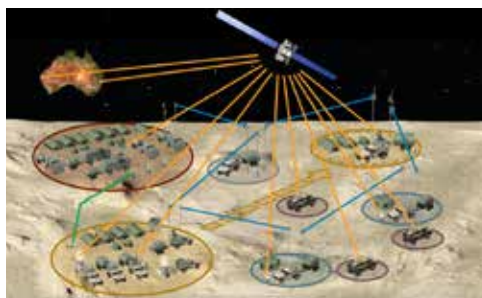


Project Data Summary Sheet¹⁵²

Project Number	LAND 2072 Phase 2B ¹⁵³
Project Name	BATTLESPACE COMMUNICATIONS SYSTEMS
First Year Reported in the MPR	2017-18
Capability Type	Replacement
Acquisition Type	Developmental
Capability Manager	Chief of Army
Government 1st Pass Approval	May 2011
Government 2nd Pass Approval	Apr 2015
Budget at 2 nd Pass Approval	\$915.7m
Total Approved Budget (Current)	\$942.6m
2018-19 Budget	\$150.7m
Project Stage	Initial Materiel Release
Complexity	ACAT I



Section 1 – Project Summary

1.1 Project Description

LAND (formally known as JP) 2072 Phase 2B will provide the Battlespace Communications System Land (BCS-L) deployed wide-band backbone by replacing and enhancing the existing Battlefield Telecommunications Network (BTN) capability within Army and Air Force. LAND 2072 Phase 2B shall deliver the Integrated Battlefield Telecommunications Network (I-BTN) in **three** capability Releases. Release 1 shall provide transit case nodes, and Release 2 **and Release 3** shall provide vehicle mounted nodes and additional capabilities. The end state will be an I-BTN that provides greater capacity, more effective switching, wireless and wired network infrastructure supporting secure voice, data and video services.

LAND 2072 Phase 2B is required to provide end to end connectivity from the enhanced Deployable Local Area Network (eDLAN), through and within the I-BTN, and to the Defence Terrestrial Communications Network (provided by JP2047 Phase 3).

Under separate funding arrangements Joint Command, Control, Communications, Computers & Intelligence Systems Program Office (JC4ISPO) is responsible for design, verification, procurement and delivery of the DLAN. LAND 2072 Phase 2B **has** provided supplementary funding to JC4ISPO for the procurement of **259** DLAN systems **for integration with I-BTN**.

LAND 2072 Phase 2B will also acquire a Terrestrial Range Extension System (TRES) to extend the range of tactical radios procured under earlier phases of Joint Project 2072.

1.2 Current Status

Cost Performance

In-year

The Project has spent **\$157.8m year to date against a budget of \$150.7m with the overspend \$7.1m due to early completion of User Training for Material Release 3 and higher than anticipated price variation claims offset by decreases to planned spend on Enhanced Deployable Local Area Network and delays in equipment acquisition for Headquarters on the Move.**

Project Financial Assurance Statement

As at **30 June 2019**, LAND 2072 Phase 2B 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, that there is sufficient budget including contingency remaining for the Project to complete against the agreed scope.

Contingency Statement

The Project has applied contingency in the financial year **for the treatment of the programmatic risk related to eDLAN**

152 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.

¹⁵³ LAND 2072 Phase 2B was originally approved as a JOINT PROJECT (JP) within the broader JP 2072 program, but since second pass it has been managed and reported as a LAND project. The remainder of this report will refer to LAND 2072 Phase 2B.

Integration that caused project delays.

Schedule Performance

Boeing Defence Australia (Boeing) is required to integrate a number of capabilities being delivered by other projects into its technical solution. Two of these projects experienced delays in the delivery of their capabilities and this resulted in delaying Boeing. Initial Materiel Release 1A was delayed by 6 months due to delays in interfacing projects. The implementation of an alternate solution resolved this issue and IMR 1A was achieved in February 18.

Due to continual delays with the eDLAN program, LAND 2072 Phase 2B has removed eDLAN interfacing requirements and replaced them with an alternate LAN as part of CCP015. Whilst this alternate LAN provides a more limited capability, the change has been endorsed by the Capability Manager. This has reduced the risk of further delays in the delivery of GFM to Boeing, however it has resulted in a slip of FMR by 16 months, to March 2022. CCP015 also introduced a new capability Release 3 that allows for those capabilities that were not impacted by the eDLAN delay to be delivered in capability Release 2, and those that were impacted by the delay to be delivered in capability Release 3. The eDLAN hardware procured with LAND 2072 Phase 2B funds will be repurposed (with different software) as an alternate LAN which may be integrated with the I-BTN at a later date.

Materiel Capability Delivery Performance

IMR, as defined in the contract, was achieved by Boeing in December 2017, allowing the Capability Manager to declare IMR, as defined in the MAA V2.1, February 2018. Initial Operating Capability was declared as being achieved in March 2018. Boeing is on schedule to deliver future releases of the contracted capability in accordance with CCP15, which includes the slip of Final Materiel Release (FMR) by 16 months, to March 2022

JC4ISPO has procured 259 eDLAN hardware systems, but note that they cannot be integrated in their current form. Army has sought additional funding from Government to remediate this integration problem using software from a different DLAN system. LAND 2072 Phase 2B has agreed with the Capability Manager to remove the requirement to integrate the eDLAN hardware with the I-BTN. Army agreed to consider declaration of the eDLAN Materiel Release milestone, as no further work will be undertaken due to the I-BTN system no longer being required to integrate with the eDLAN system.

Note

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

1.3 Project Context

Background

JP 2072 is a multi-phased program to define the Battlespace Communication Systems (Land) (BCS (L)) Communications Architecture, govern the design, incremental implementation and verification of system elements across a number of projects as well as acquire systems and equipment.

LAND 2072 Phase 2B will enhance and modernise land force communications by replacing existing ADF deployable communication information systems. It will replace and enhance the existing Battlespace Telecommunications Network (BTN) with an Integrated Battlespace Telecommunications Network (I-BTN). The I-BTN will provide secure communications within deployed ADF Headquarters, in order to effectively network commanders and their subordinate staff, allowing them to exchange voice, data and video. This capability will be further enhanced through the provision of a Headquarters On The Move (HQOTM) capability. LAND 2072 Phase 2B will also deliver a TRES, with the project currently preparing the Request for Tender documentation.

Second Pass approval also included a new purpose built System Support Facility (SSF). This facility replaces the previous support facility that has been operating out of demountable buildings. The design and construction of the SSF was delivered by E&IG, with the new facility commissioned in September 2017.

The I-BTN capability being delivered is classified as developmental, as no Off-The-Shelf systems were available to meet the requirements for the I-BTN. The I-BTN is being developed to integrate a range of both developmental components as well as a range of Off-The-Shelf components, to meet the requirements.

The I-BTN capability is being delivered in **three** releases:

Release 1 is a Transit Case based capability with an initial level of functionality of the Network Planning and Management System (NPMS). Commencement of delivery of Release 1 capability is aligned to achievement of IMR 1A.

Release 2 is **additional bearers** and includes the Medium Mounted Satellite Communications capability, **Troposcatter, External Network Access Point and an additional Currawong Network Edge Strategic to Tactical (CNEST).**

Release 3 will include Vehicle Mounted nodes and will also deliver the Headquarters On The Move (HQOTM) node as well as secure voice and video services. Completion of delivery of Release 3 capability is aligned to achievement of Final Materiel Release (FMR).

A Performance Based Support Contract was signed at the same time as the Acquisition contract in September 2015 with the Contractor. The Support Contract **initially had** a three year **term** with a rolling wave of one year extensions to a maximum of 12 years. The operative date of the Support Contract **was 29 January 2018. As a consequence of CCP015, the introduction into service of equipment has been delayed resulting in an extension in Support Contract term of 3 to 5 years at a reduced yearly expenditure. The total saving over the 5 year period is approximately \$6 million. The Support Contract was transitioned to Battlespace Communications Operations Group (BCOG) in June 2018.**

Uniqueness

The project is highly complex and technically challenging as a result of having to design an I-BTN which integrates capabilities being delivered by other projects within CASG and Chief Information Officer Group (CIOG), as well as to deliver an I-BTN technical solution which is required to interoperate with a multitude of external interfaces.

Boeing is required to design and verify that the I-BTN provides end-to-end connectivity of specified Battlespace Communications System (Land) Services from the tactical environment into the strategic network. Boeing is executing the project in **three**

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<p>capability releases across seven years.</p> <p>Boeing is developing both hardware and the network planning and management system software, as well as buying and integrating Off-The-Shelf equipment. Boeing is also required to integrate its system with existing satellite bearer systems and IT systems that have been delivered by other projects within CASG and CIOG.</p>
<p>Major Risks and Issues</p> <p>Progress in design maturity and schedule extensions introduced by CCP015 enabled the retirement or downgrade of a number of risks in-year.</p> <p>The remaining high risks relate to establishment of the capability baseline for the HQOTM vehicle. There is also significant risk in being able to successfully achieve Wideband Global Satellite (WGS) Certification for one of the I-BTN component capabilities within schedule.</p>
<p>Other Current Related Projects/Phases</p> <p>JP 2072 Phase 1, BCS(L): The initial phase of the JP 2072 program, this project has delivered communications bearers to the BMS, and enhancing communications for Australian Defence Force Land elements through the development of an holistic battlespace communications architecture for the Land environment.</p> <p>JP 2072 Phase 2A, BCS(L): Phase 2A is continuing the rollout of products selected during Phase 1 to primarily provide voice services to dismounted users. Phase 2A will also establish a mature support system for ongoing sustainment of the Phases 1 and 2A materiel systems and contribute to ongoing Prime System Integration activities to evolve the BCS(L) design. Investigation and/or market survey activities will be conducted to specify and identify products for potential procurement in future phases.</p> <p>LAND 2072 Phase 3, BCS(L): This project will introduce into service a digital communication backbone for land based elements of the Australian Defence Force (ADF) and their enabling elements. The capability is aligned with LAND 75 Phase 4 as part of a second tranche of LAND 200 with the capability being a vital function of the BMS. This phase will enhance the digital communications backbone delivered under previous phases, expand the provisioning to additional land forces and ADF elements, and provide a new capability to support the distribution and data management of the land Battlespace.</p> <p>The I-BTN is required to interface with multiple ADF platforms, including combat and non-combat vehicles, deployable satellite communication systems, and strategic communication systems. Any delays or issues within these platforms and systems can affect the testing, design, delivery or useability of the I-BTN.</p>
<p>Note</p> <p>Major risks and issues are excluded from the scope of the review.</p>

Section 2 – Financial Performance

2.1 Project Budget (out-turned) and Expenditure History

Date	Description	\$m	Notes
Oct 11	Project Budget		
May 15	Original Approved	3.9	1
	Government Second Pass Approval	911.8	4
	Total at Second Pass Approval	915.7	
Jun 19	Exchange Variation	26.9	
Jun 19	Total Budget	942.6	
	Project Expenditure		
Prior to Jul 18	Contract Expenditure – Boeing Defence Australia	(225.6)	
	Contract Expenditure – Kellogg Brown and Root	(5.8)	
	Other Contract Payments/Internal Expenses	(100.9)	2
		(332.3)	
FY to Jun 19	Contract Expenditure – Boeing Defence Australia	(127.9)	
	Contract Expenditure – Kellogg Brown and Root	(3.4)	
	Other Contract Payments/Internal Expenses	(26.5)	3
Jun 19	Total Expenditure	(490.1)	
Jun 19	Remaining Budget	452.5	
Notes			
1	The project's original budget amount prior to Second Pass Approval.		
2	Other expenditure includes: enhanced Deployable Local Area Networks work package 754 (Order managed by Joint Command, Control, Communications, Computers and Intelligence Systems (JC4ISPO)) (62.7), software (19.1), ICT hardware & other equipment (11.8), technical and engineering services (4.3), Travel (1.8), legal fees (1.0) and other (0.1).		
3	Other expenditure includes: enhanced Deployable Local Area Network work packages 754 802 (Orders managed by JC4ISPO) (22.9), software (1.9), Other (0.6), Travel (0.5), Headquarters on the Move (0.5) and ICT hardware & other equipment (0.1).		
4	The total budget amount includes supplementary funding to JC4ISPO for the procurement of additional eDLAN systems (\$126m).		

2.2A In-year Budget Estimate Variance

Estimate PBS \$m	Estimate PAES \$m	Estimate Final Plan \$m	Explanation of Material Movements
136.3	164.7	150.7	PBS – PAES: Variation relates to delays in delivery of enhanced Deployable Local Area Network (eDLAN) and additional Integrated Battlefield Telecommunications Network costs for non-delivery of eDLAN as Government Furnished Equipment. PAES – Final Plan: Variation relates to delay to Integrated Battlefield Telecommunications Network due to non-delivery of Government Furnished Equipment and delay in equipment deliveries for Headquarters on the Move.
Variance \$m	28.4	(14.0)	Total Variance (\$m): 14.4
Variance %	20.8	(8.5)	Total Variance (%): 10.6

2.2B In-year Budget/Expenditure Variance

Estimate Final Plan \$m	Actual \$m	Variance \$m	Variance Factor	Explanation

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		7.1	Australian Industry	Overspend is due to early completion of User Training for Material Release 3 and higher than anticipated price variation claims offset by decreases to planned spend on Enhanced Deployable Local Area Network and delays in equipment acquisition for Headquarters on the Move.
			Foreign Industry	
			Early Processes	
			Defence Processes	
			Foreign Government Negotiations/Payments	
			Cost Saving	
			Effort in Support of Operations	
			Additional Government Approvals	
150.7	157.8	7.1	Total Variance	
		4.7	% Variance	

2.3 Details of Project Major Contracts

Contractor	Signature Date	Price at		Type (Price Basis)	Form of Contract	Notes
		Signature \$m	30 Jun 19 \$m			
Kellogg Brown and Root (Integrated Support Contract)	Jul 15	9.6	13.1	Fixed	ASDEFCON (Services)	1,2
Boeing Defence Australia (I-BTN)	Sep 15	487.2	666.5	Fixed	ASDEFCON (Strategic Materiel)	1,3

Notes

1	Contract value as at 30 June 2019 is based on actual expenditure to 30 June 2019 and remaining commitment at current exchange rates, and includes adjustments for indexation (where applicable).
2	Increase in contract price due to additional security certification and accreditation services and annual updates to labour rates.
3	Increase in Contract Price due to changes required for the Headquarters on the Move vehicle, Medium Satellite Terminal trailer, Support and Test Equipment and Spares, and eDLAN delays.

Contractor	Quantities as at		Scope	Notes
	Signature	30 Jun 19		
Kellogg Brown and Root (Integrated Support Contract)	N/A	N/A	Range of Integrated Support Contractor (ISC) Services in support of the LAND 2072 Phase 2B Project.	
Boeing Defence Australian (I-BTN)	See scope	See scope	1 Force Node Vehicle Mounted 8 Formation Nodes Vehicle Mounted 18 Formation Nodes Transit case 16 Unit Nodes Vehicle Mounted 21 Unit Nodes Transit Case 23 Relay Nodes Transit Case 3 Tactical Interface Stations 18 Headquarters on the Move Nodes	1

Major equipment received and quantities to 30 Jun 19

- 18 Formation Nodes Transit Case
- 19 Unit Nodes Transit Case
- 19 Relay Nodes Transit Case
- 1 Tactical Interface Station

Notes

1	The scope of the contract was varied under CCP015, in agreement with the Capability Manager, amending the number of required Tactical Interface Stations from 4 to 3.
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Section 3 – Schedule Performance

3.1 Design Review Progress

Review	Major System/Platform Variant	Original Planned	Current Planned	Achieved/ Forecast	Variance (Months)	Notes
System Requirement	System Requirements Review (SRR) Release 1 and 2	May 16	N/A	Mar 16	(2)	1
	System Definition Review (SDR) Release 1 and 2	Jul 16	N/A	Mar 16	(4)	1
Preliminary Design	Release 1	Oct 16	N/A	Sept 16	(1)	
	Release 2	Oct 17	Oct 18	Jul 18	9	2,5
Detailed Design	Release 1	Dec 16	N/A	Nov 16	(1)	

	Release 2	Jan 18	Feb 19	Dec 18	11	2
	Release 3	Mar 20	N/A	Mar 20	0	4
	Support System – Release 1	Nov 16	Feb 17	Dec 16	1	3
	Support System – Release 2	Jan 18	Mar 19	Feb 19	13	2
	Support Systems – Release 3	May 20	N/A	May 20	0	4
Notes						
1	SRR/SDR covered both Release 1 and Release 2.					
2	Release 2 was impacted by delays affecting interfacing projects and note this against all Note 2 delays.					
3	The Contract was changed with CCP 9 to correct the sequencing of the Support System Detailed Design so it was logically scheduled to occur after the Mission System Detailed Design. Support System Detailed Design for Release 1 was achieved ahead of the current Contract Date.					
4	Release 3 was introduced as part of CCP015 that replaced the need for eDLAN integration with an alternate LAN. This reduced reliance on delayed interfacing projects.					
5	Preliminary Design for Release 2, which was completed in July 2018, included the capabilities that are now being delivered in both Release 2 and Release 3.					

3.2 Contractor Test and Evaluation Progress

Test and Evaluation	Major System/Platform Variant	Original Planned	Current Planned	Achieved/ Forecast	Variance (Months)	Notes
System Integration	Release 1 Mission System Integration & Interoperability Verification	Jul 17	Dec 17	Dec 17	5	1
	Release 2 Mission System Integration & Interoperability Verification	Apr 19	May 20	May 20	13	1
	Release 3 Mission System Integration & Interoperability Verification	Mar 21	N/A	Mar 21	0	2
Acceptance	System Acceptance – R1	Aug 17	Feb 18	Dec 17	4	1
	System Acceptance - R2	Jun 19	Jul 20	Jul 20	13	1
	System Acceptance – R3	May 21	N/A	May 21	0	2
	Final Acceptance (FA) - Acquisition Contract	Feb 21	May 22	May 22	15	2
Notes						
1	Release 2 expands the capability of Release 1, and has been impacted by delays affecting interfacing projects					
2	Release 3 was introduced as part of CCP015 that replaced the need for eDLAN integration with an alternate LAN. This reduced reliance on delayed interfacing projects.					

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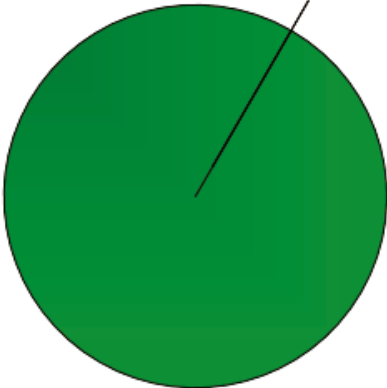
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3.3 Progress Toward Materiel Release and Operational Capability Milestones

Item	Original Planned	Achieved/Forecast	Variance (Months)	Notes
I-BTN				
Initial Materiel Release (IMR) 1A	Aug 17	Feb 18	6	1
I-BTN Initial Operational Capability (IOC)	Sep 17	Mar 18	6	1
(Release 1) Materiel Release 1	Oct 17	May 18	7	2
(Release 1) Materiel Release 2	May 18	Dec 18	7	2
(Release 1) Materiel Release 3	Oct 18	Jul 19	9	2
(Release 2) Materiel Release 5	Dec 19	Nov 20	11	1, 2
(Release 2) Materiel Release 6	Oct 20	Mar 21	5	1, 2
(Release 3) Materiel Release 7	Nov 21	Nov 21	0	1, 2
(Release 3) Materiel Release 8	Mar 22	Mar 22	0	1, 2
I-BTN Final Materiel Release (FMR)	Nov 20	Mar 22	16	2
eDLAN				
eDLAN Materiel Release	Jul 18	Jun 19	12	3
I-BTN Final Operational Capability (FOC)	Sep 20	Sep 22	24	4
Notes				
1	Due to delays incurred to date with interfacing projects, alternative interim interface requirements for Release 1 were implemented and resulted in a six month slip to IMR 1A and IOC I-BTN. This also deferred the Release 2 Materiel Releases (Materiel Releases 5 and 6) by making Materiel Release 4 no longer used and introducing Materiel Release 6. CCP15 introduced Release 3 (Materiel Releases 7 and 8) to remove the requirement to integrate I-BTN with eDLAN. There was a resultant slip to FMR of 16 months to forecast date.			
2	Materiel Release (Release 1, Release 2, Release 3) milestones will be achieved when the units receiving the capability sign the unit acceptance certificate. This variance is dependent on unit availability to conduct the unit test activity.			
3	Integration between eDLAN and the I-BTN is no longer required. Army agreed to consider declaration of the eDLAN Materiel Release milestone, as no further work will be undertaken due to the I-BTN system no longer being required to integrate with the eDLAN system.			
4	The planned FOC date will occur 6 months after FMR. This is a combination of the delay related to CCP015 and to allow time for Army to conduct testing and evaluation during Army exercises			
Schedule Status at 30 June 2019				
<p>The Gantt chart displays two horizontal bars representing project schedules from June 2010 to June 2022. The top bar, 'Schedule Plan at Government Approval', shows milestones: Approval (Jun-10), IMR (Jun-11), IOC (Jun-17), FMR (Jun-20), and FOC (Jun-22). The bottom bar, 'Schedule Plan at 30 June 2019', shows: Approval (Jun-10), IMR (Jun-17), IOC (Jun-18), FMR (Jun-21), and FOC (Jun-22). A legend on the right identifies the milestones by color: Approval (grey), IMR (blue), IOC (green), FMR (orange), and FOC (red).</p>				
Note				
Forecast dates in Section 3 are excluded from the scope of the review.				

Section 4 – Materiel Capability Delivery Performance

4.1 Measures of Materiel Capability Delivery Performance

Pie Chart: Percentage Breakdown of Materiel Capability Delivery Performance	
	<p>Green: The Project is currently meeting the majority of capability requirements as expressed in the Materiel Acquisition Agreement and supporting suite of Capability Definition Documentation.</p>
	<p>Amber: N/A</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 review.</p>	

4.2 Constitution of Initial Materiel Release and Final Materiel Release

Item	Explanation	Achievement
Initial Materiel Release (IMR) 1A	<ul style="list-style-type: none"> • Verification & validation, testing and certification completed • Initial Learning Management Packages Approved • Initial Support Contract is in place • Commonwealth acceptance of supplies for those units identified for Materiel Release 1 • Completion of AT for initial release <p>IMR 1A was achieved in February 2018</p>	Achieved
Initial Operational Capability (IOC)	<ul style="list-style-type: none"> • For Army - Delivery of four man portable formation nodes, four unit nodes, and three HCLOS with trained soldiers to enable planning, configuration and operation of Force and Formation level networks. • For Air Force - Delivery of four man portable formation nodes, two man portable unit nodes and one HCLOS with trained crew to enable planning, configuration and operation of a Formation level network. <p>IOC was achieved in March 2018</p>	Achieved
Final Materiel Release (FMR)	<ul style="list-style-type: none"> • Verification & validation, testing and Certification completed • All elements of the Mission System are delivered to units • All introduction into service training is completed and approved Learning Management Plans for sustainment training delivered to Army • Mature Support Contract in place including delivery of Data Transfer Equipment (DTE); • Delivery of Hand Held Satellite Terminal (HHST) 	Not yet achieved

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	FMR is currently forecast for achievement in March 2022	
Final Operational Capability (FOC)	<p>The provision, support and training of the IBTN to all Army and Air Force in accordance with the Basis of Issue (BOI).</p> <p>Scope includes;</p> <ul style="list-style-type: none"> • 1 Force Node Vehicle Mounted • 8 Formation Nodes Vehicle Mounted • 18 Formation Nodes Transit case • 16 Unit Nodes Vehicle Mounted • 21 Unit Nodes Transit Case • 23 Relay Nodes Transit Case • 3 Tactical Interface Stations • 18 Headquarters on the Move Nodes <p>FOC is currently forecast for achievement in September 2022.</p>	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
Development of two bespoke I-BTN components present technical risks of failure of the components or unsuitability for use with Defence planning processes.	Remediation through early and extensive component testing both in laboratory and field environments, and close engagement with the user community. Design progress and reliability of technical solutions have allowed this risk to be downgraded to Medium.
WGS certification for HQOTM and Medium SATCOM Terminal (MST) systems may take longer than anticipated.	Remediation through conduct of stakeholder working groups, and early and close engagement with WGS certification authorities. HQOTM certification has been downgraded to medium risk as delays introduced by CCP015 allow additional schedule to complete certification. MST certification remains high risk.
Delayed availability of an approved capability baseline for the HQOTM vehicle platform may cause I-BTN re-work (with associated costs and schedule impacts) and delays in establishment of the HQOTM support system.	Close engagement with the vehicle platform Systems Program Office, and Army Capability Manager to provide advance warning of potential baseline changes and to identify support system limitations that require remediation. The sustainment organisation has taken responsibility for support of the vehicle. However, technical certification and consistency of the vehicle platform baseline remain high risk.
Required HQOTM “mission fits” may place design constraints on the HQOTM or require design re-work to accommodate critical emerging requirements.	Remediation through the conduct of working groups with key stakeholders. This risk has been retired as deployability of the HQOTM vehicle fleet is being managed by the sustainment organisation.
Due to operational and exercise requirements, and the aggressive Release 2 training schedule, the responsible Service HQ Training Authority (TA) may not have sufficient time to review and endorse the Learning Management Packages (LMP), and Defence personnel may be unavailable to attend I-BTN training to meet the schedule, resulting in increased Gap Training being required	Remediation through involving the TAs in development of the Training Implementation Plan, close involvement of the TAs during development of the LMPs, and maintaining as much flexibility as possible in the construct of training courses and schedules. The TA has been engaged and prior experience of Release 1 training approval provides confidence that further approvals will go well. Based on this, the risk has been downgraded to Medium.
The platform directed for use by the Commonwealth as the MST trailer chassis may be unsuitable due to its physical characteristics. Additionally platform design changes between prototype and mature states may have critical impacts on the MST design.	Remediation through early MST prototype testing, close engagement between all stakeholders to examine impacts of proposed design changes and alternatives. Increased maturity of the trailer and integration designs has allowed this risk to be reduced to Medium.
Defence test ranges and Boeing environmental test facilities may not be available when required by the project schedule, or may not be suitable in meeting project Verification and Validation requirements.	Remediation through regular engagement with range authorities to confirm schedules, close examination of the suitability of test facility capabilities to meet project V&V requirements, and investigation of alternative test methodologies and/or backup facilities. Changes in test range requirements and progress of test facility certification has provided confidence that the requirements of V&V will be met. This has enabled this risk to be downgraded to Medium.

Emergent Risks (risk not previously identified but has emerged during 2017-18)	
Description	Remedial Action
N/A	N/A

5.2 Major Project Issues

Description	Remedial Action
Some network architecture and application incompatibilities may impact on performance of the I-BTN if not addressed.	Remediation through investigation of alternative architectures and tailored redesign of applications to improve backward compatibility. Progress in design and testing activities has enabled this issue to be downgraded to Medium.
Delays in development and delivery of interfacing projects, such as eDLAN, have led to delays in the I-BTN Release 2 schedule.	Remediation through implementation of an eDLAN interim version, realignment of project schedule dependencies and close engagement with interfacing projects. CCP015 removed the requirement to interface with eDLAN, and the delays to FMR have allowed additional time for delayed sub-projects to be completed. Based on this, the issue has been downgraded to Medium.
The TRES schedule is not achievable within the existing I-BTN FMR schedule due to resourcing constraints.	Seek additional staff to undertake the work. Reallocate work to existing workforce as capacity and priorities permit. This issue has been downgraded to Medium as the change to FMR date has allowed more time for the TRES work to be completed.
Note	
Major risks and issues in Section 5 are excluded from the scope of the review.	

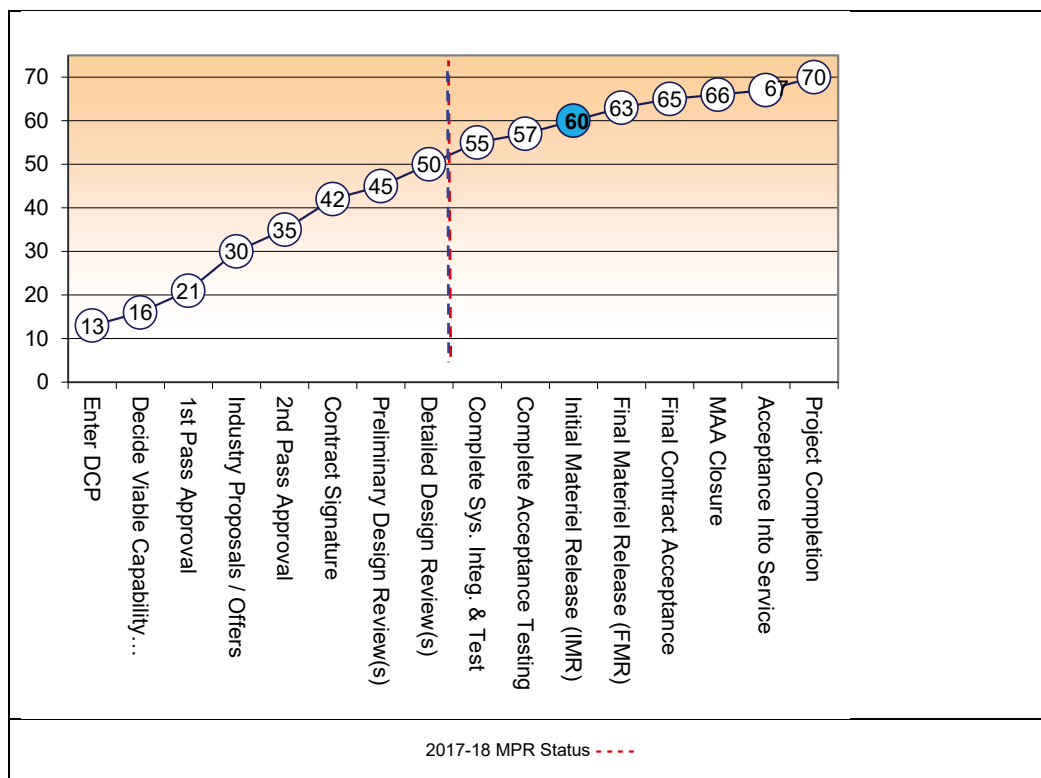
Section 6 – Project Maturity

6.1 Project Maturity Score and Benchmark

Maturity Score		Attributes							Total
		Schedule	Cost	Requirement	Technical Understanding	Technical Difficulty	Commercial	Operations and Support	
Project Stage	Benchmark	10	8	8	8	9	8	9	60
Initial Materiel Release	Project Status	7	7	7	8	7	8	9	53
	Explanation	<p>LAND 2072 Phase 2B has achieved IMR 1A. There are three capabilities releases. Release 1 was required for achievement of IMR 1A, Release 2 is beginning formal testing and Release 3 design is underway. LAND 2072 Phase 2B has assessed this score to cover the whole project (Release 1, 2 and 3).</p> <p>Schedule. Whilst IMR 1A has been achieved, there remain schedule risks to the development of the Release 2&3 capability. The Capability Manager has endorsed a revised schedule that introduces Release 3 and delays FMR/FOC.</p> <p>Cost. The project has applied contingency to treat risks and issues in this financial year. The budget estimate at completion remains within the approved budget and contingent allocation.</p> <p>Requirement. Whilst IMR 1A has been achieved and Release 2 has completed design, Release 3 is yet to complete design and testing requirements.</p> <p>Technical Difficulty. Whilst IMR 1A has been achieved, Release 2 is yet to complete testing requirements and Release 3 is yet to complete design and testing requirements.</p>							

Project Data Summary Sheets

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2018–19 Major Projects Report



Section 7 – Lessons Learned

7.1 Key Lessons Learned

Description	Categories of Systemic Lessons
Collaborative engagement by the Contractor, CASG and the Capability Manager has resulted in better outcomes for the delivered capability.	Requirements Management
Contracting for a performance based support contract at the same time as the acquisition contract results in better design decisions during the acquisition contract.	Contract Management
User engagement during the Mission System Integration Test Events (MSITE) has resulted in an improved capability by early user engagement during the design phase. This also leads to improving the management of user expectations.	Requirements Management

Section 8 – Project Line Management

8.1 Project Line Management as at 30 June 2019

Position	Name
Division Head	Mr Ivan Zlabur
Branch Head	Ms Myra Sefton
Project Director	Mr Michael Peel
Project Manager	CAPT(Army) Sean Cahir

