

## Project Data Summary Sheet<sup>148</sup>

Project Number	LAND400 Phase 2
Project Name	MOUNTED COMBAT RECONNAISSANCE CAPABILITY
First Year Reported in the MPR	2019-20
Capability Type	Replacement
Capability Manager	Chief of Army
Government 1st Pass Approval	Dec 14
Government 2nd Pass Approval	Mar 18
Budget at 2 <sup>nd</sup> Pass Approval	\$5,762.7m
Total Approved Budget (Current)	<b>\$5,655.4m</b>
2020-21 Budget	<b>\$488.7m</b>
Complexity	ACAT I



### Section 1 – Project Summary

#### 1.1 Project Description

LAND400 Phase 2 will **acquire** the Boxer 8x8 Combat Reconnaissance Vehicle (CRV) to meet Army's land combat reconnaissance requirements. The Project is approved to acquire 211 vehicles, additional modules, training **systems** and support systems to replace the in-service capability provided by the Australian Light Armoured Vehicle (ASLAV).

#### 1.2 Current Status

##### Cost Performance

###### In-year

As at 30 June 2021, financial year **2020-21** expenditure was **\$414.6m** against a Year End (YE) budget of **\$488.7m**. The YE variance is primarily due to **later than expected achievement of various milestones in the Rheinmetall Defence Australia (RDA) Acquisition Contract. The reasons for delay are a combination of technical challenges and the impacts of COVID-19 (including supply chain disruptions and travel restrictions).**

###### Project Financial Assurance Statement

As at 30 June 2021, project LAND400 Phase 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 remaining for the project to complete against the agreed scope.

###### Contingency Statement

The Project has not applied contingency in the financial year.

##### Schedule Performance

Initial Operational Capability remains on track for June 2022.

The Project **has taken** delivery of the first batch of 25 vehicles (**known as Block I**), whilst concurrently contributing towards the design of Block II vehicles. In the **three** years since contract signature, the project has undertaken a series of complex changes including the incorporation of a new electronic architecture.

##### Materiel Capability Delivery Performance

As at 30 June **2021**, **the Commonwealth has accepted all** 25 Block I Boxer CRVs. Assembly of the Block II Boxer CRVs is scheduled to commence at the Rheinmetall Defence Australia (RDA) Military Vehicle Centre of Excellence (MILVEHCOE) in 2022 and is expected to be complete in 2026.

###### Note

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

#### 1.3 Project Context

##### Background

The ASLAV supports the Australian Defence Force's mounted combat reconnaissance capability and has seen extensive operational service, including in East Timor, Iraq and Afghanistan. Introduced in 1992, the ASLAV fleet will reach the end of its life around **2023 and is expected to be withdrawn from service in 2025.**

The Government gave First Pass Approval for a replacement Mounted Combat Reconnaissance Capability (MCRC) in December 2014. An assessment prior to First Pass Approval identified that current Military-Off-The-Shelf (MOTS) solutions would be unlikely to be capable of meeting all of Army's capability requirements. In response to the Request For Tender, tenderers were required to

#### 148 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 Review Report by the Auditor-General* in **Part 3** of this report.

submit a MOTS solution, and were also provided the option of submitting a 'MOTS Plus' solution (defined as a MOTS baseline vehicle reconfigured with a single package of upgrades in order to deliver an increased level of compliance with the technical, functional and performance requirements). In March 2018, Government announced RDA as the preferred tenderer for the delivery of an Australianised Boxer 8x8 CRV to fulfil the MCRC for the ADF – an acquisition contract was signed in August 2018 for the provision and initial support of 211 Boxer CRVs.

The first 25 Boxer CRVs, referred to as Block I, were primarily manufactured and assembled in Germany, with final integration and acceptance testing undertaken in Australia. A gradual transition will occur from Germany to Australia for the assembly of the remaining 186 (Block II) vehicles – this will be via a coordinated ramp down in Germany and ramp up in Australia, thereby maximising the effect of technology transfer and reflecting the growing skill base in Australia.

There will remain some vehicle subsystems for which the transfer of manufacture or assembly from Europe to Australia would not be cost-effective and will continue to be supplied from Germany (e.g. welded drive module hulls and 30mm cannons). Final assembly, integration, set to work, and testing of those elements will however still occur in Australia, whilst selected low-volume variants will be assembled in Germany.

Delivery of the 211 vehicles will be via two deliberate Blocks (I and II). Of the 25 vehicles in Block I, the 13 Multi-Purpose Variant Boxer CRVs are a 'MOTS' solution, whilst the remaining 12 Reconnaissance and all of the 186 Block II CRVs are a 'MOTS Plus' solution. Block II consists of five variants: 121 Reconnaissance, 15 Command and Control, 29 Joint Fires and Surveillance, 10 Repair and 11 Recovery vehicles.

The Boxer CRV will form part of Army's modernised Armoured Fighting Vehicle capability, until its life-of-type (approximately 2055).

The Smart Buyer Process was introduced to Defence during 2016 and became a mandatory requirement for Defence projects during 2017. As the new process was introduced after LAND400 Phase 2 had approached the market, it was not feasible to implement it within the timeframe available.

One 'Stop Payment' has previously been invoked on RDA in response to the delayed achievement of a contract milestone (July to September 2019) – this Stop Payment has now been lifted.

#### Uniqueness

LAND400 Phase 2 is unique in that Australia is the first nation to acquire a Boxer vehicle with a manned-turret, a variant that other countries have expressed an interest in buying. Additionally, LAND400 Phase 2 is acquiring a Reconfigurable Driver Training Simulator (RDS) – an innovative Australian-developed simulator that uniquely, can be reconfigured for a variety of different armoured vehicles. The RDS is attracting global interest for follow on sales and in 2020, the Project won an Essington-Lewis Award for the best minor acquisition under \$50 million.

#### Major Risks and Issues

The following risks and issues are being managed by the Project:

- Failure of Boxer CRV to meet the contracted specifications
- Failure to meet scheduled delivery and operational Milestones
- Failure to integrate LAND200 Systems onto the CRV
- Impacts of COVID-19 on RDA
- Immersive Tactical Trainer – Containerised Variant (ITT-C) Design is not feasible
- Cost of project contractor support exceeds budget
- RDA variance at completion exceeds budget allocated cost
- LAND400 Phase 2 Training System External Interfaces
- Command, Control, Communications, Computers and Intelligence (C4I) System Software and Equipment Availability
- C2 and JSF inability to access external power source
- Initial Material Release (IMR) exceptions

#### Other Current Related Projects/Phases

LAND200 (Battlefield Command System) is delivering two subsystems, these include:

- Battlefield Management System (BMS) – that enables vehicle commanders to monitor, direct and review operations with electronic displays of maps and combat data; and
- Tactical Communications Network (TCN) – comprising secure, mobile communications infrastructure to support the distribution of the BMS and other combat systems used by Army.

#### 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
<b>Project Budget</b>			
Dec 14	Original Approved (Government First Pass Approval)	116.7	
	Government Second Pass Approval	5,646.0	
Mar 18	Total at Second Pass Approval	5,762.7	
Jun 21	Exchange Variation	(107.3)	
Jun 21	Total Budget	5,655.4	
<b>Project Expenditure</b>			
Prior to Jul 20	Contract Expenditure – RDA (Prime Contract)	(871.3)	
	Contract Expenditure – NIOA (Explosive Ordnance)	(44.7)	
	Contract Expenditure – UMS (Reconfigurable Driver Simulator)	(18.4)	
	Contract Expenditure – EOS (Remote Weapon Station)	(2.5)	
	Other Contract Payments / Internal Expenses	(129.4)	1

## Project Data Summary Sheets

Auditor-General Report No.13 2021–22  
2020–21 Major Projects Report

FY to Jun 21	Contract Expenditure – RDA (Prime Contract) Contract Expenditure – NIOA (Explosive Ordnance) Contract Expenditure – UMS (Reconfigurable Driver Simulator) Contract Expenditure – EOS (Remote Weapon Station) Other Contract Payments / Internal Expenses	(389.4) (7.6) (1.6) (3.0) (13.0)	(1,066.3)	2
Jun 21	<b>Total Expenditure</b>		(414.6) (1,480.9)	
Jun 21	<b>Remaining Budget</b>		4,174.5	

**Notes**

- Other Expenses (\$129.4m) are for Risk Mitigation Activity Contracts with Rheinmetall Landsysteme GmbH and BAE Systems (\$50.0m), Project Office Administration (\$33.9m), C4I (\$16.1m), Risk Mitigation Activity – Other (\$0.9m), Support Contract (\$3.4m), Test and Evaluation (\$2.7m), Extended Payment Terms Finance Charge (\$18.8m), Customs Duty (\$0.1m), German Quality Assurance (\$2.9m) and Remote Weapon Station – Block I (\$0.6m)
- Other Expenses (\$13.0m) are for C4I (\$1.4m), Project Office Administration (\$11.3m), German Quality Assurance (\$0.3m), Test and Evaluation (\$0.4m), Extended Payment Terms Arrangement (-\$1.5m), Support (\$0.5m), Customs Duty (\$0.3m) and other (\$0.3m).

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

Estimate PBS \$m	Estimate PAES \$m	Estimate Final Plan \$m	Explanation of Material Movements
566.1	501.4	488.7	The variation from PBS to PAES is primarily due to later than expected achievement of various milestones in the RDA Acquisition Contract. The reasons for delay are a combination of technical challenges and the impacts of COVID-19. (including supply chain disruptions and travel restrictions). The variation from PAES to Final Plan is due to budget exchange rate updates.
Variance \$m	(64.7)	(12.7)	Total Variance (\$m): (77.4)
Variance %	(11.4)	(2.5)	Total Variance (%): (13.9)

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

Estimate Final Plan \$m	Actual \$m	Variance \$m	Variance Factor	Explanation
		(65.0)	Australian Industry	The Year End (YE) variance is primarily due to RDA not delivering seven Block II major systems reviews due to a combination of technical challenges and the impacts of COVID-19 (including supply chain disruptions and travel restrictions).
		(1.0)	Foreign Industry	
			Early Processes	
		(8.1)	Defence Processes	
			Foreign Government Negotiations/Payments	
			Cost Saving	
			Effort in Support of Operations	
			Additional Government Approvals	
488.7	414.6	(74.1)	<b>Total Variance</b>	
		(15.2)	<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 21 \$m			
RDA	Aug 18	3,890.2	3,725.7	Fixed	Standard Defence Contract	1,3
UMS	Dec 18	29.1	30.8	Fixed	Standard Defence Contract	
NIOA	Jul 18	47.3	89.3	Fixed	Standard Defence Contract (Standing Offer)	4
EOS	Dec 19	50.2	49.1	Fixed	Standard Defence Contract	2,3
<b>Notes</b>						
1	Contract value as at Signature is based on contract commitment at PBS 2018-19 Budgeted exchange rates. The commitment value included Price escalation estimates.					
2	Contract value as at Signature is based on contract commitment at Mid-Year Economic and Fiscal Outlook 2019-20 Budgeted exchange rates. The commitment value included Price escalation estimates.					

3	The price at 30 June 2021 is \$164.5m lower than the price at signature due to exchange rate variation and lower than expected price escalation.			
4	Contract value as at signature reflects initial order quantity only.			
Contractor	Contracted Quantities as at		Scope	Notes
	Signature	30 June 2021		
RDA	211	211	211 Combat Reconnaissance Vehicles, 12 Mission Modules, Support & Test Equipment and Training Equipment	1
UMS	6 1	6 1	Reconfigurable Driver Simulators Part Task Trainer	
NIOA	Classified	Classified	Explosive Ordnance	
EOS	82	82	Remote Weapon Stations (RWS) for Block II vehicles	
Major equipment accepted and quantities to 30 June 2021				
As at 30 June 2021:				
<ul style="list-style-type: none"> <li>25 CRV have been accepted.</li> <li>A classified quantity and variety of explosive ordnance has been accepted.</li> </ul>				
Notes				
1 In 2019/20, the quantity reported (223) included 211 CRV and 12 Mission Modules - this has been updated for context.				

### 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	Block I – Multi Purpose Vehicle	N/A	N/A	Nov 18	-	1,2
	Block I – Reconnaissance	Nov 18	N/A	Nov 18	-	1
	Block II – Joint Fires and Surveillance	Jul 19	N/A	Jul 19	-	1
	Block II – Command and Control	Jun 19	N/A	Jul 19	1	1
	Block II – Reconnaissance	Jan 19	N/A	Feb 19	1	1
	Block II – Repair	Aug 19	Oct 19	Sep 19	1	1
Preliminary Design	Block II – Recovery	Feb 19	N/A	Feb 19	-	1
	Block I – Multi Purpose Vehicle	N/A	N/A	Jan 19	-	1, 2
	Block I – Reconnaissance	May 19	N/A	May 19	-	1
	Block II – Joint Fires and Surveillance	Dec 20	Sep 21	Aug 22	20	1, 3
	Block II – Command and Control	Jul 20	Jul 21	Apr 22	21	1, 4
	Block II – Reconnaissance	Jul 19	N/A	Sep 19	2	1, 3, 5
Detailed Design	Block II – Repair	Dec 21	Jun 22	Oct 22	10	1
	Block II – Recovery	Feb 20	Jul 20	Apr 22	26	1, 6
	Block I – Multi Purpose Vehicle	Jan 19	N/A	Aug 19	7	1, 7
	Block I – Reconnaissance	Oct 19	N/A	Nov 19	1	1
	Block II – Joint Fires and Surveillance	Nov 21	Aug 22	Apr 23	17	1, 3
	Block II – Command and Control	Apr 21	Apr 22	Dec 22	20	1, 4
Notes	Block II – Reconnaissance	May 20	Aug 21	Jan 23	20	1, 8
	Block II – Repair	Sep 22	Mar 23	Aug 23	11	1
	Block II – Recovery	Mar 21	Oct 21	Nov 22	20	1
	1	All dates represent the Approval to exit the Design Review for each Mission System variant drive and mission modules.				
2	This was not a contractual requirement.					
3	Delay was due to the introduction of the Electronic Architecture and, COVID-19 Contract Change Proposals, uncertainty with the load list and delays associated with Command and Control variant.					
4	Delay was due to a combination of introduction of the Electronic Architecture Contract Change Proposal, COVID-19, uncertainty with the load list, and delays associated with the Command and Control variant.					
5	Delay was due to a failure to satisfy all preliminary design review requirements which resulted in Defence invoking a Stop Payment in July 2019 this has now been lifted.					
6	Delay was due to a Commonwealth request for a risk reduction activity (in the form of a capability demonstration) to be incorporated into the Review.					
7	Delay was due to late achievement of PDR and underestimation of design changes following the fitment exercise.					
8	Delay was due to a combination of the Stop Payment (in July 2019 – refer note 5), the introduction of the Electronic Architecture and COVID-19 Contract Change Proposals (CCP) and the entry criteria for this activity not being met.					

#### 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 and Acceptance	Block I – Multi Purpose Vehicle	Oct 20	N/A	Dec 20	-2	1,2
	Block I – Reconnaissance	Oct 20	N/A	Jun 21	-8	1,2
	Block II – Joint Fires and Surveillance	Oct 26	May 27	Dec 26	2	1,3
	Block II – Command and Control	Jun 26	Feb 27	Dec 26	6	1,3
	Block II – Reconnaissance	Oct 26	Jun 27	Nov 26	1	1,3
	Block II – Repair	Jun 26	Feb 27	Oct 26	4	1,3
Notes	Block II – Recovery	Mar 26	Nov 26	Aug 26	5	1,3
	1	Dates specified are based on Acceptance of the final delivery for each variant.				
2	Block I vehicles delivery were delayed due to a combination of production and manufacturing delays in Europe and the					

### Project Data Summary Sheets

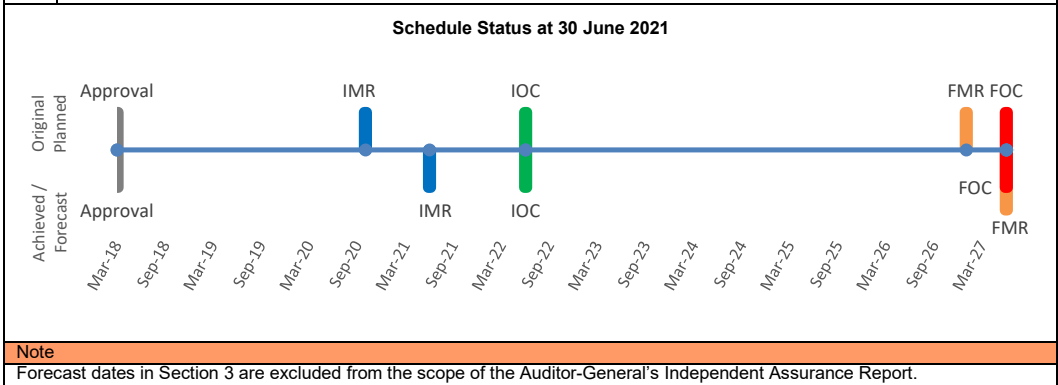
Auditor-General Report No.13 2021–22  
2020–21 Major Projects Report

	impact of COVID-19 travel restrictions in both Europe and Australia.
3	Block II vehicles are delayed due to a combination of production and manufacturing delays in Europe and the impact of COVID-19 travel restrictions in both Europe and Australia.

3.3 Progress Toward Materiel Release and Operational Capability Milestones

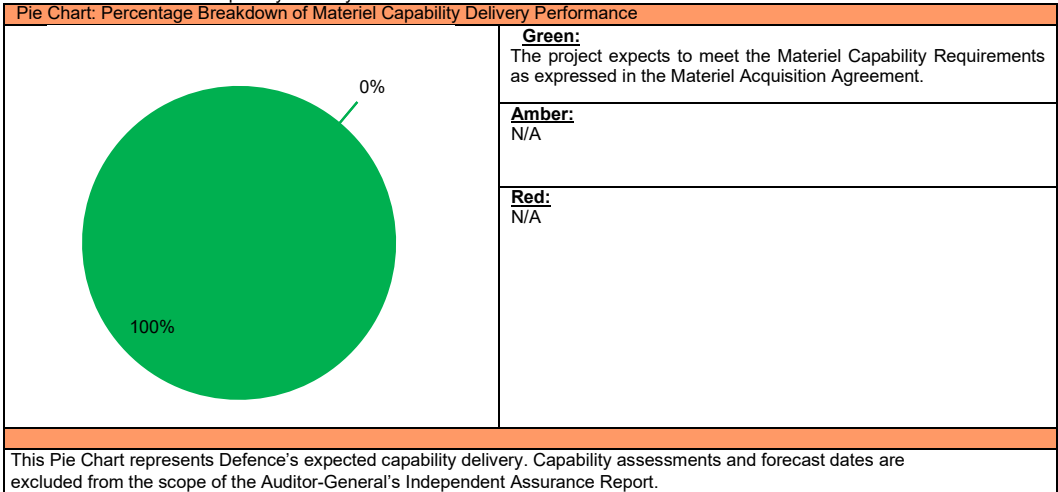
Item	Original Planned	Achieved/Forecast	Variance (Months)	Notes
Initial Materiel Release (IMR)	Oct 20	Jun 21	8	1,3
Initial Operational Capability (IOC)	Jun 22	Jun 22	-	2
Final Materiel Release (FMR)	Jan 27	Jun 27	5	1
Final Operational Capability (FOC)	Jun 27	Jun 27	0	

Notes	
1	The variance is due to a combination of production and manufacturing delays in Europe and the impact of COVID-19 travel restrictions in both Europe and Australia.
2	IOC will occur when the first operationally deployable CRV element (likely to be the first Mounted Combat Squadron) including mission, support and training systems, and facilities, if required, has been delivered to the first Combat Brigade and support organisations and accepted into service.
3	IMR was met with the delivery of 21 vehicles to the 7 <sup>th</sup> Brigade in June 21. IMR was declared with three exceptions which are further explained in Section 5.2.
4	Refer to Section 4.2 for definitions of these milestones.



**Section 4 – Materiel Capability Delivery Performance**

4.1 Measures of Materiel Capability Delivery Performance



#### 4.2 Constitution of Materiel Release and Operational Capability Milestones

Item	Explanation	Achievement
Initial Materiel Release (IMR)	<p>IMR will occur when:</p> <ul style="list-style-type: none"> <li>21 Combat Reconnaissance Vehicle mission systems have been delivered to 7th Brigade, Brisbane; and initial contractor provided logistics support arrangements are in place including: user documentation, technical data, maintenance support, logistics instruction, engineering support, spares, and training systems.</li> </ul>	<p><b>Achieved with caveats</b></p> <p><b>(Refer to Section 5.2)</b></p>
Initial Operational Capability (IOC)	<p>IOC will occur when:</p> <ul style="list-style-type: none"> <li><b>The first operationally deployable CRV element</b>, including mission, support, and training systems, and facilities, if required, have been delivered to one Combat Brigade and support organisations and accepted into operational service.</li> <li><b>Forecast: June 2022</b></li> </ul>	Not yet achieved
Final Materiel Release (FMR)	<p>FMR will occur with final delivery of the Combat Reconnaissance Vehicle capability. It includes:</p> <ul style="list-style-type: none"> <li>delivery of all vehicles, spares &amp; attrition and simulation training enablers for the Combat Reconnaissance Vehicles capability to all gaining units, and</li> <li>Logistics support arrangements, including: user documentation; technical data; maintenance support, logistics instruction, engineering support; spares; training systems; and facilities.</li> <li><b>Forecast: June 2027</b></li> </ul>	Not yet achieved
Final Operational Capability (FOC)	<p>FOC will occur when:</p> <ul style="list-style-type: none"> <li>The full scope of LAND400 Phase 2, including mission, support and training systems, and facilities (if required), has been delivered to the three Combat Brigades and support organisations, and accepted into operational service.</li> <li>Support arrangements are finalised in accordance with the Integrated Logistics Support Plan.</li> <li>The three Armoured Cavalry Regiments are declared operationally ready by the Capability Manager (including training fleets, and Spares and Attrition stock vehicles).</li> <li><b>Forecast: June 2027</b></li> </ul>	Not yet achieved

### Section 5 – Major Risks and Issues

#### 5.1 Major Project Risks

Identified Risks (risk identified by standard project risk management processes)	
Description	Remedial Action
<p><b>Failure of Boxer CRV to meet the contracted specifications</b></p> <p>There is a chance that the Boxer CRV may fail to meet the contracted minimum specifications leading to an impact on cost, schedule or capability.</p>	<p>The Commonwealth is working closely with the <b>supplier</b> as part of the <b>initial testing of the vehicle</b>. <b>Any areas for improvement will be integrated into the Block II designs.</b></p>
<p><b>Failure to meet scheduled delivery and operational Milestones</b></p> <p>There is a chance that manufacture of Block II Boxer CRV is delayed, thereby impacting on FOC (June 2027).</p>	<p>The Commonwealth <b>is working closely with the supplier to mitigate the impacts of COVID-19</b>. The Commonwealth will monitor the <b>supplier's</b> planned activities to minimise any impact to schedule.</p>
<p><b>Failure to integrate LAND200 Systems onto the CRV</b></p> <p>There is a chance that the CRV capabilities will be affected by LAND200 being unable to provide technical support or equipment within the required LAND400 Phase 2 timeframes.</p>	<p>The Commonwealth is establishing a Project Collaborative Agreement between LAND400 Phase 2 and LAND200 to ensure engagement between projects is optimised.</p> <p><b>This risk has been escalated into an issue and is being managed accordingly. The residual risk is low and this risk is expected to be retired in 2022.</b></p>
Emergent Risk (risk not previously identified but has emerged during 2020-21)	
Description	Remedial Action
<p><b>Immersive Tactical Trainer – Containerised (ITT-C) Design</b></p>	<p><b>The Commonwealth will increase the frequency of technical</b></p>

### Project Data Summary Sheets

Auditor-General Report No.13 2021–22  
2020–21 Major Projects Report

<p><b>is not feasible</b></p> <p>There is a risk that when operated the ITT-C will create too much heat in the confined container, resulting in a system that does not meet safety requirements and is not fit for purpose.</p>	<p>reviews for development of ITT-C</p> <p>This risk is expected to be retired in FY21/22.</p>
<p><b>Cost of Project Contractor Support Exceeds Budget</b></p> <p>There is a risk that the budget for Contractor Support approved at Second Pass (\$46.805m) will not be sufficient to fund the required contracted workforce for the life of the Project.</p>	<p>The Commonwealth is managing its contractor budget intensively and does not anticipate applying for contingency during the FY20/21.</p> <p>The risk is expected to be retired in FY21/22.</p>
<p><b>RDA Variance at Completion Exceeds Budget Allocated Cost</b></p> <p>There is a risk that RDA's reporting of a current VAC of \$109m is an early indicator of cost, schedule and performance challenges.</p>	<p>The Commonwealth is monitoring and engaging closely with RDA.</p> <p>If the VAC status improves in FY21/22, this risk may be retired.</p>
<p><b>RDA COVID-19 Impacts</b></p> <p>There is an <b>issue</b> that RDA will be unable to deliver against its contracted schedule due to the impacts of COVID-19. <b>There will be a six month delay to all contractual milestones with potential impacts to FOC.</b></p> <p><b>Realised and</b> potential impacts include reduced production capacity, supply chain delivery delays, lower levels of collaboration, possible staff absences or limitations, and potential disruption to program delivery.</p>	<p>The Commonwealth and RDA have signed a CCP that agrees to a six month delay to reflect the impacts of COVID-19 up to 31 December 20.</p> <p>RDA is examining options to transition more production-related work to Australia earlier than planned, and increasing production capacity in Australia to mitigate this impact.</p> <p>The Commonwealth is working intensively with RDA to mitigate the impacts on IOC and FOC. This risk became an issue during the FY20/21 year and is therefore also reflected in 5.2 below.</p>
<p><b>LAND400 Phase 2 Training System External Interfaces</b></p> <p>The CRV Training System will be affected by undefined interfaces between Army's Training Management System (TMS), the Defence and Land Synthetic Environments and the Defence Learning Environment leading to impacts on Cost, Schedule, Performance, and Reputation.</p>	<p>The Commonwealth is engaging closely with Army to refine the network architecture and allocate contingency for a Battle Management System.</p> <p>The Commonwealth recruited a network architect in March 2021 to develop the architecture, and has raised the issue with the Capability Manager (Army) for direction and endorsement of the way forward.</p> <p>The risk has been downgraded from High to Medium and the status changed from 'Issue' to 'Risk' due to improved stakeholder engagement.</p>

## 5.2 Major Project Issues

Description	Remedial Action
<p><b>Delay in Production of Block I Boxer CRV</b></p> <p>Delays in manufacturing of Block I vehicles will impact on <b>the achievement</b> of IMR. Design and manufacturing delays will most likely impact Cost, Schedule, Performance and Delivery.</p>	<p>Strategies being implemented include: implementing quality assurance on the manufacturing line; confirming Government Furnished Equipment availability; the use of airfreight; more integration activities to be carried out in Australia; and a parallel testing and acceptance process.</p> <p><b>This issue is now retired as all Block I vehicles have now been produced and delivered to the Commonwealth, and IMR has now been achieved.</b></p>
<p><b>C4I System Software and Equipment Availability</b></p> <p>CRV capabilities will be affected by Army and/or communications-related projects, System Project Offices (SPO) and original equipment manufacturers (OEM) being unable to provide equipment, software or technical support within LAND400 Phase 2 timeframes leading to an impact on Cost, Schedule, Performance and Reputation.</p>	<p>Ongoing stakeholder engagement with Army, C4I projects, SPOs and OEMs to closely manage the availability of equipment and technical information and support in accordance with LAND400 Phase 2 timeframes.</p> <p><b>This issue has been expanded for clarity and renamed 'Command, Control, Communications, Computers and Intelligence (C4I) Software and Equipment compromises CRV capability'.</b></p>
<p><b>Impacts of COVID-19 on RDA</b></p> <p>There is an issue that RDA will be unable to deliver against its contracted schedule due to the impacts of COVID-19. <b>There will be a six month delay to all contractual milestones with potential impacts to FOC.</b></p> <p><b>Realised and potential impacts include reduced production capacity, supply chain delivery delays, lower levels of collaboration, possible staff absences or limitations, and potential disruption to program delivery. It may also lead to potential delays in the delivery of Block</b></p>	<p>RDA submitted a draft Postponement CCP021 indicating 6 months of delay for COVID-19 impacts up to 31 Dec 20.</p> <p>RDA is examining options to transition more production-related work to Australia earlier than planned, and increasing production capacity in Australia to mitigate this impact.</p> <p>The Commonwealth is working intensively with RDA to mitigate the impacts on IOC and FOC.</p>

Description	Remedial Action
II vehicles and corresponding Milestones and potential delays to Block II Mandated System Reviews, delivery of vehicles and the corresponding Milestones.	
C2 and JFS variant - inability to Access External Power Source  There is an issue that the batteries in the C2 and JFS variants of the CRV are unable to be charged whilst in a static mode, leading to an impact on the operation of vehicle systems.	The Project has worked closely with the supplier to incorporate an external power/ charging port into the design.  This issue will be retired in 2021/22.
Initial Material Release was declared with three exceptions relating to: <ul style="list-style-type: none"> <li>the completion of Functional Configuration Audit and Physical Configuration Audit,</li> <li>the integration of electronic counter measures, and;</li> <li>transportability studies including air transportability and integration with other Army vehicles.</li> </ul>	The Project is currently performing remediation activities against these three caveats, which are expected to be achieved by October 2021, February 2022, and March 2022 respectively.
<b>Note</b> Major risks and issues in Section 5 are excluded from the scope of the Auditor-General's Independent Assurance Report.	

## Section 6 – Lessons Learned

### 6.1 Key Lessons Learned

Description	Categories of Systemic Lessons
A formal After Action Review (AAR) was conducted by the Project in order to develop lessons learned for application in other Defence projects (and particularly LAND400 Phase 3. This AAR was completed by the Independent Advisor and a summary of the main lessons learned is presented below.	General
<b>Enhancing project team capability</b> – The project should be sufficiently resourced at each stage of the capability lifecycle. All members of the project team should be properly trained and prepared for their roles and have a good understanding of the project's scope, schedule and cost along with associated governance requirements.	Resourcing Governance
<b>Whole of capability focus</b> – The project should establish and maintain a 'whole of capability' focus in delivering the Boxer CRV, including management of all fundamental inputs to capability and commonality and alignment across the support and training systems to retain its effectiveness in rapidly changing threat and technology environments.	Requirements Management
<b>Whole of life approach</b> – When conducting market solicitation for the capability, the tender documentation should establish clear guidance on the level of maturity required initially as well as the level of innovation or developmental aspects the Commonwealth is prepared to accept. Requirements should be expressed in terms of mission or functional performance and should encourage tenderers to offer innovative solutions.	Requirements Management
<b>Project management discipline</b> – A Program Management Plan and Project Master Schedule are the means by which high-performing projects are conducted. As such, they must be maintained as the basis for directing the LAND400 Phase 2 program, managing priorities and resources, and monitoring and reporting performance to the relevant stakeholders. A Risk Management Plan should inform a disciplined approach to identifying, recording, analysing and mitigating risks, issues as well as opportunities that may affect delivery of the capability.	Program Management Governance
<b>Capability Manager and stakeholder engagement</b> are an essential part of the tender governance – arrangements should be established for regular participation of the 3-star Capability Manager and Deputy Secretary CASG in senior governance arrangements. It is recommended that each major acquisition program invite participation from Contestability Division, Joint Force Design, Industry Division and Defence Science and Technology at all levels of the Tender Evaluation Organisation.	Governance
<b>Industry engagement</b> – Early engagement of 'Industry' (as one of the fundamental inputs to capability) is required to maximise Australian industry participation in delivering the capability. The requirements, guidance and parameters for industry involvement should be included in the tender documentation and facilitated industry engagement should be a standard part of any major acquisition project.	Requirements Management
<b>Tender requirements</b> – When conducting a tender, the Request For Tender documentation should clearly identify which requirements are considered 'essential', 'important' and 'desirable' to the Commonwealth in order to guide the tenderers in developing proposed solutions. In addition, any Risk Mitigation Activity undertaken to differentiate between tendered solutions should look beyond the testing and evaluation requirements and consider other elements of the capability (including personnel training, repair and sustainment aspects).	Requirements Management
<b>Probity</b> – During tender evaluations, all staff involved in the project, including contracted workforce, must have a clear understanding of probity and all probity	Resourcing

## Project Data Summary Sheets

Auditor-General Report No.13 2021–22  
2020–21 Major Projects Report



Description	Categories of Systemic Lessons
requirements in order to preserve the integrity of the tender process. Throughout the source selection and negotiation stages, any interaction between members of the project team and tenderers should be properly recorded to maintain transparency and ensure the Commonwealth is able to provide an appropriate response.	

**Section 7 – Project Line Management**

7.1 Project Line Management as at 30 June 2021

Position	Name
Division Head	MAJGEN David Coghlan
Branch Head	Ms. Sarah Myers

