Part 3. Project Data Summary Sheets

Project Data Summary Sheet¹⁴³

Project Number	LAND 121 Phase 3A
Project Name	OVERLANDER VEHICLES
First Year Reported in	2009-10 (as Phase 3)
the MPR	2012-13
Capability Type	Replacement
Acquisition Type	Australianised MOTS
Capability Manager	Chief of Army
Government 1st Pass	Jun 04 – Phase 3
Approval	Aug 11 – Phase 5A
	Dec 11 – Phase 3A
Government 2nd Pass	Aug 07 – Phase 3
Approval	Aug 11 – Phase 5A
	Dec 11 – Phase 3A
Total Approved Budget	\$1,017.6m
(Current)	
2016–17 Budget	\$58.6m
Project Stage	Acceptance into Service
Complexity	ACAT II



Section 1 – Project Summary

1.1 Project Description

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). LAND 121 Phase 3A has delivered 2,146 lightweight (4x4) and light (6x6) Mercedes-Benz Geländewagen (G-Wagons), associated modules and 1,799 matching Haulmark trailers. LAND 121 Phase 3A variants include:

- 4x4 lightweight: Station Wagon, Carryall Hardtop and Carryall Soft Top;
- 6x6 light single cab: Ambulance and Cargo;
- 6x6 light dual cab: Canine, Command Post Module (CPM), Dual Cab Cargo and Line Laying Modules; and
- 6x6 Surveillance and Reconnaissance.

In addition, the project office facilitated the purchase of 122 G-Wagon based General Maintenance Vehicles (GMV) and 122 related trailers that form part of the scope of LAND 121 Phase 3B.

LAND 121 Phase 3A replaced approximately two-thirds of the current Land Rover 4x4 and 6x6 vehicle fleets that have been in service since the mid-1980s (the remainder to be replaced under LAND 121 Phase 4). The new G-Wagons, together with the modules and trailers, are being employed by the Army and Air Force for training and to support domestic security and emergency response efforts. The vehicles will also be employed on humanitarian assistance/disaster relief and low-threat operations.

1.2 Current Status

Cost Performance

In-year

In-year variance is due to invoices paid in the previous financial year but budgeted for in the current financial year.

Project Financial Assurance Statement

As at 30 June 2017, Project LAND 121 Phase 3A 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 in the financial year.

143 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.

Schedule Performance

Between July 2012 and March 2017, the 2,146 G-Wagons and 1,799 Haulmark trailers that are within the approved LAND 121 Phase 3A scope were issued to units throughout Australia.

Introduction into Service began on 2 July 2012 with the delivery of 20 G-Wagons and 18 trailers to the 7th Brigade in Brisbane. As of 31 March 2017, 2,146 G-Wagons and 1,799 trailers had been delivered to Defence units. The Initial Materiel Release (IMR) milestone was achieved, with caveats, in May 2014, 29 months behind schedule due to delays in implementing the vehicle support system and processing the IMR report. Declaration of Initial Operating Capability (IOC) with caveats was approved on 17 December 2015. Final Materiel Release (FMR), and Final Operating Capability (FOC) with caveats, were achieved on 28 October 2016, three months behind schedule due to delays in design, and test and evaluation activities for the CPM module.

Materiel Capability Delivery Performance

The Project is has met the capability requirements as expressed in the Materiel Acquisition Agreement (MAA) and in accordance with the requirements of the relevant Technical Regulatory Authorities. As of 30 June 2017 the Contractors have delivered 2,268 production vehicles and 1,921 production trailers to the project. This includes deliveries against 122 vehicles and trailers being acquired on behalf of LAND 121 Phase 3B.

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 Field Vehicles, Modules and Trailers (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 to specialist assets such as command shelters and communications terminals.

LAND 121 Phase 3 was approved in August 2007 to acquire 1,187 Mercedes-Benz G-Wagons, and 973 matching trailers from Haulmark Trailers (Australia). 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, Rheinmetall MAN Military Vehicles Australia for the vehicle and module requirements and with Haulmark Trailers (Australia) for the MHC trailer requirements.

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 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 subsequently achieved second pass approval in July 2013 following contract negotiations.

Uniqueness

LAND 121 Phase 3A rolled out the FVM&T capability to multiple locations throughout Australia. This presented a unique logistic challenge requiring a robust Support System to achieve stated availability requirements at the lowest life cycle cost.

Major Risks and Issues

Concurrency of critical activities

There was a chance that the project would be affected by the concurrency of critical activities including developing the design and support system, and introducing into service the Ambulance and CPM modules. This risk has been retired as the project managed the workload within the current workforce allocation through FOC leading to project closure.

IMR/IOC Caveats

Achievement of the IMR Milestone was declared with three caveats in May 2014 relating to the following issues:

- Carryall Hardtop and Station Wagon load restraint;
- G-Wagon air transportability; and
- Vehicle warning systems operating during blackout and reduced lighting operation.

FOC Caveats

Achievement of the FOC Milestone was declared on 28 October 2016 with three caveats relating to the following issues:

- Air Transportability, external lift by CH47 for the G-Wagon FoV;
- Introduction Into Service (IIS) Directed Training Requirement (DTR) for G-Wagon Command Post Module (CPM)
 Training
- IIS DTR for G-Wagon Winch Gap Training.

Further details are provided in Section 5.2.

Other Current Sub-Projects

LAND 121 Phase 3B will provide the ADF with 2,707 protected and unprotected medium and heavy vehicles which, along with 1,704 matched trailers. This will provide payloads of between four and seventy tonnes for a range of logistics functions including vehicle recovery, freight, bulk liquid distribution and personnel carriage. LAND 121 Phase 3B is formally scoped for the delivery of 122 General Maintenance Module variants, based on the G-Wagon cab-chassis. This aspect of the Phase 3B capability was being managed through Phase 3A Project Office, however has now transitioned to LAND 121 Phase 3B due to Phase 3A project closure.

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.

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
		Project Budget			
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	362.7		2
Jul 12		Real Variation – Scope (Transfer of funds to 3B)	(2,549.2)		3
				(2,186.5)	
		Exchange Variation		32.9	
Jun 17					
lup 17		Total Budget		1,017.6	
Juli 17					
		Project Expenditure			
Prior to Jul	16	Contract Expenditure – Mercedes-Benz Australia/Pacific Ptv I to			
. nor to our		(Acquisition)	(569.1)		4
		Contract Expenditure – Haulmark Trailers (Aust) Pty Ltd (Acquisition)	(78.6)		4
		Contract Expenditure – Cablex Pty Ltd	(52.0)		
		Contract Expenditure – Haulmark Trailers (Aust) Pty Ltd (Support)	(3.3)		
		Contract Expenditure – Mercedes-Benz Australia/Pacific Pty Ltd (Support)	(2.8)		
		Other Contract Payments / Internal Expenses	(153.3)		4
				(859.1)	
FY to Jun 1	7	Contract Expenditure – Cablex Pty Ltd	(16.5)		
		Contract Expenditure – Mercedes-Benz Australia/Pacific Pty Ltd (Acquisition)	(1.4)		
		Other Contract Payments / Internal Expenses	(23.5)		5
				(41.4)	
Jun 17		Total Expenditure		(900.5)	
Jun 17		Remaining Budget		117.1	
Notes					
1	Phase 3	3 project budget prior to the split into Phase 3A and Phase 3B.			
2	Addition	nal scope from LAND 121 Phase 5A.			
3	Remova	al of Medium/Heavy Capability scope to LAND 121 Phase 3B.			

Project Data Summary Sheets ANAO Report No.26 2017–18 2016–17 Major Projects Report

4	Other expenditure comprises Phase 3A C4I Government Furnished Materials (\$24.0m) Outsourced Services, Contractors and Consultants (\$23.3m), Salaries (\$18.9m), Ambulance Intercom Module (\$6.2m) and (\$63.7m) for other Project Office costs not associated with the prime contracts. This includes \$17.2m for expenditure on Medium and Heavy Capability activities for Phase 3B that could not be recorded as being against Phase 3B due to financial system and reporting constraints.
5	Other expenditure comprises: C4I Government Furnished Materiels and Integration (\$10m), Vehicle Load Restraints (\$3.2m), Dual Cab Cargo Modules (\$3.0), Miscellaneous Vehicle Equipment (\$3.2m), freight of vehicles to units (\$1.0m), Outsourced Services (\$0.4m), and other project office costs not associated with the prime contracts (\$2.7m).

2.2A In-year Budget	Estimate Variance		
Estimate PBS \$m	Estimate PAES \$m	Estimate Final Plan \$m	Explanation of Material Movements
37.4	58.6	58.6	PBS to PAES: The variation is primarily due to a reprogramming of deliverables into 2016-17 to align with industry's capacity to deliver. PAES to Final Plan: There is no variance.
Variance \$m	21.3	0.0	Total Variance (\$m): 21.3
Variance %	56.9	0.0	Total Variance (%): 56.9

2.2B In-year Budget/Expenditure Variance

Z.ZD III your Duug		vanance		
Estimate Final Plan \$m	Actual \$m	Variance \$m	Variance Factor	Explanation
			Australian Industry	Variance is due to invoices paid in
			Foreign Industry	the previous financial year but
			Early Processes	budgeted for in the current financial
		(17.3)	Defence Processes	year.
			Foreign Government	
			Negotiations/Payments	
			Cost Saving	
			Effort in Support of Operations	
			Additional Government Approvals	
58.6	41.4	(17.3)	Total Variance	
		(29.5)	% Variance	

2.3 Details of Project Major Contracts

		Pric	e at	Turne (Dries	Form of			
Contractor	Signature Date Signature \$m		30 Jun 17 \$m	Basis)	Contract	Notes		
Mercedes Benz Australia Pacific Pty Ltd (Acquisition)	Oct 08	321.8	599.1	Variable	ASDEFCON	1, 2		
Mercedes Benz Australia Pacific Pty Ltd (Support)	Oct 08	45.1	59.3	Variable	ASDEFCON	2, 3		
Haulmark Trailers (Australia) Pty Ltd (Acquisition)	Apr 10	42.0	83.3	Variable	ASDEFCON	1, 2, 4		
Haulmark Trailers (Australia) Pty Ltd (Support)	Apr 10	22.2	25.2	Variable	ASDEFCON	2		
Cablex Pty Ltd	Mar 15	1.5	68.6	Firm	ASDEFCON	2, <mark>5</mark>		
Notes								
1 Note that the Mercedes-Be above includes \$28.3m an behalf of the LAND 121 F Pass Government Approve	Note that the Mercedes-Benz Australia/Pacific Pty Ltd and Haulmark Trailers (Australia) Pty Ltd Contract Prices 30 June 2017 above includes \$28.3m and \$4.7m respectively for GMV commitment. This item is being procured by LAND 121 Phase 3A, on behalf of the LAND 121 Phase 3B project which is funding the GMV, in accordance with the LAND 121 Phase 3B Second Pass Government Approval in July 2013.							
2 Contract value as at 30 J exchange rates, and include	une 2017 is based des adjustments for	on actual expendituindexation (where a	ure to 30 June 2017 pplicable).	7 and remainin	ng commitment at	current		

Increase is due to the inclusion into the Contract price of price adjustment forecasts.
 The majority of the increase accounts for the acquisition of additional trailers under LAND 121 Phase 5A and for the GMV trailers acquired on behalf of LAND 121 Phase 3B.

5 The increase in value of this contract reflected the contracting approach of procuring prototype Module Installations Kits followed by production Module Installation Kits.

Contractor	Quantit	ies as at	Scope	Notes	
Contractor	Signature	30 Jun 17	Seope	NULES	
Mercedes Benz Australia Pacific Pty Ltd (Acquisition)	1,187	2,268	Vehicles with associated modules	1	

Project Data Summary Sheets ANAO Report No.26 2017–18 2016–17 Major Projects Report

Mercedes Benz Australia Pacific Pty Ltd (Support)	N/A	N/A	Support Contract for vehicles and modules	
Haulmark Trailers (Australia) Pty Ltd (Acquisition)	979	1,921	Production Trailers	1
Haulmark Trailers (Australia) Pty Ltd (Support)	N/A	N/A	Support Contract for Trailers	
Cablex Pty Ltd	2	172	C4I Installation Kits for the CPM Module	
Major equipment received and quantities to 30 Jun 17				

- All design reviews completed under Phase 3.
- All ten mission system variants have completed Production Readiness Review.
- 13 prototypes delivered.
- 2,268 production vehicles delivered to the project by the Contractor including those acquired on behalf of LAND 121 Phase 3B.
- 1,921 production trailers delivered to the project by the Contractor including those acquired on behalf of LAND 121 Phase 3B.

 Notes

 1
 The quantity figures being communicated publicly exclude modules and prototypes. An additional 122 vehicles and trailers have been acquired for the GMV variant on behalf of LAND 121 Phase 3B. The GMV capability is based on the 6x6 G-Wagon Dual Cab chassis. This aspect was being managed through the Phase 3A Project Office, however it has now transitioned to the LAND 121 Phase 3B due to Phase 3A project closure.

Section 3 – Schedule Performance

3.1 Design Review Progress

Design reviews were completed under LAND 121 Phase 3.

Revie	w	Major System/Platform Variant	Original Planned	Current Planned	Achieved /Forecast	Variance (Months)	Notes
Preliminary Design		Vehicles	Apr 09	N/A	Jun 09	2	1
		Modules	Mar 09	N/A	Mar 09	0	
		Trailers	Oct 10	N/A	Oct 10	0	
Critica	al Design	Vehicles	Jun 10	N/A	Jun 10	0	
		Modules	Jul 10	N/A	Oct 11	15	2, 3
		Trays and Trailers	Mar 11	N/A	Aug 11	5	2
Critica	al Design	Module (Light Ambulance, Cab Chassis)	Feb 15	N/A	Apr 15	2	4
(Rede	esign)	Module (Light CPM)	Sep 15	N/A	Mar 16	6	5
Notes	;						
1	Vehicle F until 12 J	Preliminary Design occurred as planned from 22 A une 2009 when the Commonwealth was satisfied v	pril 2009 to 6 with the way ah	May 2009, h lead for issue	owever, exit wa s identified dur	as unable to be ing the review.	e granted
2	Critical D	esign Review variance was due to a change in spe	ecification by th	e Commonw	ealth.		
3	All work Capability of 15 ad concurred	on the Personnel/Cargo Restraint System (PC / Development Group (CDG) that removed the rec ditional Modules (Light Cargo) in lieu of the P d with this change.	RS) Module c quirement for a CRS module.	eased post PCRS Modu Army Head	Critical Design Ile. CDG recom quarters and A	following adv mended the a Air Force Hea	vice from cquisition dquarters
4	Two extra Design R	a months taken for retesting of electromagnetic c eview and Functional Configuration Audit.	ompatibility pe	rformance a	nd in preparatio	on of conduct	of Critical
5	Two mon repeat a	th variance was due to delay in initial completion on number of tests, availability of testing resources/factors	of the prototype cilities and othe	es. A further er competing	four month variant priorities.	ance due to th	e need to

Test and Evaluation	Major System/Platform Variant	Original Planned	Current Planned	Achieved /Forecast	Variance (Months)	Notes
Test Readiness	Module (Light Ambulance, Cab Chassis)	Oct 10	Jan 12	Feb 12	16	1
Review	All other vehicle, module (except Ambulance) and trailer variants had passed under Phase 3	Jul 11	Dec 11	Dec 11	5	2
	Module (Light Ambulance, Cab Chassis) (Redesign)	Nov 14	N/A	Nov 14	0	
	Module (Light CPM) (Redesign)	Feb 15	N/A	Aug 15	6	3

3.2 Contractor Test and Evaluation Progress

Project Data Summary Sheets ANAO Report No.26 2017–18 2016–17 Major Projects Report

Ide	Config Audit	guration	Tray (Light S Reconnaissa	urveillance ance)	and		Feb 11	Sep	o 12	Nov 12	21	2
r Li			All other vehi under Phase	icles and mo	odules compl	leted	Feb 11	Oc	t 11	Oct 11	8	2
gh			design)		May 15	N	/A	Oct 16	17	3		
t	Accep Verific	otance cation and	Light and Lig under Phase	htweight Tra 3	ailers comple	eted	Jul-Oct 11	N	/A	Jul-Nov 11	1	4
	Valida	ation	Module (Ligh (Redesign)	t Ambulanc	e, Cab Chas	sis)	Nov 14-Feb 15	N	/A	Nov 14-Apr 15	2	5
	Configuration Audit Tray (Light Surveillance and Reconnaissance) Feb 11 Sep 1 All other vehicles and modules completed Under Phase 3 Hot Ott 1 N/A Acceptance Verification and Validation Light and LightWeight Trailers completed Under Phase 3 Jul-Oct 11 N/A Module (Light CPM) (Redesign) May 15 N/A Module (Light Ambulance, Cab Chassis) Nov 14-Feb N/A Module (Light CPM) (Redesign) Feb-May 15 N/A Module (Light CPM) (Redesign) Feb-May 15 N/A 1 Delayed from originally planned first week of January 2012 to February 2012 d. Surveillance and Reconnaissance User Trial in mid to late January 2012. 2 Variances are due to specification changes by the Commonwealth. 3 This Test and Evaluation phase relates only to Commonwealth. 4 One extra month taken for retesting. 5 Two extra months taken for retesting of electromagnetic compatibility performanc Design Review and Functional Configuration Audit. 3.3 Progress Toward Materiel Release and Operational Capability Milestones Item Original Planned Achieved/Forecc Initial Materiel Release (IMR) Dec 11 May 14 Initial Operational Capability (FOC) Mid 16 Oct				/A	Oct 16	17	3				
	Notes					· ·		Ċ	· ·			•
	1	Delayed fr Surveilland	om originally p ce and Reconn	lanned first aissance Us	t week of Jar ser Trial in mi	nuary 20 id to late	12 to Febru January 20	ary 2012 12.	due to	collective avail	ability and	d conduct of
Configuration Audit Tray (Light Surveillance and Reconnaissance) Feb 11 Sep 12 I All other vehicles and modules completed under Phase 3 Feb 11 Oct 11 N/A Ju Acceptance Verification and Validation Light Arblukeight Trailers completed under Phase 3 Ju-Oct 11 N/A Ju Notule (Light Ambulance, Cab Chassis) Nov 14-Feb N/A Not (Redesign) Nov 14-Feb N/A Not (Redesign) Notes 1 Delayed from originally planned first week of January 2012 to February 2012 due to colle Surveillance and Reconnaissance User Trial in mid to late January 2012. Variances are due to specification changes by the Commonwealth re-design and integration wit to design activities taking longer than anticipated and delay in the completion of the prototype 4 One extra month taken for retesting of electromagnetic compatibility performance and in p Design Review and Functional Configuration Audit. 3.3 Progress Toward Materiel Release and Operational Capability Milestones 1 December 2011 to June 2012: Delay to the implementation of the vehicle support system. July 2012 to May 2014: Delay due to processing of the IMR Report. With Army Headquarte of vehicles, modules and trainers commenced in July 2012. IMR was declared with cave formally agreed as satisfied by AHQ on 29 February 2016, with implementation of solutions provide at section 5.2. 3 Variance due to delay imposed by complexity of finalising design an												
PDDICE Audit Reconnaissance) All other vehicles and modules completed Feb 11 Oct 11 Oct 11 All other Vehicles and modules completed Feb 11 Oct 11 Oct 11 Acceptance Light and Lightweight Trailers completed Jul-Oct 11 N/A Oct 11 Verification and Uder Phase 3 Module (Light CPM) (Redesign) Nov 14-Feb N/A Nov 14 Module (Light CPM) (Redesign) Feb-May 15 N/A Not 14 Nov 14 Module (Light CPM) (Redesign) Feb-May 15 N/A Not 14 Module (Light CPM) (Redesign) Feb-May 15 N/A Not 14 Module (Light CPM) (Redesign) Feb-May 15 N/A Not 14 Module (Light CPM) (Redesign) Feb-May 15 N/A Not 14 Module (Light CPM) (Redesign) Feb-May 15 N/A Not 14 Module (Light CPM) (Redesign) Feb-May 15 N/A Not 14 Module (Light CPM) (Redesign) Feb-May 15 N/A Not 14 Module (Light CPM) (Redesign) Feb-May 10: 0.0 Not 14 Feb Module (Light CPM) (Redesign) Feb-May 12: 0.0 Feb-May 12: 0.0 Feb Module (Light CPM) (Redesign) Feb May 14 Feb Feb M					n with digital C otypes.	2 systems	s. Delay due					
	4	One extra	month taken fo	or retesting.								
	5	Two extra	months taken	for retesting	of electrom	agnetic	compatibility	performa	nce and	in preparation	n of condu	ct of Critical
Ъ С		Design Re	view and Func	tional Config	guration Audi	it.				1 11 11		
3 This rest and Evaluation prace relates only to commonweal revession and integration with digital opticity of design activities taking longer than anticipated and delay in the completion of the prototypes. 4 One extra month taken for retesting. 5 Two extra months taken for retesting of electromagnetic compatibility performance and in preparation Design Review and Functional Configuration Audit. 3.3 Progress Toward Materiel Release and Operational Capability Milestones Item Original Planned Achieved/Forecast Variance (Months) Initial Materiel Release (IMR) Dec 11 Initial Operational Capability (IOC) Dec 12 Dec 15 Initial Operational Capability (FOC) Mid 16 Oct 16 3 Final Operational Capability (FOC) Mid 16 Oct 16 3 Notes 1 December 2011 to June 2012: Delay to the implementation of the vehicle support system. July 2012 to May 2014: Delay due to processing of the IMR Report. With Army Headquarters' concurrent of the support system.												
ω	Item				Original I	Planned	Ach	ieved/For	ecast	Variano (Month	s)	Notes
	Initial	Materiel Rele	ease (IMR)		Dec	: 11		May 14		29	- /	1
-0	3. Item Initial Ma Initial O Final Ma Final Op	Operational	Capability (IOC	;)	Dec	: 12		Dec 15		36		2
<u>e</u> .	Final I	Final Materiel Release (FMR)			May-J	Jul 16		Oct 16		3		3
e	Final	Operational Capability (FOC)			Mid	16	Oct 16		3		3, <mark>4</mark>	
¥	Notes											
Data S	1	December July 2012 of vehicles formally ag provided a	2011 to June 2 to May 2014: E s, modules and greed as satisfi t Section 5.2.	2012: Delay Delay due to d trailers co ed by AHQ	to the impler processing mmenced in on 29 Febru	mentatio of the IM July 20 Jary 201	n of the vehi IR Report. V 12. IMR wa 6, with imple	cle suppo Vith Army s declare mentatior	rt syster Headqu d with o of solu	n. Jarters' concur caveats on 28 tions in progre	rence the May 2014 ess. Furthe	main roll-out 4 with these er details are
umr	2	Delays due to the development required for module components. IOC was declared with caveats on 17 December 2015, with these formally agreed as satisfied by AHQ on 29 February 2016, with implementation of solutions in progress. Further details are provided at eaching 5.2.									er 2015, s. Further	
ກູ	3	Variance d	lue to delay im	posed by co	mplexity of fi	inalising	design and r	nanufactu	ire of the	e CPM module		
UR.	4	FOC was	declared with	caveats on	28 October	[·] 2016. F	urther detai	ls are pro	ovided a	t Section 5.2.		
y She					Schedul	le Statu	s at 30 June	2017				
ets		Sch Goven	- edule Plan at nment Approval							■ A	vpproval MR	
			-							a 14	C	
		Sche	dule Plan at 30 June 2017							F	MR	

Module (Light Ambulance, Cab Chassis)

tem			Original Planne	d A	chieved/Fore	ecast	Variance (Months)	Notes
nitial I	Vateriel Release (IMR)		Dec 11		May 14		29	1
nitial (Operational Capability (IOC)		Dec 12		Dec 15		36	2
inal N	lateriel Release (FMR)		May-Jul 16		Oct 16		3	3
inal C	Operational Capability (FOC)	Mid 16		Oct 16		3	3, <mark>4</mark>
lotes								
2	July 2012 to May 2014: D of vehicles, modules and formally agreed as satisfied provided at Section 5.2. Delays due to the develop	elay due to pr trailers comm ed by AHQ on ment required	29 February 20	IMR Report 2012. IMR 16, with im ponents. IC	. With Army was declare plementation	Headquar d with cav of solutio	ters' concurrence veats on 28 May ns in progress. F aveats on 17 De	e the main roll-ou 2014 with these Further details are cember 2015,
	with these formally agreed	as satisfied b	by AHQ on 29 Fe	bruary 2010	s, with implei	mentation	of solutions in pro	ogress. Further
3	Variance due to delay imp	osed by comp	lexity of finalisin	g design an	d manufactu	re of the C	PM module.	
4	FOC was declared with o	aveats on 28	October 2016.	Further de	tails are pro	vided at S	Section 5.2.	
]		Schedule Stat	us at 30 Ju	ne 2017		Approv	al
	Schedule Plan at Government Approval						IMR	
	Schedule Plan at 30 June 2017						■ IOC ■ FMR	
	ž	-12	-13	-14	1-15	-16	L- ■ FOC	

Aug 12

Apr 11

Apr 15

48

2

Note

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

Project Data Summary Sheets

ANAO Report No. 26 2017-18 2016–17 Major Projects Report

Functional

Configuration

Section 4 – Materiel Capability Delivery Performance



Note

This Pie Chart represents Defence's expected capability delivery. Capability assessments and forecast dates are excluded from the scope of the review.

4.2 Constitution of Initial Materiel Release and Final Materiel Release

Item	Explanation	Achievement
Initial Materiel Release (IMR)	Full issue to a Brigade of the initial vehicle variants Carryall (quantity 15), Panel Van (quantity three), Station Wagon (quantity 15), Cargo (quantity nine) and Canine (quantity one).	Achieved with caveats.
	IMR was achieved provided the following caveats are resolved prior to IOC:	
	 Carryall Hardtop and Station Wagon load restraint; 	
	2. G-Wagon air transportability; and	
	 Vehicle warning systems operating during blackout and reduced lighting operation. 	
	Refer to Section 5.2 for more detail.	
Final Materiel Release (FMR)	Introduction into service of the remaining Mission Systems (Vehicles, Modules and Trailers) including;	Achieved
	 All light and lightweight vehicles, modules, and trailers and associated supplies transferred to sustainment; 	
	 Verification and validation, testing and certification of all supplies; 	
	 Maintenance support and training provided for operators and maintainers; and 	
	 Support spares and repair parts provided for a period of three years. 	
	FMR was achieved following the formal agreement that the IMR/IOC caveats were satisfied on 29 February 2016.	

Section 5 – Major Risks and Issues

5.1 Major Project Risks

Identified Risks (risk identified by standard project risk management processes)			
Description	Remedial Action		
The concurrency of critical activities including developing the design and support system, and introducing into service the Ambulance and CPM modules, has the potential to impact on cost, schedule, supportability and reputation.	This risk has been retired following the achievement of FMR, and FOC with caveats, in October 2016.		
Emergent Risks (risk not previously identified but has emerged during 2016-17)			
Description	Remedial Action		
N/A	N/A		

5.2 Major Project Issues

Description	Remedial Action
Carryall Hardtop and Station Wagon Load Restraint Anchorages (IMR/IOC caveat). The respective DEF(AUST) Specifications for the Carryall Hardtop (CAHT) and the Carryall Station Wagon (CASW) require the rear load space to be "integrated within the Vehicle Cab" and that "all items stowed inside the Cab with a mass of greater than 250grams to remain stowed when subjected to specified crash loadings". However, both the CAHT and the CASW were designed/manufactured in accordance with normal commercial practise that does not meet the Australian Defence specific requirement.	The Project Office, in conjunction with MBAuP, developed modification packages for both the CAHT and the CASW that enabled the requirements of the respective DEF(AUST)s to be satisfied. AHQ formally agreed this caveat was satisfied on 29 February 2016. Modification Kits were subsequently issued and installation commenced. This issue has been retired, as there were no outstanding support projects to be provided.
Air Transportability (IMR/IOC caveat). At the time of its submission, the Materiel Release MR1 (IMR) and MR2 (Trailer) Achievement Report identified that G-Wagons were yet to be formally certified for transportation by air.	This IMR/IOC caveat has been resolved, with the external air transport element superseded by the FOC caveat below.
Vehicle warning systems operating during blackout and reduced lighting operation (IMR/IOC caveat). The DEF(AUST) Specifications for the G-Wagon fleet required "the vehicle crew to be able to dim (shield) and switch off the instrument lights" and "to be able to dim (but not switch off) Driver Console warning lights" during Blackout / Reduced Lighting modes. The MR1 (IMR) and MR2 (Trailer) Achievement Report however identified that the G-Wagon fleet, being essentially a Military Off-The Shelf purchase, was compliant to international requirement - Blackout Lighting Systems for Tactical Land Vehicles which states: "Blackout conditions implies total blackout in which all vehicle lighting (both normal and blackout lighting) is extinguished".	This issue has been retired as a solution was designed, fully funded and is being implemented.
External Air Lift (FOC Caveat). Certification of external air lift by CH47 Helicopter for the G-Wagon family of vehicles was incomplete at FOC declaration.	Technical analysis completed in December 2016 confirmed the appropriate risk acceptance requirements for safe and effective external air lift by CH47 Helicopter. The Project Office and Capability Manager have developed a risk assessment and appropriate inspection processes to ensure safe external air lift of the G-Wagon family of vehicles.
G-Wagon Command Post Module (CPM) Operator Training (FOC Caveat). CPM training for the required number of personnel has been limited by the substantial pre-requisites required for the CPM operator course.	A G-Wagon Training Consolidation Directive is being jointly drafted by the Project Office and Capability Manager to cover all remaining aspects of operator training for G- Wagon Mission Systems and ancillary equipment. The Project Office has completed all responsibilities for the Training Consolidation Directive, with this now being staffed for approval by the Capability Manager. This is expected to be approved in August 2017.
G-Wagon Winch 'Gap' Training (FOC Caveat). Initial G- Wagon operator training was conducted before a winch system was fitted to the G-Wagon training vehicle fleet. Winch 'gap' training was subsequently conducted through a combination of a fly-away team and unit-based training. There remains a deficiency of this winch training for some operators.	A G-Wagon Training Consolidation Directive is being jointly drafted by the Project Office and Capability Manager to cover all remaining aspects of operator training for G- Wagon Mission Systems and ancillary equipment. The Project Office has completed all responsibilities for the Training Consolidation Directive, with this now being staffed for approval by the Capability Manager. This is expected to be approved in August 2017.

Note

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



Section 7 – Lessons Learned

7.1 Key Lessons Learned

Project Lesson	Categories of Systemic Lessons
To avoid costly and time consuming Contract Change Proposals, due to requirement variations, it is critical that Defence stakeholders provide clarity in terms of the Operational Concept Document and Functional Performance Specification and that the project office captures the origin and maintains the traceability into the System Specification.	Requirements Management
The time required to negotiate contracts for the LAND 121 project is a significant driver of the schedule.	Contract Management Requirements Management
When the organisation is under pressure to compress schedule so as to hasten the delivery of capability to the war-fighter, key decisions must be taken in light of potential impact on the ability of the project to achieve this aim.	Schedule Management Resourcing

ander Li	It is important to ensure the early involvement of Army Logistics Training Centre (ALTC) staff in the development of the Training requirement. This includes reviewing the relevant contract template and clauses pertaining to training and participation in preliminary meetings to the Initial Training Conference. Suggest preliminary brief by ALTC for them to define their expectations, and 'fit' to contractual requirements.
ght	The effort involved with the vehicle/trailer interface (and any other interface with the prime equipment – e.g. wheels, required payload, etc) should not be underestimated even for apparently simple equipments. The early formation of interface working groups is important.
	Significant time and effort may be saved if critical items of Support and Test Equipment identified during source evaluation are secured concurrently with the prime system acquisition, when Commonwealth negotiation power is greatest.
	Strategic Relationship Boards, or similar forums for senior management of the Commonwealth and the Prime Contractor to meet on a regular basis, are useful mechanisms that should be seriously considered across other major projects. Pitched at Director General and Managing Director level, these board meetings have real potential to resolve issues in a more timely and effective way than contract level discussions, particularly in the in-contract management phase.
	The complexity of integrating communication and battle-management equipment into vehicles during the design and development phase of both materiel systems, with different project offices, prime contractors and development cycles, should not be underestimated. More work should be done by Defence in the

Needs/Requirements stage to de-conflict or better integrate interdependent projects.

The evaluation and scheduling of a gap between Low Rate Initial Production and Full Rate Schedule Production is a critical driver for effective and efficient Full Rate Production. This schedule gap Management must provide suitable time for; evaluation of the Low Rate Initial Production deliverables, planning to overcome any production and performance quality issues, and implementation of improved production procedures.

Resourcing

Requirements

Management

Requirements

Management

Contract Management

Contract Management

Section 8 - Project Line Management

8.1 Project Line Management in 2016–17

Position	Name
Division Head	MAJGEN David Coghlan
Branch Head	BRIG Haydn Kohl (to Oct 16) Ms Sarah Myers (Oct 16-current)
Project Director	Mr Ken Butler (to Dec 16) LTCOL Dave Hughes (Dec 16-current)
Project Manager	Mr Geoff Fallon (Acting) (Vehicles and Modules) (to Feb 17) Mr Brian Whiffen (Vehicles, Modules and Trailers) Mr Ron Thompson (CPM Module)

Project Data Summary Sheets ANAO Report No. 26 2017-18 2016–17 Major Projects Report