

## Project Data Summary Sheet<sup>127</sup>

Project Number	<b>LAND 121 Phase 3B</b>
Project Name	<b>OVERLANDER VEHICLES (MEDIUM AND HEAVY VEHICLES, MODULES AND TRAILERS)</b>
First Year Reported in the MPR	2013-14
Capability Type	Replacement
Acquisition Type	Australianised MOTS
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 2 <sup>nd</sup> Pass Approval	<b>\$3,284.7m</b>
Total Approved Budget (Current)	<b>\$3,428.9m</b>
2017-18 Budget	<b>\$697.3m</b>
Project Stage	<b>Integration and Test</b>
Complexity	ACAT I



### Section 1 – Project Summary

#### 1.1 Project Description

LAND 121 Phase 3 was established to replace the current fleet of Australian Defence Force (ADF) Field Vehicles, Modules and Trailers (FVM&T) and will enhance the ground mobility of the ADF.

In December 2011, Government approved the splitting of LAND 121 Phase 3 into two projects:

- LAND 121 Phase 3A – Lightweight and Light Capability (LLC), incorporating the approved Phase 5A; and
- LAND 121 Phase 3B – Medium and Heavy Capability (MHC), incorporating the yet to be approved Phase 5B.

LAND 121 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.

The following vehicles, trailers and modules will be acquired:

- 2,536 MHC vehicles and 3,054 modules supplied by Rheinmetall MAN Military Vehicles Australia (RMMVA);
- **1,582** trailers from Haulmark Trailers (Australia);
- 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 LAND 121 Phase 3A;
- 49 in-service Bushmaster Protected Mobility Vehicles upgraded to customised General Maintenance Vehicle variants **and associated trailers**;
- 18 Line Laying Modules acquired by LAND 121 Phase 3A; and
- A further 664 specialist modules to be acquired which are not yet in contract.

#### 1.2 Current Status

##### Cost Performance

###### In-year

As at **30 Jun 2018**, financial year 2017-18 expenditure was **\$659.7m** against the forecast expenditure of **\$697.3m**. **The variation is due to CFOG decision to delay payment of invoices totalling \$37.7m for goods delivered and services provided in FY17-18 as a result of portfolio cash budget pressures.**

Project Financial Assurance Statement

#### 127 Notice to reader

Forecast dates and Sections: 1.2 (Materiel Capability Delivery Performance), 1.3 (Major Risks and Issues), 4.1 (Measures of Materiel Capability 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.

As at 30 Jun 2018, Project LAND 121 Phase 3B has reviewed the approved scope and budget for those elements required to be delivered by the project. Having reviewed the current financial and contractual obligations of the 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 funds in the financial year.

**Schedule Performance**

Phase 3B has progressed through the design phases for all vehicles, modules and trailers. While Stop Payments have been invoked on RMMVA, the RMMV Executive Board continues to monitor contract performance and progress in the achievement of targets.

Haulmark Trailers (Australia) Pty Ltd (trailers) continue to provide deliverables as required under the contract.

Due to early delays, schedule performance is closely monitored. The Project is confident it will achieve the Initial Materiel Release (IMR) milestone by the originally planned date of December 2018.

**Materiel Capability Delivery Performance**

Affordability will impact the overall capability, with costs being managed by maximising off-the-shelf solutions.

As at 30 Jun 2018 Rheinmetall MAN Military Vehicles Australia has delivered 1406 of 2,536 vehicles and the following modules:

- Flatracks: 2157 (all deliveries completed)
- Bridge Boat Interface: 13 (of 25)
- Mediumweight Combat Engineer Section Stores: 15 (of 73)
- Mediumweight Maintenance: 14 (of 110)
- Mediumweight Stores: 9 (of 265)
- Heavy Stores: 9 (of 115)

Haulmark Trailers (Australia) has delivered 745 of 1,582 matched trailers.

**Note**

Forecast dates and capability assessments are excluded from the scope of the review.

1.3 Project Context

**Background**

Project LAND 121 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 LAND 121 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.

LAND 121 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 LAND 121 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, 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 LAND 121 Phase 3 into two projects: LAND 121 Phase 3A for the LLC approved under Phase 3 and amalgamating this with the additional scope approved under Phase 5A; and LAND 121 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**

LAND 121 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 following risks and issues may have an impact on schedule, cost, performance, and/or reputation.

Risks associated with the vehicle acquisition process include changes to system specifications **resulting from required engineering changes, technical certification**, integration issues with new generation communication equipment, access to public roads **and the support contract may not meet the requirements of the Commonwealth**. The key issues concerning the project are the performance of key subcontractors, **delays to the recovery capability and training**, and interface issues between vehicles, trailers, modules **and other capabilities**. **Please refer to Section 5 of this document that details the specific risks and issues.**

#### Other Current Sub-Projects

LAND 121 is a multi-phased project providing the ADF with current-generation high-capability field vehicles, modules and trailers. Other LAND 121 projects are:

**LAND 121 Phase 3A** has delivered 2,146 lightweight (4x4) and light (6x6) Mercedes-Benz G-Wagons and 1,799 matching Haulmark trailers, replacing approximately two thirds of the current Land Rover 4x4 and 6x6 vehicle fleets. The new G-Wagons will be used primarily for tactical training, but will also be available to support humanitarian assistance or disaster relief operations, and to help secure Australia's coastline. **This project was closed on 03 October 2017.**

**LAND 121 Phase 4** will acquire and deliver into service 1100 Protected Mobility Vehicles – Light (PMV-L) and 1058 associated trailers. The PMV-L will perform command, reconnaissance, liaison and utility roles.

**LAND 121 Phase 5B 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 review.

## 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	(66.5)	
Jun 12	Budget as at 30 June 2012	3,171.2	
Jul 12	Real Variation – Scope (Funds retained by 3A)	(622.0)	2
<b>Jul 12</b>	<b>At Original Approval (Phase 3B Project Budget after split from Phase 3)</b>	<b>2,549.2</b>	
Jul 12	Exchange Variation to opening budget	23.3	3
Jul 13	Real Variation – Scope	7.0	4
Jul 13	Real Variation – Scope	21.0	5
<b>Jul 13</b>	Real Variation – Project Supplementation	684.2	6
	<b>Total at Revised Second Pass Approval</b>	<b>3,284.7</b>	
Jun 18	Exchange Variation	144.2	
Jun 18	<b>Total Budget</b>	<b>3,428.9</b>	
<b>Project Expenditure</b>			
Prior to Jul 17	Contract Expenditure – Rheinmetall MAN Military Vehicles Australia (Acquisition)	(784.5)	
	Contract Expenditure – Haulmark Trailers (Aust) Pty Ltd (Acquisition)	(119.9)	
	Rheinmetall MAN Military Vehicles Australia (Support)	(4.2)	
	Other Contract Payments / Internal Expenses	(94.5)	7
		(1,003.1)	
Jun 18	Contract Expenditure – Rheinmetall MAN Military Vehicles Australia (Acquisition)	(544.4)	
	Contract Expenditure – Haulmark Trailers (Aust) Pty Ltd (Acquisition)	(80.0)	
	Rheinmetall MAN Military Vehicles Australia (Support)	(2.6)	
	Other Contract Payments / Internal Expenses	(32.7)	8
		(659.7)	
Jun 18	<b>Total Expenditure</b>	<b>(1,662.8)</b>	9
Jul 18	<b>Remaining Budget</b>	<b>1,766.1</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 LAND 121 Phase 3A.		
3	Update of exchange rates from approval to 2012–13 PBS rates.		

4	Transfer of funds from LAND 116 Phase 3 for acquisition of trailers.
5	Transfer of funds from JP 2059 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, <b>as per revised second pass approval.</b>
7	Expenses comprise of (\$38.6m) for the acquisition of G-Wagons by LAND 121 Phase 3A on behalf of LAND 121 Phase 3B, (\$23.1m) for salaries, (\$9.0m) for the Protected Mobility Vehicle, and (\$23.2m) for other project office costs not associated with the prime contracts.
8	Expenses comprise of (\$7.8m) for the Protected Mobility Vehicle, (\$9.0m) for salaries, and (\$15.8m) for other project office costs not associated with the prime contracts.
9	Delays to some mandated systems reviews and deliveries resulted in stop payment on related milestones being imposed.

#### 2.2A In-year Budget Estimate Variance

Estimate PBS \$m	Estimate PAES \$m	Estimate Final Plan \$m	Explanation of Material Movements
709.9	687.6	697.3	<b>PBS to PAES: The variation is due primarily to equipment deliveries and associated payments that were brought forward into 2016-17 from 2017-18.</b> <b>PAES to Final Plan: Variance is due to updates to exchange rates.</b>
Variance \$m	(22.3)	9.7	Total Variance (\$m): (12.6)
Variance %	(3.1)	1.4	Total Variance (%): (1.8)

#### 2.2B In-year Budget/Expenditure Variance

Estimate Final Plan \$m	Actual \$m	Variance \$m	Variance Factor	Explanation
			Australian Industry	<b>Variance is due to CFOG decision to delay the payment of invoices totalling \$37.7m for goods delivered and services provided in FY17-18 as a result of portfolio cash budget pressures.</b>
			Foreign Industry	
			Early Processes	
		(37.7)	Defence Processes	
			Foreign Government Negotiation/Payments	
			Cost Saving	
			Effort in Support of Operations	
			Additional Government Approvals	
697.3	659.7	(37.6)	<b>Total Variance</b>	
		(5.4)	<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 18 \$m			
Rheinmetall MAN Military Vehicles Australia (Acquisition)	Jul 13	1,585.9	2,111.4	Variable	ASDEFCON	1, 2
Haulmark Trailers (Australia) Pty Ltd (Acquisition)	Jul 13	397.7	508.1	Variable	ASDEFCON	1, 2
Rheinmetall MAN Military Vehicles Australia (Support)	Jul 13	32.3	47.1	Variable	ASDEFCON	1, 2
<b>Notes</b>						
1	<b>Additional vehicles and trailers, worth \$28.3m and \$4.7m respectively, were funded and procured by LAND 121 Phase 3A, on behalf of the LAND 121 Phase 3B project.</b>					
2	Contract value as at 30 Jun 2018 is based on actual expenditure to 30 Jun 2018 and remaining commitment at current exchange rates of EURO 0.6344 on 29 Jun 2018, and includes adjustments for indexation (where applicable).					
Contractor	Quantities as at		Scope	Notes		
	Signature	30 Jun 18				
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.			
<b>Major equipment received and quantities to 30 Jun 18</b>						
<b>As at 30 Jun 2018 Rheinmetall MAN Military Vehicles Australia has delivered 1406 of 2,536 vehicles and the following modules:</b>						
<ul style="list-style-type: none"> <li>- Flatracks: 2157 (all deliveries completed)</li> <li>- Bridge Boat Interface: 13 (of 25)</li> <li>- Mediumweight Combat Engineer Section Stores: 15 (of 73)</li> <li>- Mediumweight Maintenance: 14 (of 110)</li> <li>- Mediumweight Stores: 9 (of 265)</li> <li>- Heavy Stores: 9 (of 115)</li> </ul>						

### Project Data Summary Sheets

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Haulmark Trailers (Australia) has delivered (as at 30 Jun 2018): **354** Medium weight Cargo trailers, **278** Heavy ILH trailers, **68** Heavy Equipment Trailers, **13** Medium Equipment Transporters, **6** Heavy Bulk Fuel Tankers, **26** Dolly Low Loaders, **207** Cargo Kits and **140** ramp sets (for the Mediumweight, Cargo Trailers).

**Notes**

1 | The quantity figures being communicated publicly excludes vehicle and trailer prototypes.

### Section 3 – Schedule Performance

#### 3.1 Design Review Progress

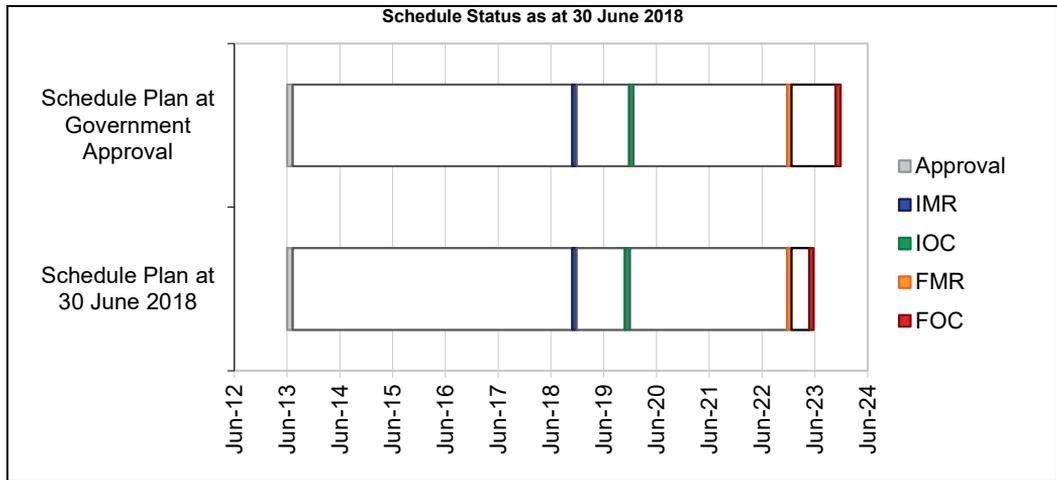
Review	Major System/Platform Variant	Original Planned	Current Planned	Achieved/Forecast	Variance (Months)	Notes
Preliminary Design	Vehicles	Dec 14	Aug 15	Dec 15	12	1,2
	Modules	Aug 14	Feb 15	Mar 15	7	1,2
	Trailers	Jun 16	Jan 17	Jan 17	7	1,3
Detailed Design	Vehicles	May 15	Sep 16	Jun 17	25	1,2
	Modules	Nov 14	Jun 15	Mar 16	16	1,2
	Trailers	Jan 17	Jul 17	Jun 17	5	1,3
Critical Design	Vehicles	Aug 15	Jan 17	Dec 17	28	1,2
	Modules	Mar 15	Nov 15	Sep 16	18	1,2
<b>Notes</b>						
1	All dates represent the Approval of the exit for the Reviews of the last vehicle, module and trailer variants. <b>All vehicles, contracted modules and trailers have now completed preliminary, detailed and critical design review processes.</b>					
2	<b>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.</b>					
3	<b>Trailer Variance is due to a change in scope by the CoA to Group C Trailers.</b>					

#### 3.2 Contractor Test and Evaluation Progress

Test and Evaluation	Major System/Platform Variant	Original Planned	Current Planned	Achieved/Forecast	Variance (Months)	Notes
System Integration, Acceptance Test and Evaluation (AT&E)	Vehicles	Jul 16	Aug 18	Feb 19	31	1, 2, 3, 4
	Modules	Nov 15	Jun 17	Sep 18	34	1, 2, 3, 4, 5
	Trailers	Sep 17	May 18	Jun 18	9	1, 6
<b>Notes</b>						
1	All dates represent the Approval of the Acceptance Verification Reports 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 (CCP 117) 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.					

#### 3.3 Progress Toward Materiel Release and Operational Capability Milestones

Item	Original Planned	Achieved/ Forecast	Variance (Months)	Note
Initial Materiel Release (IMR)	Dec 18	Dec 18	0	1
Initial Operational Capability (IOC)	Dec 19	Dec 19	0	
Final Materiel Release (FMR)	Dec 22	Dec 22	0	
Final Operational Capability (FOC)	Dec 23	Jun 23	(6)	
<b>Notes</b>				
1	All variances are forecast to be achieved on or ahead of planned dates and are a reflection of estimated planned work required to achieve MAA milestones.			



**Note**  
Forecast dates in Section 3 are excluded from the scope of the review.

**Section 4 – Materiel Capability Delivery Performance**

**4.1 Measures of Materiel Capability Delivery Performance**

Pie Chart: Percentage Breakdown of Materiel Capability Delivery Performance	
	<p><b>Green:</b> The Project expects to meet 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> N/A</p>
	<p><b>Red:</b> N/A</p>
<p><b>Note</b> This Pie Chart represents Defence's expected capability delivery. Capability assessments and forecast dates are excluded from the scope of the review.</p>	

**4.2 Constitution of Initial Materiel Release and Final Materiel Release**

Item	Explanation	Achievement
Initial Materiel Release (IMR)	IMR requires the following to be delivered: <b>659</b> medium and heavy vehicles, <b>436</b> modules, <b>57</b> trailers, sufficient training for operators and maintainers to support Army's introduction into service plan and adequate logistic support arrangements. Forecast achievement <b>December 2018</b> .	Not yet achieved

Final Materiel Release (FMR)	FMR requires the following to be delivered: 2,707 medium and heavy vehicles, 3,858 modules, 1,753 trailers, achieve the Directed Training Requirement across the entire medium and heavy capability for operators and maintainers and logistic support arrangements. Forecast achievement December 2022.	Not yet achieved
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## Section 5 – Major Risks and Issues

### 5.1 Major Project Risks

Identified Risks (risk identified by standard project risk management processes)	
Description	Remedial Action
<p><b>Changes to system specifications.</b></p> <p>There is a chance that the project will be affected by changes to system specifications leading to Contract Change Proposals which will impact on cost and schedule.</p>	<p><b>Development of a decision log.</b> Changes will only be considered on formal advice from Army and will include costs and risks.</p> <p>The project team has worked with relevant stakeholders to assess proposed changes resulting from design reviews. While a number of Contract Change Proposals have been generated to reflect agreed outcomes of the design reviews, there has been no impact on schedule, and costs are being managed within the approved budget.</p> <p>This risk <b>continues</b> to diminish as the design review process <b>is completed</b>. However, some engineering changes are being considered as a result of verification and validation activities. <b>It is likely that this risk is to be retired by the end of 2018.</b></p>
<p><b>Integration of new generation communication equipment (C4I) – vehicles.</b></p> <p>There is a chance that the project will be affected by the complexities of delivering MHC vehicles with an integrated C4I solution impacting on performance, cost and schedule.</p>	<p><b>Monitor and Review RMMVA performance.</b></p> <p>This risk continues to be managed through the establishment of a working group involving RMMVA as the Prime System Integrator, and Thales as the Subject Matter Expert.</p> <p><b>The project has digitised a significant quantity of trucks with C4I fit in order to meet AHQ defined digitisation C4I package. Technical certification of the C4I package was submitted to AHQ for approval in mid-June, 70/150 vehicles now digitised.</b></p>
<p><b>Access to Public Roads.</b></p> <p>There is a chance that the MHC will be affected by the States and Territories (S&amp;Ts) delaying certification and/or not issuing the appropriate permits for operational use which may impact on schedule, cost, performance, supportability, environment, reputation and compliance.</p>	<p><b>Develop and agree to a strategy with States and Territories.</b></p> <p>Defence continues to lead negotiations with the States and Territories. Visits by LAND 121 Phase 3B and Strategic Logistics Branch (JLC) to all States and Territories have been completed. JLC will incorporate LAND 121 Phase 3B vehicle and trailer combinations iteratively into the Defence Road Transport Exception Framework (DRTEF) as Defence reviews road access confirmation from individual States and Territories.</p> <p><b>States and Territories access is actively discussed at each IPT (held monthly) with all stakeholders. The main focus has been HRV permits for driving on public roads to allow training of the public road driving elements of the HRV Pilot course.</b></p>
<p><b>Insufficient storage space at the LAND 121 Introduction into Service facility at Meeandah.</b> There is a chance that Introduction Into Service will be affected by lack of storage space at Meeandah impacting on reputation.</p>	<p><b>The Meeandah facility has now been utilised for several years by the project for the receipt and roll-out vehicle and module capabilities without incident. Roll-out plans are reviewed and assessed in regards to Meeandah's capacity. This risk has been retired.</b></p>
<p><b>Heavy Recovery Mission System training delay</b></p> <p>There is a chance that the MHC roll-out will be affected by a delay in training for the Heavy Recovery Mission System impacting on schedule and performance.</p> <p><b>SEE ISSUE BELOW</b></p>	<p>A training gap analysis has been conducted by RMMV/RMMVA in Europe and a workshop has been planned for July/August 2017 in Germany to evaluate the findings. Two ADF Recovery mechanics are participating in a joint training development activity with RMMVA.</p> <p>A draft training implementation plan has been released to stakeholders and a CCP is being developed (to be executed in July 17) which will define training locations and resources.</p> <p><b>This risk has become an issue due to the February 2018 scheduled trial operator training course being rescheduled to May 2018. This is in accordance with CCP156 and has been detailed below in major project issues.</b></p>
Emergent Risks (risk not previously identified but has emerged during 2017–18)	
Description	Remedial Action
<p><b>Technical Certification delay.</b></p>	<p><b>Monitor and Review RMMVA performance. The project office is working closely with RMMVA to ensure that deliverables are accepted in accordance with technical documentation and where needed, with the appropriate SG2.</b></p>

There is a chance that the project will be affected by the technical restrictions being in place at the time of vehicle's acceptance. This may impact on cost, schedule and reputation.	RMMVA have submitted a plan for the remediation of SG2s, which is being discussed with AHQ for scheduling remediation to unit deployed assets and the fleet at Meeandah.  Warranty and Latent Defect contract clauses will also be utilised if required.
RMMVA failure to meet contractual compliance. There is a chance that the MHC contracted Support and Maintenance Services (relating to the provision of spare parts, and after sales support for the protected variant and stores modules) will be affected by RMMVA not meeting their contractual obligations impacting on cost, schedule, performance, reputation and supportability.	This risk is being mitigated by close monitoring and engagement with RMMVA through regular Combined Services Performance Reviews. The provision of spares is being resolved as RMMVA are to establish a production facility in Queensland by 2021, which will also provide a long term solution for the protected variant repairs where an interim solution is currently in place. The after sales support for modules is under discussion with RMMVA.

#### 5.2 Major Project Issues

Description	Remedial Action
<p><b>Subcontractor engagement.</b></p> <p>The project has been affected by the delay to subcontractor engagement impacting on schedule, cost, performance and reputation.</p>	<p><b>CoA to undertake financial, capacity and viability assessment of subcontractors.</b></p> <p>All key subcontractors have now been engaged. The delay in engaging the subcontractors has impacted on the conduct of design reviews for some module elements. Performance issues initially identified with Varley have been resolved. RPC Technologies' performance issues have been addressed. The Holmwood Highgate contract schedule was amended to reflect changes to their delivery schedule however there are no impacts to the achievement of MAA milestones.</p> <p>This issue is being closely managed by the Project Manager after initial involvement by the Assistant Secretary. Weekly updates continue to be provided from RMMVA to assess progress.</p> <p>The project continues to engage with RMMVA and Holmwood Highgate regularly to track the build and delivery of the first 16 bulk liquid modules which remain on target for end June delivery. RMMVA has advised of some part shortages and this is being actively managed through the RMMVA supply chain and is being closely monitored. Project is engaging with RMMVA and Varley on a regular basis to track the build and delivery of the stores batches. Acceptance of batches has been impacted by quality issues identified with Medium and Heavy stores and this is being actively managed by RMMVA &amp; reported weekly to the project. Varley module rework planning has progressed with escalation from RMMVA and CoA.</p>
<p><b>Project interface and integration issues.</b> The MHC has encountered technical engineering and project management integration and interface issues. Integration issues include issues between vehicles, modules and/or trailers.</p>	<p>The Project integration issues are being actively managed with two key focus areas. The Hydraulic connectors between the Truck Tractor and Trailers has been identified as an issue and a Request for Proposal has been issued to RMMVA to install the correct hydraulic connectors. The second issue is the Park Brake Interlock capability between the ILH Truck, Trailers and Bulk Fuel Modules. RMMVA have proven a solution through testing and the quote has been accepted by the Commonwealth. Hydraulic interfaces have been reviewed during Group C trailer testing and have been found to be satisfactory with minor changes required. The Park Brake Interlock solution has been addressed. Electrical interfaces are still to be implemented on the vehicle and tested prior to conduct of pilot training in August 2018.</p>
<p><b>42M Medium Recovery Vehicle</b></p> <p>The project has been affected by the delay in design and verification of the 42M recovery vehicle, and further delays to the delivery schedule impacting on cost, schedule and performance.</p>	<p>Critical Design Review exit was achieved in December 2017, where RMMVA advised that additional schedule was required in order to address technical, quality and production issues, and to allow RMMVA to implement lessons learnt from the 45M integration process to the 42M integration process. The project is actively managing this issue with regular workshops and meetings held with RMMVA. CCP156 agreed to amend the delivery schedule to meet RMMVA's revised production schedule. MAA deliverables will not be impacted.</p>

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2017-18 Major Projects Report

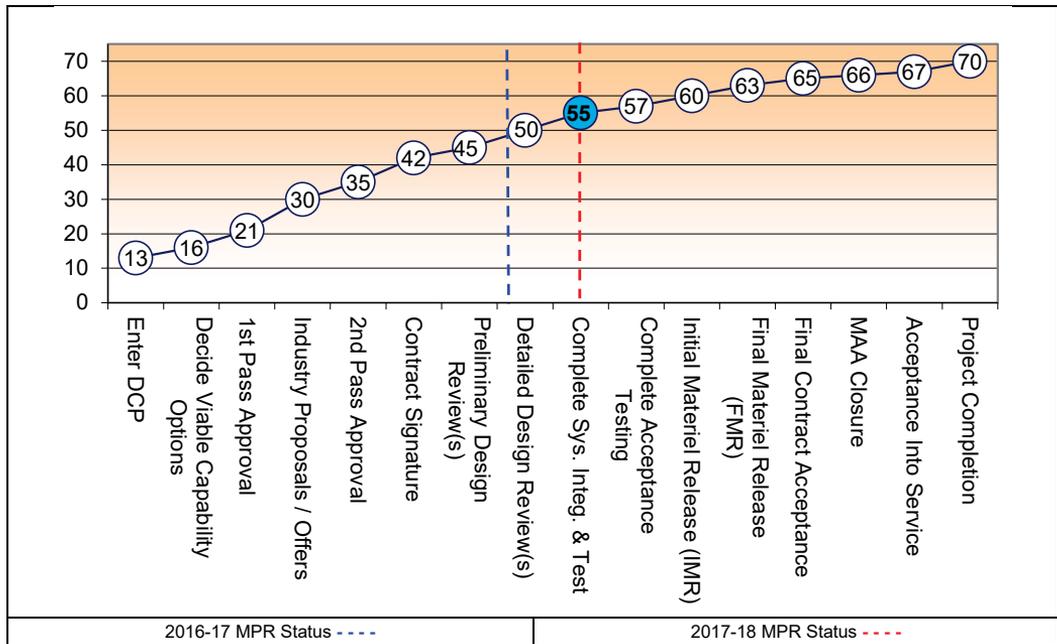
	First production vehicles have been built and are in transit for delivery as per CCP156. Some production and parts sourcing issues have been identified by RMMVA. These are being managed by dual sourcing parts when needed. CoA continues to closely track and manage 42M delivery.
<p><b>45M Heavy Recovery Vehicle training delay</b></p> <p>The trial operator Heavy Recovery Mission System training course was scheduled to commence in February 2018. However, this was not achieved due to technical restrictions limiting the safe conduct of the course coupled with uncertainty in obtaining the required permits and deficiencies in training preparedness deliverables from RMMVA.</p>	<p>This became an issue due to the February 2018 scheduled trial operator training course being rescheduled to May 2018 in accordance with CCP156.</p> <p>The decision to postpone the pilot course was made in consultation with AHQ and FORCOMD. Close engagement with RMMVA will continue to ensure that the revised schedule is achieved. Regular meetings and workshops are being conducted to ensure that preparedness and mitigations to technical issues are progressing.</p> <p>The HRV pilot course commenced in May 2018 and was successfully completed at the end of June. User feedback has been positive with some minor changes needed to training plans and documentation. The course will be taken to the Learning Implementation Board (LIB) for endorsement to run as an IIS course. This issue is to be reviewed for context and applicability as an outcome of the course assessment.</p>
<p><b>MHV SE – Bridge Boat Interface (BBI)</b></p> <p>The project has been affected by integration failure between the Improved Ribbon Bridge (IRB) Ramp Bay and BBI, impacting on capability, schedule, and cost.</p>	<p>BBI integration issues with L155 modules is ongoing. The Commonwealth has provided a concept to RMMVA for assessment.</p> <p>Quote from RMMVA received and has been approved to commence integration solution investigation with outcomes due in May 2018. A CCP will be raised to modify the built BBI Modules to the required build state, update technical documentation, commence training and introduce the BBI into service.</p> <p>A draft quote has been received from RMMVA to modify the BBI fleet, which is currently being considered by the project to determine Value For Money. Decision on whether or not to proceed is expected in July 18.</p>

<b>Note</b>
Major risks and issues in Section 5 are excluded from the scope of the review.

**Section 6 – Project Maturity**

6.1 Project Maturity Score and Benchmark

Maturity Score		Attributes							Total
		Schedule	Cost	Requirement	Technical Understanding	Technical Difficulty	Commercial	Operations and Support	
Project Stage	Benchmark	8	7	8	8	8	8	8	55
Integration and Test	Project Status	9	8	8	7	8	8	7	55
	Explanation	<ul style="list-style-type: none"> <li><b>Schedule:</b> Concurrent activity and schedule float contribute to high confidence that schedule will be within the tolerance of the Materiel Acquisition Agreement.</li> <li><b>Cost:</b> The project has progressed to a stage where the Estimate at Completion can be forecast with confidence based on cost variance trends. Majority of risks have been retired in project elements particularly sensitive to cost increases</li> <li><b>Technical Understanding:</b> Technical data and Intellectual Property provisions will allow Defence to operate, support, maintain, modify and dispose the materiel elements of the capability. Score is below the benchmark as RMMVA is behind with a number of ILS deliverables due to inadequate resourcing earlier in the project. While resourcing is now adequate it is likely that the ILS deliverables will remain behind where they should be, although this is unlikely to affect introduction into service.</li> <li><b>Operations and Support:</b> Detailed operational and support requirements have been specified and In-Service Contracts are in place. The score being below the benchmark again reflects the ILS deliverables being behind schedule. The project is also working towards a performance based support contract, and the collection of appropriate metrics to inform that process and the end contract.</li> </ul>							



**Section 7 – Lessons Learned**

**7.1 Key Lessons Learned**

Project Lesson	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 LAND 121 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 negotiations and potential variation, to ensure all items on the contracted GFE list are available and sourced.	Contract Management

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 LAND 121 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. LAND 121 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

## Section 8 – Project Line Management

### 8.1 Project Line Management in 2017–18

Position	Name
Division Head	MAJGEN David Coghlan (Dec 15–current)
Branch Head	Ms Sarah Myers (Oct 16–current)
Project Director	COL Steve Wilson (Dec 16–current)
Project Manager Vehicles and Modules	Ms Jacquie Menzies (to Dec 17) <b>Ms Alecia Millard (Dec 17 – current)</b>
Project Manager Trailers	Mr Jonathan McGuigan

