

Project Data Summary Sheet¹⁶⁶

Project Number	LAND 200 Tranche 2
Project Name	BATTLEFIELD COMMAND SYSTEM
First Year Reported in the MPR	2019-20
Capability Type	Upgrade
Acquisition Type	Developmental
Capability Manager	Chief of Army
Government 1st Pass Approval	Aug 13
Government 2nd Pass Approval (or key Government pre-Second Pass Approval)	Sep 17
Budget at 2 nd Pass Approval (or key Government pre-Second Pass Approval)	\$930.0m
Total Approved Budget (Current)	\$969.7m
2019-20 Budget	\$247.0m
Project Stage	Preliminary Design Review
Complexity	ACAT I



Section 1 – Project Summary

1.1 Project Description

<p>LAND 200 is delivering the Battlefield Command System (BCS) capability that provides Army with a Battle Management System (BMS) and an integrated Tactical Communications Network (TCN) that is transforming command and control of Land forces into a modern networked system. The BCS will provide fast, accurate, secure and reliable digital communications that will enable tactical Land forces to make better informed decisions, by distributing the right information to the right people at the right time, increasing the likelihood of operational success and soldier safety via friendly force tracking.</p> <p>LAND 200 Tranche 2 (LAND 200-2) is: expanding and evolving the LAND 200 Tranche 1 (LAND 200-1) capability across Army with new collaborative planning, control and monitoring tools for Brigade and Divisional-level headquarters; integrating the BCS into an additional 540 platforms: including M1A1 tank, M88 armoured recovery vehicle, Hawkei, Bushmaster and Medium Heavy Cargo trucks; and the Program will embed BCS training into Army's training institutions to evolve from a paper based to a digital based learning capability.</p> <p>The Commonwealth is the LAND 200-2 Program's Prime System Integrator (PSI) supported by two prime contractors: Elbit Systems (Israel) Ltd (Elbit) is the contractor for the BMS; and Harris Communications (Australia) Pty Ltd (L3Harris) is the contractor for the TCN.</p>
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1.2 Current Status

<p>Cost Performance</p> <p><u>In-year</u> For financial year 19/20 the project spent \$250.5m against a planned budget of \$247.0m, resulting in an overspend of \$3.5m. This overspend against phasing is due to a re-phasing of the TCN Milestones under the Prime Contract with minor spend being bought forward from Financial year 20/21.</p> <p><u>Project Financial Assurance Statement</u> As at 30 June 2020, project LAND 200-2 has reviewed the project's approved scope and budget for those elements required to be delivered by Defence. Having reviewed the current financial contractual obligations of Defence for this project, current known risks and estimated future expenditure, Defence considers, as at the reporting date, there is sufficient budget, including contingency, remaining for the project to complete against the agreed scope.</p> <p><u>Contingency Statement</u> The project has not applied contingency in the financial year.</p> <p>Schedule Performance LAND 200-2 has established contracts with Elbit for the delivery of the BMS and L3Harris for delivery of the TCN. Elbit has completed the integration and installation of the Tranche 1 components onto the Medium Heavy Cargo trucks and has delivered BMS training systems and Release 1 of the BMS software. L3Harris has completed Preliminary Design and is scheduled to conduct its Detailed Design Review in Jul - Aug 20.</p> <p>LAND 200-2 has experienced schedule delays under both the Elbit contract for the BMS and the L3Harris contract for the TCN. The delays have resulted from the Commonwealth's inability to provide all the required Government Furnished Material (GFM) and contractor delays in meeting contract milestones.</p>
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Forecast dates and Sections: 1.2 (Material Capability Delivery Performance), 1.3 (Major Risks and Issues), 4.1 (Measures of Material 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 Review Report by the Auditor-General in Part 3* of this report.

<p>A CCP has been finalised with L3Harris that will recognise a 10 month delay to the L3Harris contract, with costs shared between the Commonwealth and L3Harris.</p> <p>Several CCPs are also currently being evaluated by the Commonwealth for updates to the Elbit integration and installation schedule for the M1A1 and M88 and a CCP for the integration of the Mission Partner Environment (MPE) in lieu of the Defence Secret Network. These CCPs will provide clarity on schedule changes to the Elbit contract. The schedule impact to the Elbit contract is still being evaluated.</p> <p>As a result of the schedule delays, IOC and FOC will be delayed between 12 months and 24 months. The Commonwealth is continuing to work on the finalisation of the Integrated Master Schedule to confirm the delay.</p> <p>Material Capability Delivery Performance</p> <p>LAND 200-2 will deliver: 150 Medium Heavy Cargo trucks fitted with the Tranche 1 BCS node and Foundation Training Classroom requirements. LAND 200-2 will deliver a further 390 vehicle BCS node integrations and installations with the M1A1, M88, PMV-M and PMV-L platforms and will deliver the BMS-HQ software hosted on the MPE, training and BMS simulator systems and L3Harris AN/PRC-158 multi-channel multi-band radios.</p> <p>The remaining node design descriptions are being updated to accommodate architecture changes requested by the Army Program Sponsor.</p> <p>Limited availability of required Government Furnished Data in support of the Weapons Integrated BMS (WINBMS) for the M1A1 may limit the WINBMS capability to be provided on that platform.</p>
<p>Note</p> <p>Forecast dates and capability assessments are excluded from the scope of the Auditor-General's Independent Assurance Report.</p>

1.3 Project Context

<p>Background</p> <p>The LAND 200 program is a core program that fundamentally influences the way Land Forces plan, command and control operations from frontline soldiers and combat vehicles up to and including deployed Joint Force Headquarters. LAND 200 systems provide warfighters with common battlefield awareness and information superiority through a highly capable, mobile and secure networked environment.</p> <p>In August 2013, LAND 200-2 was presented to Government as a federation of two projects; JP 2072 Phase 3 and LAND 75 Phase 4. At this time, LAND 200-2 received Government Combined Pass Approval for the continuation of LAND 75 Phase 3.4, LAND 125 Phase 3A and JP 2072 Phase 1 (approved as LAND 200-1) and First Pass Project Approval for new work to be delivered under LAND 200-2.</p> <p>L200-1 and LAND 75 Phase 4 Work Package A delivered the Battle Group and Below Command, Control and Communications System (BGC3) for approximately one-third of the Land force. The BGC3 was primed by Elbit which integrated Raytheon and L3Harris radios acquired by JP 2072 Phases 1 and 2. LAND 200-1 and LAND 75 Phase 4 Work Package A:</p> <p>Installed the BGC3 into dismounted commanders, Bushmaster PMV, Unimog, G-Wagon and Armoured Personnel Carrier M113AS4.</p> <p>Delivered a Track Management System (TMS) as the primary interface between the BMS and Joint and US Coalition systems providing an exchange of situational awareness data and the Land Forces common operational picture.</p> <p>LAND 75 Phase 3.4 and LAND 125 Phase 3A achieved Initial Operating Capability (IOC) in April 2012 and Final Operating Capability (FOC) in March 2015.</p> <p>FMR for LAND 75 Phase 4 Work Package A (the final deliverable for the project) was achieved in December 2017.</p> <p>LAND 200-2 put forward a procurement decision for the further development of the BMS, which commenced under LAND 75. No MOTS BMS product was available that provided all of the Army requirements.</p> <p>In September 2017, Second Pass Government Approval was provided for LAND 200-2. This Government Approval draws together both projects to formulate under the name LAND 200 Tranche 2 (Phase 2) Battlefield Command Systems. Under this approval, LAND 200-2 will deliver:</p> <p>An integrated Battle Management System – Command and Control (BMS-C2) with a supporting TCN into new vehicle platforms as part of the digitised land force. In addition to this, a modernised TCN with a new vehicle mounted communications system solution will be acquired by current and future LAND 200 platforms programs.</p> <p>Institutionalised BMS-C2 and TCN training and simulation across land forces.</p> <p>Expanded functionality of the BMS-C2 to incorporate additional decision and planning tools for use at the Joint Task Force and Brigade Headquarters level.</p> <p>The project was listed as a Project of Interest in September 2018 due to issues associated with vehicle integration and the drawdown of 30% of the Project's contingency to treat the issues.</p>
<p>Uniqueness</p> <p>LAND 200 is delivering the core of Army's digital Command, Control and Communications capability. It is a highly complex project in part due to the integration of new leading edge technologies but also of programmatic interdependencies associated with the BCS being integrated into all the Land Forces deployable headquarters from Platoon to the Division and nearly all of Army's Land platforms and several Naval amphibious capabilities.</p>
<p>Major Risks and Issues</p> <p>The project is currently managing the following major risks:</p> <ul style="list-style-type: none"> • Availability of BMS software for the conduct of Army testing. • Incorporation of PMV-L modifications with the LAND 121-4 deliveries. • Establishment of the systems integration function. • Contract impacts resulting from delayed Land Data Model development. • Funding for the combined implementation of LAND 200-2 modifications with PMICA. <p>The project is also managing the following project issues:</p> <ul style="list-style-type: none"> • PMV-M installation delay.

<ul style="list-style-type: none"> Reduced functionality of the M1A1 implementation of the WINBMS. Delayed implementation of the M1A1 and M88 modifications. Node design architecture changes.
Other Current Related Projects/Phases
LAND 200-2 has direct BCS integration interdependencies with several other Defence Projects and Products, including: LAND 121 Phase 4 Protected Mobility Vehicle (Light Hawkei; Mounted Combat System Program Office (Product CA01 M1A1 Tank and M88 Armoured Recovery Vehicle); and Commercial and General Service Vehicle Systems Program Office (Product CA-04 Protected Mobility Vehicle – Medium Bushmaster).
Note
Major risks and issues are excluded from the scope of the Auditor-General's Independent Assurance Report.

Section 2 – Financial Performance

2.1 Project Budget (out-turned) and Expenditure History

Date	Description	\$m	Notes
Project Budget			
Sep 17	Original Approved (Second Pass Approval)	930.0	1
	Total at Second Pass Approval (or key Government pre-Second Pass Approval)	930.0	
Jun 20	Exchange Variation	39.7	
	Total Budget	969.7	
Project Expenditure			
Prior to Jul 19	Contract Expenditure – L3Harris Communications	171.2	2
	Contract Expenditure – Elbit Systems	143.8	
	Other Contract Payments / Internal Expenses	7.0	
		322.0	
FY 19/20	Contract Expenditure – Elbit Systems	132.5	3
	Contract Expenditure – L3Harris Communications	99.5	
	Other Contract Payments / Internal Expenses	18.5	
		250.5	
Jun 20	Total Expenditure	572.5	
Jun 20	Remaining Budget	397.2	
Notes			
1	The Second Pass budget excludes First to Second Pass Approval funding for Work Packages B, C and D (these prices were combined with the Combined Pass Approval for Work Package A captured within the JP 2072 Phase 3 and LAND 75 Phase 4 projects).		
2	Other expenses for prior years includes \$3.8 for Technical Services, \$1.2m for travel, \$0.9 for SME, \$0.7 for software licenses and \$0.4m for miscellaneous.		
3	Other expenses for FY 19/20 include \$11.8m for Technical Services, \$2.4m for SME, \$2.3m for OP&E, \$0.8m for travel, \$0.8m for software and \$0.4m for miscellaneous.		

2.2A In-year Budget Estimate Variance

Estimate PBS \$m	Estimate PAES \$m	Estimate Final Plan \$m	Explanation of Material Movements
263.0	247.9	247.0	PBS to PAES: Variation is due to the delays in Vehicle Integration and Tactical Communication Network (TCN) replanning. PAES to Final Plan: A stronger Australian dollar has resulted in a minor variance to the \$AUD equivalent planned Budget for 19/20.
Variance \$m	(15.1)	(0.9)	Total Variance (\$m): (16.0)
Variance %	(5.7)	(0.4)	Total Variance (%): (6.1)

2.2B In-year Budget/Expenditure Variance

Estimate Final Plan \$m	Actual \$m	Variance \$m	Variance Factor	Explanation
		3.5	Australian Industry	Is due to a re-phasing of the TCN Milestones under the Prime Contract with minor spend being bought forward from Financial year 20/21.
			Foreign Industry	
			Early Processes	
			Defence Processes	
			Foreign Government Negotiations/Payments	
			Cost Saving	
			Effort in Support of Operations	
			Additional Government Approvals	
247.0	250.5	3.5	Total Variance	
		1.4	% Variance	

2.3 Details of Project Major Contracts

Contractor	Signature Date	Price at		Type (Price Basis)	Form of Contract	Notes
		Signature \$m	30 Jun 20 \$m			
Elbit Systems Limited	Sep 17	365.2	418.5	Fixed	ASDEFCON	1
L3Harris Communications Australia	Sep 17	330.0	370.7	Fixed	ASDEFCON	1,2
Notes						
1	Contract value as at 30 June 2020 is based on actual expenditure to 30 June 2020 and remaining commitment at current exchange rates, and includes adjustments for indexation (where applicable).					
2	Contract value at 30 June 2020 includes the cost of CCPs to address changes in system requirements.					
Contractor	Contracted Quantities as at		Scope	Notes		
	Signature	30 Jun 20				
Elbit Systems Limited	N/A	N/A	Development of BMS software and integration and installation systems into the M1A1, M88 and PMV-M.	1		
L3Harris Communications Australia	N/A	N/A	Development TCN software and provision of AN/PRC-158 radios.	2		
Major equipment accepted and quantities to 30 Jun 20						
150 x MHC vehicles have been modified with BMS and accepted.						
Notes						
1	This contract is for the provision of BMS systems for installation in the following: GSV Node PMV-L x 108, MNV Node M1A1 x 59, MNV Node M88 x 7, MNV Node PMV-L x 126, GSV Node MHC x 150, C2V Node PMV-M x 57, C2V Node PMV-L x 33, BMS-HQ hosted on MPE x 33, BMS Training System and BMS SIM.					
2	The contract is for the provision of TCN systems for installation in the following: GSV Node PMV-L x 108, MNV Node M1A1 x 59, MNV Node M88 x 7, MNV Node PMV-L x 126, GSV Node MHC x 150, C2V Node PMV-M x 57, C2V Node PMV-L x 33.					

Section 3 – Schedule Performance

3.1 Design Review Progress

Review	Major System/Platform Variant	Original Planned	Current Contracted	Achieved / Forecast	Variance (Months)	Notes
System Requirements	TCN Systems Requirement Review	Jul 18	N/A	Aug 18	1	8
	BMS Systems Requirements Review	N/A	N/A	N/A	N/A	1
Preliminary Design	TCN Preliminary Design Review	May 19	N/A	Sep 19	4	2
	BMS Preliminary Design Review (Various Reviews)	N/A	N/A	N/A	N/A	1
	Preliminary Design Review M1A1/M88	Jan 20	N/A	Jun 21	17	5
	Preliminary Design Review PMV-L	TBC	N/A	TBC	N/A	4
Detailed Design	Preliminary Design Review PMV-M	Sep 19	N/A	Jul 21	22	6
	TCN Detailed Design Review	Sep 19	Aug 20	Aug 20	11	3
	BMS R1 Detailed Design Review	Nov 19	N/A	Mar 20	4	9
	BMS R2 Detailed Design Review	Nov 20	N/A	Apr 22	17	7
	Detailed Design Review M1A1/M88	Jul 20	N/A	Feb 22	19	5
	Detailed Design Review PMV-L	TBC	N/A	TBC	N/A	4
	Detailed Design Review PMV-M	Feb 21	N/A	Mar 22	13	6
Notes						
1	There is no discrete BMS Systems Requirements Review. BMS software does not follow the traditional Systems Engineering Review process. The Commonwealth has implemented a series of Software specific agile reviews.					
2	TCN Preliminary Design Review variance resulted from the late entry into and exit from the Systems Definition Review.					
3	TCN Detailed Design Review is subject to delay that has stemmed from the delay to Preliminary Design Review completion and delays in the provision of GFM. The TCN Detailed Design Review contract date was updated with the approval of TCN CCP021.					
4	PMV-L is not yet in contract due to critical dependence on LAND 121-4 managing priorities, which require full rate production to commence.					
5	Progression of the design activity for the M1A1/M88 has been on hold pending availability of vehicle data from the USA and the vehicle OEM. A CCP to address the issues and allow for the recommencement of work is currently being reviewed by Commonwealth staff.					
6	PMV-M work is currently on hold pending a review of work associated with the Protected Mobility Integration Assurance Program (PMICA), which is also modifying the PMV-M vehicle. The LAND 200-2 work is likely to be integrated with the PMICA work.					
7	The Commonwealth implemented a change to the hosting for the secure environment from the Defence Secret Network to the Mission Partner Environment, requiring revised work requirements.					
8	System Requirements Review was delayed due to the rejection by the Commonwealth of the System Specification when first submitted for approval and the need for revisions by the contractor.					
9	BMS R1 Detailed Design Review milestone event was delayed due to delayed completion of key design artefacts that were required to accurately describe the R1 capability.					

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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	TCN Acceptance Test &Evaluation	May 21	N/A	Apr 22	11	1
	BMS R1 Acceptance Test &Evaluation	Jun 19	N/A	Mar20	9	7
	BMS R2 Acceptance Test &Evaluation	Dec 20	N/A	Apr 22	16	6
	M1A1/M88 Platform Integration Acceptance Test & Evaluation)	Apr 21	N/A	Jan 23	21	5
	PMV-L Acceptance Test &Evaluation	TBC	N/A	TBC	N/A	3
Acceptance	PMV-M Acceptance Test &Evaluation	Feb 20	N/A	Nov 21	21	4
	TCN System Acceptance	Jun 20	Aug 21	Aug 21	14	2
	BMS Acceptance R1	Jan 20	N/A	Mar 20	2	8
	BMS Acceptance R2	Mar 21	N/A	Aug 22	17	6
	M1A1 Tank	Feb 22	N/A	Jul 23	17	5
	M88	May 22	N/A	May 23	12	5
	PMV-L	TBC	N/A	TBC	N/A	3
	PMV-M	Apr 21	N/A	Nov 22	19	4

Notes

- TCN System Integration delay is directly driven from delays to progress Detailed Design Review.
- TCN System Acceptance has been affected by delays in the availability of some GFM. The TCN System Acceptance milestone was updated with CCP021.
- PMV-L is not yet in contract and remains unqualified due to critical dependence on LAND 121-4.
- PMV-M work was delayed as a result of delayed provision of Government Furnished Material. The progression is currently pending a review of work associated with the Protected Mobility Integration Assurance Program (PMICA), which is also modifying the PMV-M vehicle. The LAND 200-2 work is likely to be integrated with the PMICA work.
- Progression of work for the M1A1/M88 has been on hold pending availability of vehicle data from the USA and the vehicle OEM. A CCP to address the issues and allow for the recommencement of work is currently being reviewed by Commonwealth staff.
- The Commonwealth implemented a change to the hosting for the secure environment from the Defence Secret Network to the Mission Partner Environment, requiring revised work requirements.
- The BMS AT&E delay flows from the delay to the Detailed Design Review.
- The delay to the Software Release Review and associated acceptance for BMS Release 1 resulted from delays in achieving the Release 1 Software Design Review/Test Readiness Review (DD/TRR).

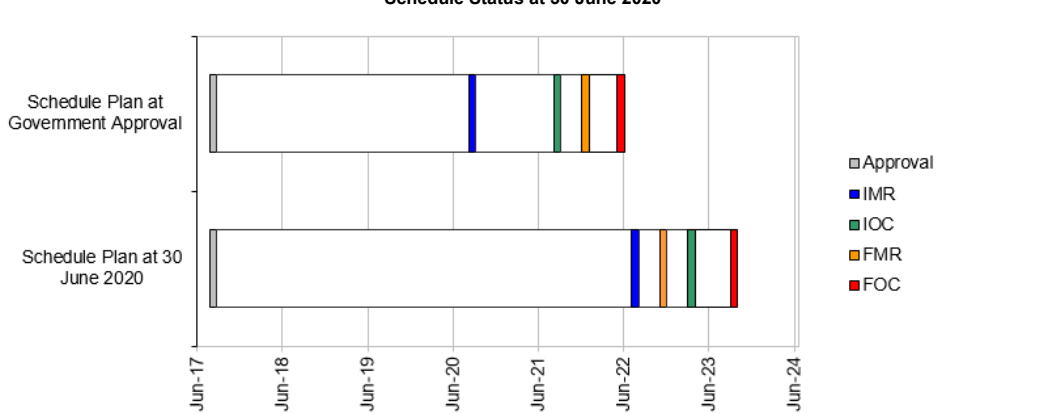
3.3 Progress Toward Materiel Release and Operational Capability Milestones

Item	Original Planned	Achieved / Forecast	Variance (Months)	Notes
Initial Materiel Release (IMR)	Sep 20	Aug 22	23	1
Initial Operational Capability (IOC)	Sep 21	Apr 23	19	1
Final Materiel Release (FMR)	Jan 22	Jan 23	12	1
Final Operational Capability (FOC)	Jun 22	Oct 23	16	1

Notes

- IOC and FOC delays are being driven by time taken to establish new contracts for platform integration; availability of GFM; materiel and data from interdependent projects that are in separate, but parallel delays and contractor performance.

Schedule Status at 30 June 2020

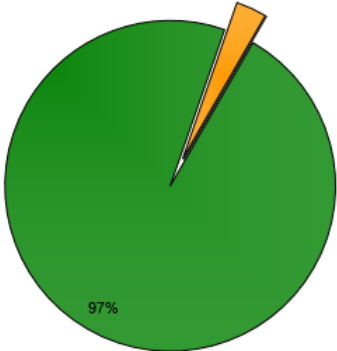


Note

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

Section 4 – Materiel Capability Delivery Performance

4.1 Measures of Materiel Capability Delivery Performance

Pie Chart: Percentage Breakdown of Materiel Capability Delivery Performance	
	<p>Green: The project expects to meet Materiel Capability requirements as expressed in the Materiel Acquisition Agreement.</p> <p>Amber: Restriction on the access to interface data for the M1A1 Tank may limit the capability provided by the WINBMS on that platform.</p> <p>Red: N/A</p>
<p>Note This Pie Chart represents Defence's expected capability delivery. Capability assessments and forecast dates are excluded from the scope of the Auditor-General's Independent Assurance Report.</p>	

4.2 Constitution of Materiel Release and Operational Capability Milestones

Item	Explanation	Achievement
Initial Materiel Release (IMR)	<p>IMR comprises the delivery of :</p> <ul style="list-style-type: none"> • Foundation Training Classroom requirements • Training Integration Syndicate Rooms • BMS HQ hosted on MPE • BGC3 Training Assemblage • BMS Simulator • MNV Nodes fitted to 16 x M1A1 Tanks • MNV Nodes fitted to 2 x M88 Hercules • C2V nodes fitted to 11 x PMV-L Hawkei • MNV Nodes fitted to 42 PMV-L Hawkei • GSV Nodes fitted to 36 PMV-L Hawkei • GW Nodes fitted to 19 PMV-M Bushmaster • GSV Node fitted to 50 MHC Trucks. <p>IMR is forecast to be achieved in Aug 22.</p>	Not yet achieved
Initial Operational Capability (IOC)	<ul style="list-style-type: none"> • IOC incorporates the components of FIC sufficient to constitute an operational capability. • Commander and staff in a Brigade Headquarters are able to use the BMS to support the planning and conduct of operations. • The data network includes sufficient material to support a BG sized force to plan and conduct operations using the BMS and weapons integrated BMS. • The TCN is established using Tranche 1 and Tranche 2 solutions to support a BG deployment. • The BMS is able to interface with JCATS and VBS systems to establish an initial simulation system. <p>IOC is forecast to be achieved in Apr 23</p>	Not yet achieved
Final Materiel Release (FMR)	<p>FMR comprises the delivery of:</p> <ul style="list-style-type: none"> • Foundation Training Classroom requirements • Training Integration Syndicate Rooms • BMS HQ hosted on MPE • BGC3 Training Assemblage • BMS Simulator MNV Nodes fitted to 59 M1A1 Tanks • MNV Nodes fitted to 7 M88 Hercules • C2V nodes fitted to 33 PMV-L Hawkei • MNV Nodes fitted to 126 PMV-L Hawkei • GSV Nodes fitted to 108 PMV-L Hawkei • GW Nodes fitted to 57 PMV-M Bushmaster • GSV Node fitted to 150 MHC Trucks. <p>FMR is forecast to be achieved in Jan 23.</p>	Not yet achieved

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Final Operational Capability (FOC)	<ul style="list-style-type: none"> FOC incorporates the components of FIC sufficient to constitute full operational capability Each of Army's three Combat Brigades has one digitised BG and a small number of combat support vehicles. Defence will be able to deploy a digitised BG and Brigade HQ. Defence could also configure and group all three BG under the digitised BHQ, all at the same readiness notice. Capability Manager sign-off of FOC. <p>FOC is forecast to be achieved in Oct 23.</p>	Not yet achieved
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Section 5 – Major Risks and Issues

5.1 Major Project Risks

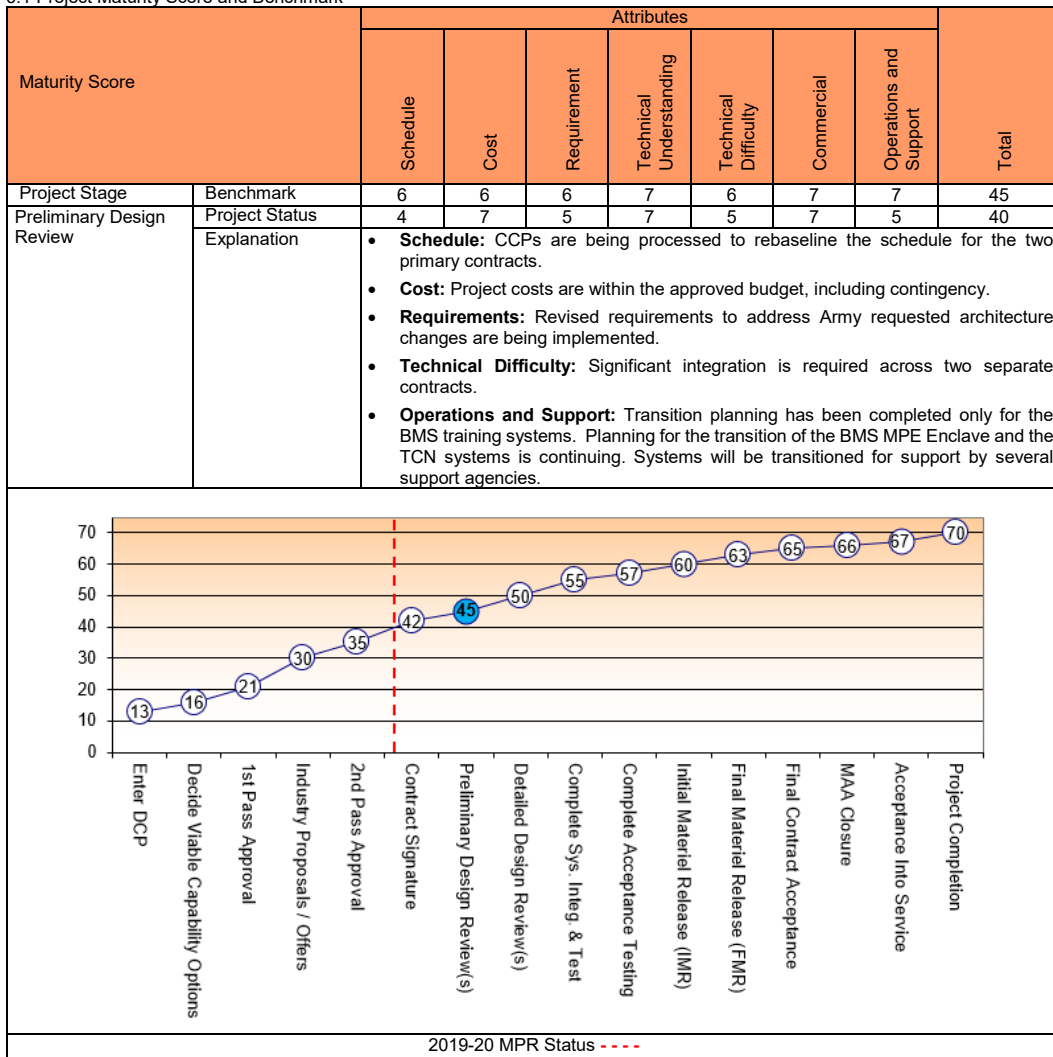
Identified Risks (risk identified by standard project risk management processes)	
Description	Remedial Action
There is a risk that the BMS software version V9.1 may not be available in time for Army to conduct its planned confidence testing at the LNIC in September 2020 causing a delay to the release of the software and to the achievement of IMR and IOC.	A Contract Change Proposal is being developed to integrate the revised scope into the Elbit contract. A further Contract Change Proposal is being developed with the supplier of the BMS-C2 Enclave to provide support to additional CoA confidence testing activities. CASG is also working with Army to confirm the impact of delayed testing until October 2020.
There is a risk that the delivery of the PMV-L C2V node modifications will be delayed due to the need to integrate scope and schedule activities with those of LAND 121 Phase 4.	LAND 200-2 requirements will be advised to LAND 121 Phase 4 to allow for a quotation to be developed by Thales for the joint implementation of the requirements for the combined projects.
There is a risk that the PSI function will not be fully functional in time to address the systems integration requirements for the BMS and the TCN for full operation within the modified vehicles.	A Project Manager and a Senior Engineering Manager have been assigned to the PSI team, with a further three engineers being sourced through the Critical Systems Branch Major Service Provider. The Governance framework is to be completed by end of June 2020.
Emergent Risks (risk not previously identified but has emerged during 2019–20)	
Description	Remedial Action
There is a risk that the required updates to the Australian Land Data Model will be released by LNIC after the Elbit and L3Harris contract development gates have passed resulting in additional costs and schedule delay to delivering the FOC capability.	Coordinated briefings have been established with the LNIC, the LAND 200-2 Project Office and the two major contractors. Future updates to the Australian Land Data Model will involve negotiation between the LAND 200-2 Project Office and the LNIC regarding the required level of compliance and the schedule for implementation so that commercial considerations can be addressed with the contractors. Defence may need to seek additional contingency and inform Government of the new schedule to incorporate new requirements that have a significant capability realisation benefit to Army.
There is a risk that there will be a funding shortfall for the combined implementation of the LAND 200-2 modification and the Protected Mobility Integration Assurance (PMICA) upgrades on the PMV-M vehicles.	The Project Sponsor in Army has been advised of the likely funding shortfall, with further consideration to be held following the availability of costs from PMICA and Thales.

5.2 Major Project Issues

Description	Remedial Action
The delivery of the modification to the PMV-M vehicles will be delayed due to the need to combine the integration and installation activity with the vehicle upgrades being progressed under the PMICA program.	An interim fit of the new capability is proposed in the G-Wagon Command Post Mobile vehicles. At a proposed cost of approximately \$3m, this could allow Army to gain experience with the TCN waveform and software as part of an interim Gateway capability, pending the delivery of the full capability on the PMV-M vehicles. This proposal is currently under evaluation by the Commonwealth TCN team and L3Harris.
The Weapons Integrated Battle Management System (WINBMS) software is not able to be fully implemented in the M1A1 tank due to the non-availability Government Furnished interface data.	A proposal is being presented to Army to reduce the WINBMS scope for the M1A1 tank and transfer the integration of the full WINBMS to another Army platform.
The progression of the M1A1 Tank and M88 platform integration and installation under the Elbit contract has been delayed.	CCP002 addresses changes in the scope of work and removes the unavailable GFM associated with the WINBMS. The updated schedule impact of the delay is being evaluated as part of the CCP evaluation.
The Army Program Sponsor has requested architecture changes to the implementation of the node designs, requiring contract changes for some platform integration activities.	A CCP to the Elbit contract is in progress to address the changes to the M1A1 and M88. An updated Node Design Description is being provided to LAND 121 Phase 3 as the basis of the Request for Quotation to Thales for the PMV-L. No hardware changes are required for the PMV-M. A Survey and Quote task is being prepared with L3Harris for a detailed review of the architecture changes and any impact on the requirements for the L3Harris software. Cost and schedule impacts are being developed.
Note	
Major risks and issues in Section 5 are excluded from the scope of the Auditor-General's Independent Assurance Report.	

Section 6 – Project Maturity

6.1 Project Maturity Score and Benchmark



Section 7 – Lessons Learned

7.1 Key Lessons Learned

Description	Categories of Systemic Lessons
Complex projects that involve multiple delivery contracts for different elements of the capability need to establish clear strategies for the systems integration requirements across the project. Where the Commonwealth selects an in-house option for the implementation of the systems integration function, this needs to be resourced appropriately at an early stage of the project.	Resourcing

Section 8 – Project Line Management

8.1 Project Line Management as at 30 June 2020

Position	Name
Division Head	Mr Ivan Zlabur
Branch Head	Ms Rosemary Gauci
Project Director	Mr Peter Edwards
Project Managers	LTCOL Geoff Donkin (TCN) and LTCOL Constantinos Eracleous (BMS)

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