

## Project Data Summary Sheet<sup>147</sup>

Project Number	LAND121 Phase 3B
Project Name	OVERLANDER VEHICLES (MEDIUM AND HEAVY VEHICLES, MODULES AND TRAILERS)
First Year Reported in the MPR	2013-14
Capability Type	Replacement
Capability Manager	Chief of Army
Government 1st Pass Approval	Jun 04 – Phase 3 Dec 11 – Phase 3B
Government 2nd Pass Approval	Aug 07 – Phase 3 Jul 13 – Phase 3B
Budget at 2nd Pass Approval	\$3,284.7m
Total Approved Budget (Current)	\$3,399.6m
2021-22 Budget	\$74.2m
Complexity	ACAT I



### Section 1 – Project Summary

#### 1.1 Project Description

<p>LAND121 Phase 3 was established to replace the current fleet of Australian Defence Force (ADF) Field Vehicles, Modules and Trailers (FVM&amp;T) and will enhance the ground mobility of the ADF.</p> <p>In December 2011, Government approved the splitting of LAND121 Phase 3 into two projects:</p> <ul style="list-style-type: none"> <li>• LAND121 Phase 3A – Lightweight and Light Capability (LLC), incorporating the approved Phase 5A; and</li> <li>• LAND121 Phase 3B – Medium and Heavy Capability (MHC).</li> </ul> <p>LAND121 Phase 3B will upgrade and replace the existing medium and heavy vehicle and trailer fleet. Vehicles (protected and unprotected) consisting of nine variants, will be introduced by the project including cargo, tractor, recovery and tanker functions. Ten trailer variants for general cargo, equipment transport, and tanker capability will also be acquired. Fleet flexibility will be supplemented by flatracks and modules that will permit the rapid deployment of stores (including maintenance and combat engineering), fuel and water tankers and specialist bridging capabilities.</p> <p>The following vehicles, trailers and modules are being acquired:</p> <ul style="list-style-type: none"> <li>• 2,536 MHC vehicles and 3,054 modules (including 55 Command Post Heavy (CPH) modules) supplied by Rheinmetall MAN Military Vehicles Australia (RMMVA);</li> <li>• 1,582 trailers from Haulmark Trailers (Australia) (HTA);</li> <li>• 122 Geländewagen (G-Wagon) fitted with maintenance modules supplied by Mercedes-Benz Australia / Pacific Pty Ltd and associated trailers supplied by Haulmark Trailers (Australia) Pty Ltd (HTA), acquired by LAND121 Phase 3A;</li> <li>• 49 in-service Bushmaster Protected Mobility Vehicles upgraded to customised General Maintenance Vehicle variants and associated trailers;</li> <li>• 18 Line Laying Modules acquired by LAND121 Phase 3A;</li> <li>• A further 664 specialist modules are to be acquired.             <ul style="list-style-type: none"> <li>○ 170 Personnel Restraint Modules (PRM) from United Rentals Australia Pty Ltd; and</li> <li>○ 494 Modules Gun Ammunition (MGA) and Modules Gun Stores (MGS) currently out for tender.</li> </ul> </li> </ul>
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#### 1.2 Current Status

<p><b>Cost Performance</b></p> <p><u>In-year</u></p> <p>As at 30 June 2022, financial year 2021-22 expenditure was \$63.0m against a budget of \$74.2m. The EOFY Variation is primarily due to reprogramming of milestones affected by schedule delay in uncontracted specialist modules and the CPH, and COVID-19 supply chain impacts into Q1 financial year 2022-23 as forecast.</p> <p><u>Project Financial Assurance Statement</u></p> <p>As at 30 June 2022, project LAND121 Phase 3B 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, 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.</p> <p><u>Contingency Statement</u></p> <p>The project has not applied contingency funds in the financial year.</p>
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#### 147 Notice to reader

<p>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 <i>Independent Assurance Report by the Auditor-General</i> in <b>Part 3</b> of this report.</p>
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**Schedule Performance**

Phase 3B has progressed through the design phases for all RMMVA contracted vehicles, modules and HTA trailers. HTA continues to provide trailer deliverables as required under the contract. The Project achieved the Initial Materiel Release (IMR) milestone in November 2018, ahead of the scheduled date of December 2018 and achieved Initial Operational Capability (IOC) with a caveat on vehicle air certification, by the originally planned date of December 2019. RMMVA has been requested by Air Movements Training and Development Unit (AMTDU) to provide additional technical data to inform air certification clearance. This issue is being closely managed by Capability Acquisition and Sustainment Group (CASG) and the Capability Manager. In 2020-21 PDSS, the Final Materiel Release (FMR) and Final Operational Capability (FOC) milestones were scheduled for December 2022 and December 2023 respectively. However, as at 30 June 2022, the project is in the process of monitoring potential impacts to these milestones from COVID-19 impacts in meeting the Directed Training Requirement (DTR); the outstanding work to achieve air certification; and the time required to finalise the user requirements and deliver the remaining specialist modules.

**Materiel Capability/Scope Delivery Performance**

As described in the Schedule Performance above, the Project achieved IOC with a caveat on air certification. Schedule management remains a key focus and is being closely managed by CASG and the Capability Manager. As at 30 June 2022 RMMVA has delivered 2,536 of 2,536 vehicles and 2,999 of 3,054 modules. HTA has delivered 1,581 of 1,582 companion trailers. A contract was signed with United Rentals Australia Pty Ltd, for the delivery of 170 PRM modules in December 2021. A Request for Tender (RFT) was released on 2 May 2022 for MGA and MGS, which closes in October 2022.

**Note**

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

**1.3 Project Context****Background**

Project LAND121 is a multi-phased project to provide the ADF with the FVM&T and associated support systems to meet ADF mobility requirements including logistic distribution, command and liaison, casualty evacuation, troop lift, and the provision of mobility for specialist assets such as command shelters and communications terminals.

At the time Government approved LAND121 Phase 3 the ADF's FVM&T fleet consisted of some 7,300 vehicles and 3,700 trailers acquired progressively from 1959. By 2008, 98 percent of the current assets had exceeded their life of type. The fleet was increasingly costly to maintain, repair and operate. Furthermore, the increased operational tempo from 1999 has compounded the challenges faced by the fleet to provide the mobility needs required by the ADF.

LAND121 Phase 3 was approved in August 2007 to acquire 1,187 Mercedes-Benz G-Wagons, and 973 matching trailers from HTA. In August 2011, Government approved the acquisition of an additional 959 G Wagons and 826 trailers under LAND121 Phase 5A via the contracts negotiated for Phase 3.

Phase 3 was also intended to acquire medium and heavy FVM&T; however, the Commonwealth withdrew from negotiations with the preferred tenderer, and a tender resubmission process was initiated in December 2008. In December 2011, Defence announced negotiations would commence with the preferred tenderers, RMMVA for the MHC vehicle and module requirements and with HTA for the MHC trailer requirements.

Strictly, Military Off The Shelf (MOTS) items were not considered appropriate as modifications are required to achieve:

- Compliance with Australian Design Regulations;
- A requirement for vehicles to interface with in-service and new Australian designed trailers and modules; and
- Integrate with in-service communication equipment.

In a related decision at the same time, Government approved the splitting of LAND121 Phase 3 into two projects: LAND121 Phase 3A for the LLC approved under Phase 3 and amalgamating this with the additional scope approved under Phase 5A; and LAND121 Phase 3B to progress the Phase 3 MHC scope elements. This decision effectively closed Phase 3 and amounted to a combined pass approval for the new Phase 3A and an 'interim pass' approval for the new Phase 3B. The December 2011 approval allowed the continuation of contracted activities toward the LLC acquisition and the ongoing negotiations for the MHC contracts for Phase 3B. Phase 3B was required to seek a supplementary second pass approval following contract negotiations.

The Phase 3A LLC Contract Amendments were executed in January 2012 and Phase 3B achieved second pass approval in July 2013 and contracts were executed shortly after.

**Uniqueness**

LAND121 Phase 3B is to deliver the FVM&T capability to multiple locations throughout Australia and on operational service overseas. This presents a unique logistic challenge in having a robust Support System that will achieve stated availability requirements for the lowest life cycle cost.

**Major Risks and Issues**

The project is currently managing the following major risks:

- MGA/MGS, PRM and CPH delivery delays;
- Radiation Hazards from Loading Modules onto Gun Tractor.

The project is also managing the following project issues:

- Finalisation of User Requirements for uncontracted specialist modules;
- AMTDU certification;
- Impact of COVID-19.

**Other Current Related Projects/Phases**

LAND121 is a multi-phased project providing the ADF with current-generation high-capability field vehicles, modules and trailers. Other LAND121 projects are:

LAND121 Phase 4 will acquire and deliver into service 1,100 Protected Mobility Vehicles – Light (PMV-L) and 1,058 associated trailers. The PMV-L will perform command, reconnaissance, liaison and utility roles.

LAND121 Phase 5B, approved in June 2018, will acquire and deliver into service an additional (to Phase 3B) 1,044 vehicles with 872 modules and 812 trailers.

**Note**

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

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## Section 2 – Financial Performance

### 2.1 Project Budget (out-turned) and Expenditure History

Date	Description	\$m	Notes
<b>Project Budget</b>			
Dec 11	At Original Approval (Phase 3 Project Budget prior to split into 3A and 3B)	3,237.7	1
Jun 12	Exchange Variation Budget as at 30 June 2012	(66.5)	
		<u>3,171.2</u>	
Jul 12	Real Variation - Scope (Funds retained by 3A) <b>At Original Approval (Phase 3B Project Budget after split from Phase 3)</b>	(622.0)	2
		<b>2,549.2</b>	
Jul 12	Exchange Variation to opening budget	23.3	3
Jul 13	Real Variation - Scope	7.0	4
	Real Variation - Scope	21.0	5
	Real Variation - Project Supplementation	684.2	6
	<b>Total at Revised Second Pass Approval</b>	<b>3,284.7</b>	
Nov 18	Real Variation - Budgetary Adjustment	(30.0)	7
Jun 22	Exchange Variation	144.8	
	<b>Total Budget</b>	<b>3,399.6</b>	
<b>Project Expenditure</b>			
Prior to Jul 21	Contract Expenditure - Rheinmetall MAN Military Vehicles Australia (Acquisition)	(2,046.3)	
	Contract Expenditure - Haulmark Trailers (Aust) Pty Ltd (Acquisition)	(446.3)	
	Rheinmetall MAN Military Vehicles Australia (Support)	(15.4)	
	Other Contract Payments / Internal Expenses	(240.7)	8
		<u>(2,748.8)</u>	
FY to Jun 22	Contract Expenditure - Rheinmetall MAN Military Vehicles Australia (Acquisition)	(19.3)	
	Contract Expenditure - Haulmark Trailers (Aust) Pty Ltd (Acquisition)	(24.6)	
	Rheinmetall MAN Military Vehicles Australia (Support)	0	
	Contract Expenditure - United Rentals Australia Pty Ltd (Acquisition)	(3.0)	
	Other Contract Payments / Internal Expenses	(16.1)	9
		<u>(63.0)</u>	
Jun 22	<b>Total Expenditure</b>	<b>(2,811.8)</b>	
Jun 22	<b>Remaining Budget</b>	<b>587.8</b>	
<b>Notes</b>			
1	Phase 3 project budget prior to the split into Phase 3A and Phase 3B.		
2	Retention of Light Capability scope by LAND121 Phase 3A.		
3	Update of exchange rates from approval to 2012–13 PBS rates.		
4	Transfer of funds from LAND116 Phase 3 for acquisition of trailers.		
5	Transfer of funds from JP2059 Phase 2 Bulk Liquid Distribution for acquisition of some vehicles and associated equipment to facilitate fuel and water transportation.		
6	Provision for general program supplementation associated with easing cost pressures identified during scoping for project approval, as per revised second pass approval.		
7	Budget Adjustment of \$30.0m was approved by Government in Nov 18. The \$30.0m adjustment from LAND121 Phase 3B will be returned to the budget of LAND121 Phase 5B in 2023-24. LAND121Phase 5B relates to the acquisition and delivery into service of an additional 1,044 vehicles, 872 modules and 812 trailers. LAND121 Phase 3B and LAND121Phase 5B are managed by the same project team at Defence		
8	Other Expenses comprise of (\$64.1m) for the acquisition of G-Wagons by LAND121 Phase 3A on behalf of LAND121 Phase 3B, (\$61.6m) for salaries, (\$22.3m) for the Protected Mobility Vehicle, and (\$79.0m) for other project office costs not associated with the prime contracts. An adjustment of \$13.7m was required due to the transition back to Accrual Accounting from a Cash Methodology in FY 2019-20.		
9	Other Expenses comprise of (\$11.6m) for salaries and ( \$4.5m) for other project office costs not associated with prime contracts.		

2.2A In-year Budget Estimate Variance

Estimate PBS \$m	Estimate PAES \$m	Estimate Final Plan \$m	Explanation of Material Movements
65.1	74.4	74.2	PBS to PAEs: The variation is due primarily to forecast milestones reprogrammed from FY 22-23 into FY 21-22. PAES to Final Plan: Variance is due to updates to exchange rates.
Variance \$m		9.3 (0.2)	Total Variance (\$m): 9.1
Variance %		14.3 (0.3)	Total Variance (%): 14.0

2.2B In-year Budget/Expenditure Variance

Estimate Final Plan \$m	Actual \$m	Variance \$m	Variance Factor	Explanation
		(11.2)	Australian Industry	The EOFY Variation is primarily due to reprogramming of milestones affected by schedule delay in uncontracted specialist modules and the CPH, and COVID-19 supply chain impacts into Q1 financial year 2022-23 as forecast.
			Foreign Industry	
			Early Processes	
			Defence Processes	
			Foreign Government Negotiations/Payments	
			Cost Saving	
			Effort in Support of Operations	
			Additional Government Approvals	
74.2	63.0	(11.2)	<b>Total Variance</b>	
		(15.1)	<b>% Variance</b>	

2.3 Details of Project Major Contracts

Contractor	Signature Date	Price at		Type (Price Basis)	Form of Contract	Notes
		Signature \$m	30 Jun 22 \$m			
Rheinmetall MAN Military Vehicles Australia (Acquisition)	Jul 13	1,585.9	2,129.9	Variable	Standard Defence Contract	1, 2, 3
Haulmark Trailers (Australia) Pty Ltd (Acquisition)	Jul 13	397.7	509.6	Variable	Standard Defence Contract	1, 2
Rheinmetall MAN Military Vehicles Australia (Support)	Jul 13	32.3	46.7	Variable	Standard Defence Contract	1, 2, 4
United Rentals Australia Pty Ltd	Dec 21	29.9	33.4	Variable	Standard Defence Contract	2

Notes

- Additional vehicles and trailers, worth \$28.3m and \$4.7m respectively, were funded and procured by LAND121 Phase 3A, on behalf of the LAND121 Phase 3B project.
- Contract value as at 30 June 2022 is based on actual expenditure to 30 June 2022 and remaining commitment at current exchange rates of EURO 0.6589 and USD 0.6889 based on XR RBA on 30 June 2022, and includes adjustments for indexation (where applicable).
- Price at 30 June 2022 varies from Price at Signature due to contracted price escalation, and contract changes related to in-scope capability and support.
- As of 01 July 2020, the Support Contract which has previously been managed by LAND121 Phase 3B has transitioned to Commercial and General Service Vehicle Systems Program Office (CGSVSPO) under CA16 Fleet.

Contractor	Contracted Quantities as at		Scope	Notes
	Signature	30 Jun 22		
Rheinmetall MAN Military Vehicles Australia (Acquisition)	2,536	2,536	MHC vehicles with associated modules.	1
Haulmark Trailers (Australia) Pty Ltd (Acquisition)	1,582	1,582	MHC Trailers.	1
Rheinmetall MAN Military Vehicles Australia (Support)	N/A	N/A	MHC Support Contract for vehicles and modules.	2
United Rentals Australia Pty Ltd	170	170	Personnel Restraint Module	

Major equipment accepted and quantities to 30 Jun 22

As at 30 June 2022 Rheinmetall MAN Military Vehicles Australia has delivered 2,536 of 2,536 of the following vehicles:

- Mediumweight Tray: all deliveries completed;
- Mediumweight Tray with Crane: all deliveries completed;
- Mediumweight Tipper (dump): all deliveries completed;
- Heavy Integrated Load Handling: all deliveries completed;
- Heavy Tipper: all deliveries completed;
- Heavy Tractor: all deliveries completed;
- Medium Recovery : all deliveries completed;
- Heavy Recovery: all deliveries completed; and
- Heavy Tanker: all deliveries completed.

and 2,999 of 3,054 of the following modules:

- Flatracks: all deliveries completed;
- Bridge Boat Interface: all deliveries completed;
- Mediumweight Combat Engineer Section Stores: all deliveries completed;

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- Mediumweight Maintenance: all deliveries completed;
- Mediumweight Stores: all deliveries completed;
- Heavy Stores: all deliveries completed;
- Heavy Bulk Fuel Pump and Storage: all deliveries completed;
- Heavy Bulk Fuel Storage: all deliveries completed;
- Heavy Bulk Water Pump and Storage: all deliveries completed; and
- Heavy Bulk Water Storage: all deliveries completed;
- Command Post Heavy Module: delivery not yet commenced

As at 30 June 2022 Haulmark Trailers (Australia) has delivered 1,581 of 1,582 of the following matched trailers:

- Medium weight Cargo trailers: all deliveries completed;
- Heavy ILH trailers: all deliveries completed;
- Heavy Equipment Trailers: all deliveries completed;
- Medium Equipment Transporters: all deliveries completed;
- Heavy Bulk Fuel Tankers: all deliveries completed;
- Heavy Equipment Transporters: 95% Complete;
- Dolly Low Loaders: all deliveries completed;
- Heavy Cargo trailers: all deliveries completed;
- Heavy Bulk Water Tankers: all deliveries completed; and
- Dolly Road Trains: all deliveries completed.

As at 30 June 2022 United Rentals Australia Pty Ltd, has delivered 0 of 170 of the PRM.

Notes	
1	The quantity figures being communicated publicly excludes vehicle and trailer prototypes.
2	As of 1 July 2020, the Support Contract which has previously been managed by LAND121 Phase 3B has transitioned to Commercial and General Service Vehicle Systems Program Office (CGSVSPO) under CA16 Fleet.

### Section 3 – Schedule Performance

#### 3.1 Design Review Progress

Review	Major System/Platform Variant	Original Planned	Current Contracted	Achieved/Forecast	Variance (Months)	Notes
Preliminary Design	Vehicles	Dec 14	Aug 15	Dec 15	12	1, 2
	Modules (RMMVA)	Aug 14	Feb 15	Mar 15	7	1, 2
	Trailers	Jun 16	Jan 17	Jan 17	7	1, 3
	Personnel Restraint Module	Oct 22	N/A	Oct 22	0	
Detailed Design	Vehicles	May 15	Sep 16	Jun 17	25	1, 2
	Modules (RMMVA)	Nov 14	Jun 15	Mar 16	16	1, 2
	Trailers	Jan 17	Jul 17	Jun 17	5	1, 3
	Personnel Restraint Module	Jan 24	N/A	Jan 24	N/A	4
Critical Design	Vehicles	Aug 15	Jan 17	Dec 17	28	1, 2
	Modules (RMMVA)	Mar 15	Nov 15	Sep 16	18	1, 2
Notes						
1	All dates represent the Approval of the exit for the Reviews of the last vehicle, module and trailer variants. All vehicles, contracted modules and trailers have now completed preliminary, detailed and critical design review processes.					
2	Vehicle and Module Variance is due to two replans. The first was due to major delays in finalisation of contracts between the prime contractor and its subcontractors. The second was an adjustment to the schedule by the contractor in order to reduce production risks by concentrating on the most mature vehicle variants and slower ramping up of Protected Vehicles.					
3	Trailer Variance is due to a change in scope by the CoA to Group C Trailers.					
4	Original/contracted date had a logic error. Contract change in progress to correct the logic and update Current Contracted Date.					

#### 3.2 Contractor Test and Evaluation Progress

Test and Evaluation	Major System/Platform Variant	Original Planned	Current Contracted	Achieved/Forecast	Variance (Months)	Notes
System Integration, Acceptance Test and Evaluation (AT&E)	Vehicles	Jul 16	Aug 18	Nov 22	76	1,2,3,4,7
	Modules (RMMVA)	Nov 15	Jun 17	Jun 21	67	1,2,3,4,5,7
	Trailers	Sep 17	May 18	Jun 18	9	1,6
	Personnel Restraint Module	Nov 23	N/A	Nov 23	N/A	1,8
Notes						
1	All dates represent the Approval of the Acceptance Verification Reports (AVRs) for the tests of the last vehicle, module and trailer variant.					
2	Delays by RMMVA to secure its subcontractor has impacted the completion of verification.-					
3	Senior management attention (Defence and the RMMV Board) is expected to improve the schedule performance for completion of acceptance test and evaluation.					
4	Current Planned Date changes to Vehicles and Modules are IAW CCP064 signed 15 July 2016.					
5	A Contract Change Proposal IAW CCP 117 signed 13 July 2017 was executed to address an additional nine month variance associated with RMMVA sub-contractor, Holmwood Highgate delay in progressing the Liquid Module Program.					
6	Current Planned Date changes are IAW Group C Integrated Baseline Review (June 2016) outcomes and agreements.					
7	Revised Achieved/Forecast date for Vehicles relates to outcomes arising from remaining testing activities and associated AVRs for the Medium Recovery Vehicle. Final Acceptance Verification & Validation for this vehicle is scheduled to be finalised by November 2022. Revised Achieved/Forecast date for the Bulk Liquid Modules relates to the resubmission of a number of AVRs. These were approved in June 2021.					
8	Original/contracted date had a logic error. Contract change in progress to correct the logic and update Current Contracted Date.					

3.3 Progress Toward Materiel Release and Operational Capability Milestones

Item	Original Planned	Achieved/Forecast	Variance (Months)	Notes
Initial Materiel Release (IMR)	Dec 18	Nov 18	(1)	1
Initial Operational Capability (IOC)	Dec 19	Dec 19	0	2
Final Materiel Release (FMR)	Dec 22	TBA	N/A	3
Final Operational Capability (FOC)	Dec 23	TBA	N/A	3
<b>Notes</b>				
1	Initial Materiel Release was achieved one month earlier than forecast due to all elements of Initial Materiel Release being satisfied and agreed with the Capability Manager in November 2018.			
2	Operational Capability (IOC) was declared with air certification caveat on 12 December 2019.			
3	The impact on the current forecasted dates for FMR and FOC is being assessed in line with the additional time required to finalise the user requirements and delivery of the specialist modules, the ongoing work required to achieve air certification and the impact of COVID-19 on the DTR schedule.			

  

**Schedule Status at 30 June 2022**

**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	
	<p><b>Green:</b> The project is currently meeting materiel capability requirements as expressed in the MAA and in accordance with the requirements of the relevant Technical Regulatory Authorities.</p>
	<p><b>Amber:</b> 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.</p>
	<p><b>Red:</b></p>

**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)	IMR requires the following to be delivered: 659 medium and heavy vehicles, 436 modules, 57 trailers, sufficient training for operators and maintainers to support Army's introduction into service plan and adequate logistic support arrangements. Achieved November 2018.	Achieved
Initial Operational Capability (IOC)	IOC requires the following to be delivered: Based on a Battle Group, which is approximately 100 vehicles, deployed on a Major Defence Training activity (Exercise TALISMAN SABRE or equivalent). IOC was declared by Chief of Army in December 2019 with an air certification caveat.	Achieved with an air certification caveat
Final Materiel Release (FMR)	FMR requires the following to be delivered: 2,707 medium and heavy vehicles, 3,858 modules and 1,753 trailers, achieve the Directed Training Requirement across the entire medium and heavy capability for operators and maintainers and logistic support arrangements.	Not yet achieved

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	Forecast achievement TBA. The impact on the current forecasted date for FMR is being assessed in line with the additional time required to finalise the user requirements and deliver the specialist modules, the ongoing work required to achieve air certification and the impact of COVID-19 on the DTR schedule.	
Final Operational Capability (FOC)	FOC requires the following to be delivered: Complete delivery of 2,707 vehicles, 1,753 trailers and 3,858 modules, acceptance and Introduction Into Service to meet Chief of Army Preparedness Directive requirement to deploy and support a Multi Role Combat Brigade and concurrent Battle Group on operations. Forecast achievement TBA. The impact on the current forecasted date for FOC is being assessed in line with the additional time required to finalise the user requirements and deliver the specialist modules, the ongoing work required to achieve air certification and the impact of COVID-19 on the DTR schedule.	Not yet achieved

## Section 5 – Major Risks and Issues

### 5.1 Major Project Risks

Identified Risks (risk identified by standard project risk management processes)	
Description	Remedial Action
MGA/MGS, PRM and CPH delivery delays There is a chance that a combination of technical complexity, contractual complexity, and certification requirements will delay the delivery of modules past the agreed date. That date is FMR and FOC under MAA version 2.2.	RFT for the MGA/MGS has been released and plans are progressing to mitigate the schedule risk associated with Verification & Validation (V&V) testing. This issue will be revisited and addressed post the RFT closing date in October 2022. The CPH OCD and User Requirements are currently being reviewed by the Capability Manager. A contract was signed in December 2021 with United Rentals Australia Pty Ltd, for the delivery of a 170 PRM modules.
MGA/MGS – Access to FMS Data There is a chance that the MGA/MGS will not be delivered as required to meet MAA milestones due to the lengthy period required to obtain approvals to access FMS data.	This risk has been closed as access to FMS data has been approved and will be removed at the next MPR.
Hazards from carrying Ammunition on communications enabled Gun Tow Vehicle The Gun Tow Vehicle (GTV) is fitted with a communications node. Some ammunition components are sensitive to electromagnetic radiation emitted by the communications node. There is a chance that designing to reduce the risk that the fitted communications node will damage or initiate ammunition components on the GTV, may delay MGA design, incur unidentified / unbudgeted costs and constrain or lessen desired capability.	This risk is still ongoing as it is linked to the design of the MGA/MGS, which is currently out for tender. This risk will be reassessed as the project progresses through Tender Evaluation, Detailed Design and prototyping. This risk will be revisited post the RFT closing date in October 2022. Suitable risk treatments have been identified and will be implemented through the design and verification process with the preferred tenderer.
Emergent Risks (risk not previously identified but has emerged during 2021–22)	
Description	Remedial Action
Tyre Changing Station (TCS) Development Risk.  There is a chance that the TCS Commercial Off the Shelf (COTS) equipment will fail to operate as required in environments that the equipment was not designed for. This will result in the inability of the TCS to change tyres and / run flats.	This risk was identified and created in July 2021.  Since July 2021, the TCS COTS equipment has undergone extensive vibration and climate testing.  All major issues identified during vibration testing have been remediated and testing is to be repeated for V&V.  Consequently this risk was re-assessed and downgraded and will be removed at the next MPR.

### 5.2 Major Project Issues

Description	Remedial Action
Finalisation of User Requirements for Uncontracted Modules There is a risk that uncontracted modules may not have robust User Requirements, which can be taken to industry to satisfy the Capability need. This may lead to Cost, Schedule or Capability risks for the Project and Capability Manager.	Operational Concept Document (OCD) and Functional Performance Specification (FPS) have been completed for MGA/MGS and the associated RFT was released. The CPH OCD and User Requirements are currently being reviewed by the Capability Manager.

	<p>Whilst the majority of the Medium Heavy Capability has been delivered on time, a delay in issue and approval of the OCDs will result in a risk to schedule for the delivery of the modules. The issue continues to be managed closely with key stakeholders via Integrated Project Team and Project Management Stakeholder Group meetings. Options will be explored with the preferred tenderers to optimise the delivery schedule.</p>
<p>Air Movements Training and Development Unit (AMTDU) certification</p> <p>There is a chance that Air transportability will affect project schedule, performance and cost.</p> <p>IOC has been declared with air certification caveats.</p>	<p>Nearly all Modules have received full clearance and most Vehicles have received caveated clearance. Work continues to address AMTDU Requests for Information (RFIs) to resolve the caveats. Semi-Trailer clearance work has not yet commenced and no significant roadblocks to certification are expected.</p> <p>AMTDU continues to be heavily involved and consulted on aspects of design that impact air transportability. AMTDU assessments are being conducted using information available to inform the analysis and findings resulting in either a Risk Retention requirement or full clearance for Air Transportation to be advised once the design process is completed. CASG has engaged RMMVA to conduct additional analysis work to address AMTDU RFIs. This includes detailed Finite Elements Analysis on all Tie Down Points. This issue is still active but is being effectively managed.</p>
<p>Impact of COVID-19</p> <p>There is a chance that disruptions as a result of the COVID-19 pandemic will cause delays in the achievement of project milestones. However, major milestones of Final Material Release (December 2022) and Final Operating Capability (December 2023) are expected to remain on track. The pandemic could impact: supply chains, delivery of Mission Systems to meet contractual and roll-out schedules, cancellation of events for media/industry, suspension of Training delivery, reduced organisational ability to maintain business tempo and business as usual activities; all of which could cause delay to the project.</p>	<p>Close collaboration with stakeholders.</p> <p>The mitigations and risks in relation to COVID-19 are being closely managed across all stakeholder groups. Close collaboration is also established with key Industry Partners. The achievement of DTR has been impacted by COVID-19, along with ADF support provided to extreme weather events, and this may delay FMR.</p> <p>Given the ongoing nature of the pandemic, this risk will continue to be managed with stakeholder groups and key Industry Partners. This issue is still active but is being effectively managed and will be reviewed prior to the next MPR.</p>

<p><b>Note</b></p> <p>Major risks and issues in Section 5 are excluded from the scope of the Auditor-General's Independent Assurance Report.</p>
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**Section 6 – Lessons Learned**

6.1 Key Lessons Learned

Description	Categories of Systemic Lessons
Government should refrain from announcing preferred tenderers until negotiations are complete. Public announcements undermine negotiation leverage and may provide detail which is subject to change during negotiations.	Contract Management
Projects must have a robust suite of up-to-date capability documents (Operational Concept Document and Functional Performance Specification) available during tender evaluation and negotiations to provide critical contextual information for the negotiation team. These documents also provide the framework for the acquisition authority and capability manager to conduct an informed acceptance process.	Requirements Management
It is key that requirements are fully agreed before negotiations commence to avoid any uncertainty and potential for delays.	Requirements Management
Where doubt exists in relation to compliance claims and/or significant risk is apportioned to a performance requirement, project teams should seek Objective Quality Evidence (OQE) during tender evaluation, so claims of fitness for purpose are supportable and evidence required during Design Acceptance, and AT&E is minimised.	Requirements Management
For projects of this size and complexity, team members require highly developed project management and contracting skills and experience. In preparing for LAND121 Phase 3B contract negotiations, the need was identified for external expertise and advice to support the negotiation process. The presence of an experienced negotiator and technical adviser was key to being able to negotiate a successful contract.	Contract Management
The effort involved with the vehicle/module/trailer interface (including all interfaces between elements of the prime equipment) should not be underestimated even for apparently simple equipment. The early formation of interface working groups is critical.	Contract Management
Early involvement of Army Logistic Training Centre (ALTC) staff in the development of the Training requirement is mandatory. This includes reviewing the ASDEFCON template DID ILS-910 and relevant clauses pertaining to training and participation in preliminary meetings to the Initial Training Conference. Propose a preliminary brief by ALTC to define expectations and 'fit' to contractual requirements.	Resourcing
Government Furnished Equipment (GFE) lists should be continuously developed and updated while the system specifications and statement of work are still subject to	Contract Management

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negotiations and potential variation, to ensure all items on the contracted GFE list are available and sourced.	
Ensure contractual provisions require the contractor to have executed contracts with Approved Subcontractors within a specific time following contract execution, so as to avoid impact on contract deliverables and slippage to key engineering reviews.	Contract Management
'Mancats' is a vehicle diagnostic tool that can be used with the fleet of RMMVA vehicles being acquired. A lesson learned from LAND121 Phase 3A (G-Wagons) was to lease, and not buy, the vehicle diagnostic tool. Leasing reduces the risk of hardware and firmware redundancy, and is a better value for money option for the Commonwealth. LAND121 Phase 3B is negotiating an appropriate lease arrangement with RMMVA for 'Mancats'.	Contract Management
An AT&E program should consider risk and performance requirements to determine whether OQE can be provided by prime contractors and their parent companies to support claims of fitness for purpose in lieu of testing. During negotiations all claims of compliance should be reflected in the qualification method to be used in the AT&E program.	Contract Management
Durability testing of Commercial Off The Shelf (COTS) equipment early in the project life-cycle (pre Preliminary Design Review) helped mitigate project risk through early identification of defects and hardening of equipment. Rigorous testing of COTS equipment early in the project life-cycle is encouraged.	Requirements Management
Establish and maintain defined level of competency in project management, requirements analysis and specification, and systems engineering to help ensure consistent delivery of capability across large projects. This may require on-going skills analysis and plan to achieve and maintain the required skills set of the project team.	Resourcing
Co-locating the Army School of Transport training team within the CASG Project Office has proven beneficial by allowing for close collaboration and enhanced communication between the two groups. In addition, it has allowed end user input into the vehicle development and supporting processes. The training team have also acted as ambassadors of the capability in their interactions with the wider user group.	Resourcing
Projects of this size and scale will often have numerous dependent projects, many of which will rely on the bigger project running to schedule. The number of requests for information from numerous stakeholder groups sometimes requires prioritisation in order to remain focused on project priorities. This needs careful management to ensure wider Defence priorities and objectives are achieved/supported.	Governance
The importance of the Integrated Logistics Management (ILS) discipline cannot be underestimated. ILS involvement and input is recommended to be considered from the establishment of the project and contract establishment, and implementation. Emphasis on ILS together with engineering and project management involvement in Major Systems Reviews and the design process is critical in ensuring that ILS products can adequately support the delivery of the capability.	Resourcing
The vehicle user nation working group (RMMVUNG) has proven valuable in building an understanding of the CONOPS, issues and challenges faced by different user nations with the same vehicle fleet. There have been lessons learnt by CASG and AHQ from these conferences and there are efforts to reduce support costs by sharing development, refresh and acquisition activities.	Governance

## Section 7 – Project Structure

### 7.1 Project Structure as at 30 June 2022

Unit	Name
Division	Land Systems
Branch	Land Vehicle Systems

