (Months)	Notes
System Integration	IFC-4.0 Initial Operational Test & Evaluation	N/A	N/A	N/A	N/A	1, 4
	IFC-4.0 Increment 1 Operational Assessment to Support IOC	Jun 23	N/A	Aug 23	2	2, 4
	IFC-4.0 Increment 2 Operational Assessment Post IOC	Sep 28	N/A	Sep 28	0	3, 4
Acceptance	Delivery to Australia of initial Mission Control System	Oct – Dec 21	N/A	Delayed from Nov 23	Not for Publication (NFP)	5
	Commencement of crew training with the USN	Jul – Sep 22	N/A	Dec 22	5	6
	Issue of Airworthiness Instrument (UASOP)	Mar - May 23	N/A	Sep 24	18	7
	Delivery of sixth and final MQ-4C AV [Subject to Government Approval of AV 5-6 and sequencing with USN]	To Be Announced (TBA)	TBA	TBA	N/A	8

Notes	
1	This was a USN and Northrop Grumman Systems Engineering milestone, originally forecast for August 2021, for the IFC-4.0, the baseline configuration for the ADF. IFC-4.0 has now been split into two increments per the revised USN delivery schedule.
2	As a result of the Incremental approach to the delivery of IFC-4.0, the forecast date for achievement of the Operational Assessment has changed to account for the revised capability delivery.
3	Increment 2 funding has been approved by the US Government and will deliver upgraded capabilities along with a SAA functionality to meet the requirements of PA-1.
4	Due to the development nature of this capability, System Integration milestones are being further refined and are expected to be amended.
5	Production funding pause announcement delayed the original schedule preventing PWC referral in March 2020. Facilities works was paused until Government approval in November 2022. The change in basing for aircraft from Edinburgh to Tindal resulted in a redesign which has also contributed to the amendment of dates.
6	Training needs analysis in consultation with the US revealed a change to the training requirements and hence the schedule amendment.
7	At Government Second Pass Approval (Tranche 3) In Service Date (ISD) was amended by 12 months (and consequently IMR and IOC by 24 months against the Original Planned) due to the impacts of the USN production funding pause announcement in February 2020, resulting in pause of facilities progression. This had a flow-on effect on Project schedule. As the Operating Permit was required to support activities from first flight to IOC, the date required for the Operating Permit was amended, leading to the identified variance.
8	Maritime Patrol and Response submissions are subject to tranched Government approval. Following each tranche of Government approval, project milestone definitions and the project schedule will be re-baselined through an MAA update.

3.3 Progress Toward Materiel Release and Operational Capability Milestones

Item	Original Planned	Achieved/Forecast	Variance (Months)	Notes
In Service Date (ISD)	Jul 23	Jul 24 - Jun 25	23	1
Initial Materiel Release (IMR)	May - Jul 24	May 25 - Apr 26	23	1
Initial Operational Capability (IOC)	Jul 24	Jul 25 - Jun 26	23	1
Final Materiel Release (FMR)	Aug - Oct 25	Aug 28 - Feb 29	42	2
Final Operational Capability (FOC)	Dec 25	Jul 30 - Jun 31	66	2

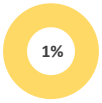
Notes	
1	At Government Second Pass Approval (Tranche 3), ISD was amended by 12 months (and consequently IMR and IOC by 24 months against the Original Planned) due to the impacts of the USN production funding pause announcement in February 2020, resulting in pause of facilities progression.
2	With effect November 2020, FOC was changed to align with the Tranche 4 approval. An incremental approach to acquisition extended the timeline for FOC incurring a four-year delay. Delay to FOC was due to the USN prioritising other capabilities during the production pause. The MAA was updated to reflect the updated forecast dates.



Note
Forecast dates in Section 3 are excluded from the scope of the Auditor-General's Independent Assurance Report.

Section 4 – Materiel Capability/Scope Delivery Performance

4.1 Measures of Materiel Capability/Scope Delivery Performance

Traffic Light Diagram: Percentage Breakdown of Materiel Capability/Scope Delivery Performance	
	**Green:** The project expects to meet the current capability requirements as expressed in the MAA, noting that the full capability is yet to be approved by Government.
	**Amber:** Elements of the funded developmental capabilities are not expected to be progressed into the platform due to prioritising other capabilities.
	**Red:** N/A

Note
This Traffic Light Diagram represents Defence's expected capability delivery. Capability assessments and forecast dates are excluded from the scope of the Auditor-General's Independent Assurance Report.

4.2 Constitution of Materiel Release and Operational Capability Milestones

Item	Explanation	Achievement
Initial Materiel Release (IMR)	• Two x MQ-4C Triton AV delivered to Australia. • Two x MOB MCS Primary including a secondary MST installed and ready for use at Edinburgh. • One x FOB MCS delivered to Tindal. • Establishment of Interim Sustainment support arrangements. • Initial US trained crew (initial focus will be on Test and Evaluation and tactics development). • Support systems, equipment and spares as required. • Initial Distributed Operator functionality enabled and ready for use.	Not yet Achieved
Initial Operational Capability (IOC)	In addition to IMR deliveries: • The Triton system is able to safely sustain one orbit in a maritime surveillance role, at a rate of effort to support initial operations.	Not yet Achieved
Final Materiel Release (FMR)	• All MQ-4C Triton AV delivered to Australia. • All MOB and FOB MCS installed and ready for use. • All MST installed at Edinburgh and ready for individual and collective training. • All crews trained. • Through life support arrangements are in place.	Not yet Achieved
Final Operational Capability (FOC)	In addition to FMR deliveries: • The Triton system is able to safely and effectively conduct the required orbits, in all roles, at a rate of effort in accordance with strategic and capability guidance.	Not yet Achieved

Section 5 – Major Risks and Issues

5.1 Major Project Risks

Identified Risks (risk identified by standard project risk management processes)		
Ref#	Description	Remedial Action
1	There is a risk that the current network infrastructure, combined with the level of development required to integrate the Triton system into the Defence SIE, will require design and certification effort that may not be achievable by the capability milestone dates.	CIOG - Military Platform Integration (CIOG-MPI) has developed a phased approach to SIE integration in line with capability milestones. This includes reliance on, and support of, other network infrastructure projects. The project and CIOG-MPI continue to leverage the USN Cooperative Program to source required technical data, subject matter expert advice and lessons learned from the USN network integration experience. Control and responsibility of the delivery of SIE allocated to CIOG-MPI allowing effective control of the relevant deliverables with clear articulation of responsibilities under a MoU between CIOG-MPI and Australian Signals Directorate.
2	There is a risk that the complexity and novelty of a large RPAS may lead to delays in the issue of an Operating Permit and achievement of dependent capability milestones.	The project established a Triton UASOP Working Group to undertake deliberate tailoring activities and facilitate engagement with the Defence Aviation Safety Authority and other stakeholders to ensure an integrated approach to technical and operational considerations, and an Operating Permit process that is aligned with DASR. This risk has been downgraded to Medium due to improved understanding of the activities required to achieve a UASOP.
3	There is a risk that the planned sustainment budget may be affected by insufficient data maturity leading to an impact on achieving Air Force support requirements and overall program affordability.	The project continues to work closely with the USN, Northrop Grumman Corporation and the Surveillance and Response System Program Office to identify sustainment cost drivers, investigate opportunities for sustainment efficiencies, validate logistics modelling assumptions, and implement lessons learned from other USN-sourced systems. Sustainment data will continue to mature as the USN Triton operational tempo increases. The project is also working with Northrop Grumman Australia to develop an affordable 'Interim Sustainment Support Contract' for Australian-based support.
4	Australian Triton aircraft will initially be delivered with some systems requiring further qualification to allow operation in all airspace and environmental conditions. There is a risk that the qualification and retrofitting of these systems may result in a delay to FOC.	The project is working with the USN to plan for an 'Alternate Means of Compliance' program to support initial operations in some airspace and environmental conditions. The Commonwealth of Australia has entered into PA-1 for the development of a SAA capability. The Cooperative Program includes activities to address flight in icing conditions. It is expected that moderate icing certification will be achieved prior to Australian operations, enabling Triton operations in moderate icing conditions. Extreme icing conditions will be risk- managed as agreed in the UASOP. The icing certification is expected to be completed prior to IOC and there is improved understanding of the activities required for airspace integration. This risk is therefore downgraded to Medium.
5	There is a risk that facilities design and construction management costs will affect the affordability of Triton facilities.	Security and Estate Group (SEG) engaged design and construction contractors to facilitate PWC expediency which was achieved in November 2022. As a result this risk is in the process of being retired.
6	Facilities schedule currently on the critical path. A number of issues have contributed to the current position, including a previous pause to the facilities program due to US Triton program uncertainties and a change of operational concept.	SEG have initiated early works utilising funding transferred to AIR555 for shared works at Edinburgh. The RAAF Tindal design contractor has now been appointed and has commenced work. PWC approval was received in November 2022. The construction works for the facilities have commenced and it is on schedule. As such, this risk has been downgraded to Medium.
Emergent Risks (risk not previously identified but has emerged during 2022–23)		
Ref#	Description	Remedial Action
1	N/A	N/A

5.2 Major Project Issues

Ref#	Description	Remedial Action
1	N/A	N/A

Note
Major risks and issues in Section 5 are excluded from the scope of the Auditor-General's Independent Assurance Report.

Section 6 – Lessons Learned

6.1 Key Lessons Learned

Description	Categories of Systemic Lessons
In line with Defence instruction and CASG Lessons policy, the project conducts scheduled reviews of its captured lessons information (including any observations, insights and/or lessons identified) as well as lessons information contained within the Defence Lessons Repository. The project has captured three lessons in total, two of which are related to Governance, one of which is related to Resourcing and Governance. These project lessons are provided below:	The project has not categorised any of its lessons information as a whole-of-Defence Lesson Learned.
Lesson Type – Observation. Inclusion of resourced schedules for external organisations. Accurate resourced schedules of external organisations that are responsible for program deliverables should be integrated into the project Integrated Master Schedule (IMS) in sufficient detail to track progress against each deliverable. This should be incorporated into the IMS at the early stages of the project and managed throughout the duration of the project.	Governance
Lesson Type – Observation. Developmental programs. The resourcing and engagement required to support developmental programs with partner nations is significantly higher than traditional acquisition programs that procure mature platforms. Additionally, regular engagement is required to ensure all stakeholders are aligned on the status of the program.	Resourcing & Governance
Lesson Type – Observation. External agency engagement. When establishing a complex project that has interfaces with external agencies who provide a Fundamental Inputs to Capability (FIC), the project should ensure that clear deliverables and lines of communication for each FIC organisation is established. To enable an adequate level of oversight, a dedicated FIC coordination role should be considered for future complex development projects.	Governance

Section 7 – Project Structure

7.1 Project Structure as at 30 June 2023

Unit	Name
Division	Aerospace Systems
Branch	Aerospace Surveillance and Response