

APPENDICES

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APPENDIX A: DEFENCE COOPERATION PROGRAM

No changes have been made to the Defence Cooperation Program since the *PBS 2018-19*.

APPENDIX B: TOP 30 ACQUISITION PROJECTS BY 2018–19 FORECAST EXPENDITURE

Table 63: Top 30 Projects by 2018–19 Forecast Expenditure^[1]

Domain/ Project Name	Project Number/ Phase	Approved Project Expenditure \$m	Estimated Cumulative Expenditure to 30 June 2018 \$m	Budget Estimate 2018-19 \$m	Revised Estimate 2018-19 \$m	Variation \$m	Project Performance Update and Explanation of Variation
Air Domain							
New Air Combat Capability (NACC)	AIR 6000 Phase2A/B	16,586	2,669	1,821	1,933	112	This project is being delivered as planned, with the forecast variation primarily attributable to foreign exchange updates.
Maritime Patrol and Response Aircraft System	AIR 7000 Phase2	5,376	3,428	592	409	-183	During 2018-19, the project will take delivery of the eighth aircraft. The forecast variation is due to the bringing forward of aircraft payments into 2017-18 from 2018-19, re-aligning payments with available budget and aircraft delivery, and foreign exchange updates.
Pilot Training System	AIR 5428 Phase1	1,244	324	403	379	-23	During 2018-19, the project will now deliver 22 training aircraft (for a progressive total of 35), six flight simulators, training courseware and associated learning environment elements to support the commencement of pilot and flying instructor training at RAAF East Sale, Victoria in January 2019 and RAAF Base Pearce, Western Australia in May 2019. The forecast variation is due to the re-programming of aircraft and flight simulator payments, courseware and other relevant activities to align to the adjusted delivery schedule and foreign exchange update.
Multi-Role Helicopter (MRH)	AIR 9000 Phase2	3,776	3,111	186	148	-38	The introduction of the MRH90 into 6 Aviation Regiment in support of Special Operations as well as key capabilities for Army and Navy operations continues to be a key focus for 2018-19, including a replacement Cargo Hook, Fast Roping Rappelling and Extraction System and Gun Mount. The forecast variation reflects the re-prioritisation of delivery of key capabilities to support integration of MRH-90 into 6 Aviation, with non-essential elements being delayed.

Table 63: Top 30 Projects by 2018–19 Forecast Expenditure (Continued)

Domain/ Project Name	Project Number/ Phase	Approved Project Expenditure \$m	Estimated Cumulative Expenditure to 30 June 2018 \$m	Budget Estimate 2018-19 \$m	Revised Estimate 2018-19 \$m	Variation \$m	Project Performance Update and Explanation of Variation
Air Domain (Continued)							
Airborne Early Warning & Control Interoperability Compliance Upgrade	AIR 5077 Phase5A	1,191	440	215	177	-38	Detailed Design of Release 2 of the interoperability upgrades is delayed at least six months against plan and delivery schedule with the effect of a further six month delay over the execution phase to Operational Capability 2 in early 2022. Mitigation options have been endorsed to reduce the total 12 month delay. The forecast variation is due to Release 2 with significant Prime Contractor effort and associated cost has been deferred to later years, deferment of invoice payments from May and June 2019 into July and foreign exchange updates.
EA-18G Growler Airborne Electronic Enabling	AIR 5349 Phase3	3,500	2,301	197	193	-4	The acquisition of the project is as forecast in the Defence <i>PBS 2018-19</i> . There will be no significant variation to financial estimate for delivery of EA-18G Growler Airborne Electronic Enabling.
Future Naval Aviation Combat System (FNACS)	AIR 9000 Phase8	3,212	2,220	139	167	28	As of December 2018, the Seahawk Romeo capability is supporting eight embarked flights on Navy ships. The forecast variation is due to an earlier than expected recommencement of weapons deliveries and the implementation of the Air Warfare Destroyer ship alteration package and availability of ships for modifications.
Helicopter Aircrew Training System	AIR 9000 Phase7	481	293	90	89	-1	Initial helicopter training courses were successfully completed during 2018. Full operational capability is on track to be achieved in 2019. There will be no significant variation to financial estimate for delivery of Helicopter Aircrew Training System.
Conversion of additional KC-30A to multi-role Tanker Transport	AIR 7403 Phase3	895	590	78	60	-19	The forecast variation is due to the retirement of risk within the prime contract and a revised schedule for the delivery of spares and support equipment.
Battlefield Airlift - Car bou Replacement	AIR 8000 Phase2	1,449	785	68	69	1	The acquisition of the project is as forecast in the Defence <i>PBS 2018-19</i> . There will be no significant variation to financial estimate for delivery of Battlefield Airlift - Car bou Replacement.

Table 63: Top 30 Projects by 2018–19 Forecast Expenditure (Continued)

Domain/ Project Name	Project Number/ Phase	Approved Project Expenditure \$m	Estimated Cumulative Expenditure to 30 June 2018 \$m	Budget Estimate 2018-19 \$m	Revised Estimate 2018-19 \$m	Variation \$m	Project Performance Update and Explanation of Variation
Air Domain (Continued)							
Airborne Early Warning and Control Acquisition	AIR 5077 Phase3	3,890	3,630	55	43	-13	The forecast variation is due to delays in Radar Multi Channel Recorder and Host Processor Software Improvements, and foreign exchange updates.
Joint Domain							
Battlefield Command Systems (Tranche 2)	LAND 200 Phase2-A	960	99	206	227	21	The forecast variation is primarily attributable to the re-scheduling of activities from 2017-18 to 2018-19.
Battlespace Communications System (Land)	JP 2072 Phase2B	945	332	136	165	28	The forecast variation is primarily attributable to the higher than expected costs for delivery of the Integrated Battlefield Telecommunications Network, as a result of the late delivery of the Enhanced Deployable Local Area Network as government furnished equipment.
Fixed Base Defence Air Traffic Management & Control System	AIR 5431 Phase3	977	155	116	125	9	The forecast variation is primarily attributable to the rescheduling of payments for the Autotrac II Air Traffic Control System.
ADF Identification Friend or Foe and Automatic Dependent Surveillance Broadcast	JNT 90 Phase1	436	113	96	90	-6	The forecast variation is primarily attributable to the re-scheduling of activities to integrate this system into the KC-30A multi-role tanker transport aircraft.
Satellite Ground Station (SGS) East and Wideband SATCOM Network Management System	JP 2008 Phase5B2	233	57	76	60	-17	The forecast variation is primarily attributable to the re-scheduling of non-critical path milestones for the delivery of this system.
Jindalee Operational Radar Network (JORN) Phase 6	AIR 2025 Phase6	1,118	42	71	66	-5	The forecast variation is primarily attributable to the re-scheduling of prime contract payments.
Fixed Base Defence Air Traffic Management & Control System	AIR 5431 Phase2	200	76	60	73	14	The forecast variation is primarily attributable to the re-scheduling of prime contract payments.

Table 63: Top 30 Projects by 2018–19 Forecast Expenditure (Continued)

Domain/ Project Name	Project Number/ Phase	Approved Project Expenditure \$m	Estimated Cumulative Expenditure to 30 June 2018 \$m	Budget Estimate 2018-19 \$m	Revised Estimate 2018-19 \$m	Variation \$m	Project Performance Update and Explanation of Variation
Land Domain							
Overlander - Medium Heavy Capability (MHC) Truck and Trailer components	LAND 121 Phase3B	3,401	1,663	628	639	11	The project continues to deliver initial capability to Army's 3rd Brigade, RAAF units and other supporting organisations within Defence. The forecast variation reflects foreign exchange updates.
Overlander - Protected Mobility Vehicle - Light (Hawkel)	LAND 121 Phase4	1,979	463	396	203	-193	The forecast variation is primarily due to ongoing vehicle reliability issues, which is expected to delay the commencement of full rate production.
Night Fighting Equipment Replacement	LAND 53 Phase1BR	441	111	90	96	6	The project continues to deliver on schedule. The financial variation reflects foreign exchange updates.
Chemical Biological Radiological Nuclear Defence (CBRND)	JP 02110 PH1B	256	8	54	24	-30	The project has successfully negotiated acquisition and support contracts with the preferred tenderer, which were signed on July 2018. The forecast variation reflects the agreed contract payment schedule.
Soldier Enhancement Version 2 – Lethality	Land 125 Phase3C	463	279	53	50	-3	The project remains on schedule and within budget. The forecast variation reflects the value of deliverables that were originally planned for delivery in 2018-19 but were received ahead of schedule and were accepted and paid for in 2017-18.
Maritime Domain							
Future Submarine Design and Construction	SEA 1000 Phase1B	2,269	364	418	456	38	The forecast variation is primarily due to reprogramming for the extension of the Design and Mobilisation Contract.
Air Warfare Destroyer Program	SEA 4000 Phase3	9,108	7,586	376	226	-150	HMAS <i>Brisbane</i> , was delivered and subsequently commissioned in October 2018. The Program is on track to achieve the other key activities identified during <i>PBS 2018-19</i> . The forecast variation primarily relates to reprogramming of major contract costs and AEGIS FMS estimates in line with expected expenditure and as per the current Air Warfare Destroyer schedule.

Table 63: Top 30 Projects by 2018–19 Forecast Expenditure (Continued)

Domain/ Project Name	Project Number/ Phase	Approved Project Expenditure \$m	Estimated Cumulative Expenditure to 30 June 2018 \$m	Budget Estimate 2018-19 \$m	Revised Estimate 2018-19 \$m	Variation \$m	Project Performance Update and Explanation of Variation
Maritime Domain (Continued)							
Maritime Operational Support Capability	SEA 1654 Phase3	1,072	356	280	286	6	Nuship Supply was successfully launched on the 23 Nov 2018 as planned in Ferrol, Spain. Keel laying for Nuship Stalwart occurred on the 24 November 2018. The forecast variation is primarily due to the increase in Contract Change Proposals for the Prime Contract relating to Training Development and spares.
Offshore Patrol Vessel - Batch 1	SEA 1180 Phase1-A	3,742	150	274	221	-53	Build of the first two Offshore Patrol Vessels commenced in South Australia November 2018, with the build for the remaining 10 to commence in Western Australia in 2020. The project is meeting its agreed schedule. The forecast variation is primarily due to the later than expected signature of the acquisition contract and consequent flow down to planned payment dates.
Anzac Air Search Radar Replacement	SEA 1448 Phase4B-A	429	133	84	89	5	The first radar system remains scheduled to be delivered and fitted in 2019. The forecast variation is primarily due to payments for the Air Search Radar Acquisition Contract being made in 2018-19 rather than 2017-18.
Pacific Patrol Boat Replacement	SEA 3036 Phase1	505	50	72	71	-1	The project is progressing in alignment with plan and has achieved Initial Material Release and Initial Operational Capability within the financial year, marked by acceptance of the first of 21 boats in November 2018 and simultaneous handover of the boat to Papua New Guinea. There will be no significant variation to financial estimate for delivery of Pacific Patrol Boat Replacement.
Future Frigate - Design and Construction	SEA 5000 Phase1	6,307	264	52	222	170	The variation between the Budget and Revised estimates is due to inclusion of funding allocation post Government approval in June 2018, for the Design and Production phase of the project.

Table 63: Top 30 Projects by 2018–19 Forecast Expenditure (Continued)

Domain/ Project Name	Project Number/ Phase	Approved Project Expenditure \$m	Estimated Cumulative Expenditure to 30 June 2018 \$m	Budget Estimate 2018-19 \$m	Revised Estimate 2018-19 \$m	Variation \$m
Total Top 30 Projects (Gross Plan)						
		76,441	32,092	7,382	7,056	-326
Other Approved Project Gross Plans				1,206	1,953	747
Total – Approved Projects (Gross Plan)				8,588	9,009	421
Management Margin: Slippage				-885	-1,199	-314
Payments Required for the Approved Program				7,703	7,810	107

APPENDIX C: TOP 30 SUSTAINMENT PRODUCTS BY 2018–19 FORECAST EXPENDITURE

Table 64: Top 30 Sustainment Products by 2018–19 Forecast Expenditure

Domain/ Project Name	Product Serial	Budget Estimate 2018-19 \$m	Revised Estimate 2018-19 \$m	Variation \$m	Project Performance Update and Explanation of Variation
Air Domain					
F/A-18F Super Hornet Weapon System	CAF21	414	436	21	The forecast variation is primarily attributable to foreign exchange updates.
Airborne Early Warning and Control System - AEW/C	CAF20	217	224	7	The forecast variation is primarily attributable to foreign exchange updates.
Multi Role Helicopter - TLH MRH90	CA48	215	234	19	Aircraft availability continues to be a key focus for 2018-19, with work to optimise MRH90 scheduled maintenance arrangements continuing along with optimisation of operational maintenance support arrangements. Further development of Taipan First Of Class Flight Trails is currently scheduled for 2nd Quarter 2019. The forecast variation is due to the Collective Bargaining Arrangements with Nahema being signed off for the realisation of technical and economic benefits for the international NH90 community and to address the forecast Rate of Effort and capability modifications under the Prime Contract.
F/A-18 Hornet Weapon System	CAF02	190	195	5	The forecast variation is primarily attributable to foreign exchange updates.
Armed Reconnaissance Helicopter Weapons System	CA12	153	145	-8	Final Operational Capability for Tiger was declared in 2016 with nine caveats. The final two caveats were closed by Chief of Army on the September 2018. During 2018-19, focus remains on the development of the Tiger's amphibious capability for operations in the new Canberra Class Landing Helicopters docks and preparation for USA WAVERIDER 2019 to be conducted in 2019-20. The forecast variation is due to the latest forecast in Rate of Effort and scheduled completion of some minor Engineering Modifications.
C-17 Heavy Air Lift Weapons System	CAF19	126	133	7	The forecast variation is primarily attributable to foreign exchange updates.
MH-60R Seahawk Romeo Helicopter	CN35	124	119	-5	As of December 2018, the Seahawk Romeo capability is supporting eight embarked flights in Navy ships. Australian-led modifications to the aircraft have been progressively embodied with the program scheduled for completion in the second quarter of 2019. The forecast variation is due to reduced support requirements of Seahawk Romeo sustainment delivery activities.

Table 64: Top 30 Sustainment Products by 2018–19 Forecast Expenditure (Continued)

Domain/ Project Name	Product Serial	Budget Estimate 2018-19 \$m	Revised Estimate 2018-19 \$m	Variation \$m	Project Performance Update and Explanation of Variation
Air Domain (Continued)					
Lead-In Fighter Hawk 127 Weapon System	CAF03	123	135	12	The forecast variation is primarily attributable to the inclusion of contracted services to provide the required level of Aerial Opposing Forces and Target Support within the Product Schedule, and foreign exchange updates.
C130J-30 Hercules Weapon System	CAF06	101	105	4	The forecast variation is primarily attributable to foreign exchange updates.
KC-30A Weapon System Multi-role Tanker Transport	CAF22	89	90	1	There will be no significant variation to financial estimate for delivery of KC-30A Weapon System Multi-role Tanker Transport.
P-8A Poseidon Maritime Surveillance Aircraft	CAF35	87	109	22	The forecast variation is due to the realignment of sustainment delivery activities from AP-3C Orion Weapon System, as well as foreign exchange updates.
C-27J Spartan Battlefield Airlifters	CAF34	66	68	2	The forecast variation is primarily attributable to foreign exchange updates.
AP-3C Orion Weapon System	CAF04	61	52	-9	The forecast variation is primarily attributable to the net of the realignment of sustainment delivery activities to P-8A Poseidon Maritime Surveillance Aircraft and the amalgamation of the Electronic Warfare Mission Support System into the AP-3C Product Schedule.
Joint Domain					
Air Force Munitions and Air Force Guided Weapons	CAF32 & CAF33	91	95	4	The forecast variation is primarily attributable to foreign exchange updates.
Army Munitions and Army Guided Weapons	CA59 & CA60	207	160	-47	The forecast variation is primarily attributable to the transfer of explosive ordnance manufacturing aspects to Explosive Ordnance Manufacturing Facilities, and foreign exchange updates.
ATC Capability (Air Traffic Control)	CAF12	64	68	4	The forecast variation relates to rescheduling for procurement and installation of Fixed Tactical Air Navigation Systems.
Navy Munitions and Navy Guided Weapons	CN38 & CN37	108	97	-10	The forecast variation is primarily attributable to the transfer of explosive ordnance manufacturing aspects to Explosive Ordnance Manufacturing Facilities, and foreign exchange updates.
Wide Area Surveillance (OTHR)	CAF13	89	89	0	The expenditure against the planned budget is on track.

Table 64: Top 30 Sustainment Products by 2018–19 Forecast Expenditure (Continued)

Domain/ Project Name	Product Serial	Budget Estimate 2018-19 \$m	Revised Estimate 2018-19 \$m	Variation \$m	Project Performance Update and Explanation of Variation
Land Domain					
ADF Clothing	CA39	113	111	-2	The product continues to meet the ADF's clothing and footwear requirements. The forecast variation reflects revised demand planning and inventory targets that have resulted in cost savings that have been reallocated to existing sustainment funding pressures.
ADO Commercial Vehicles Fleet	CA19	80	78	-2	The product continues to focus on improving overall vehicle utilisation and rationalisation and reducing costs. The forecast variation is the result of enhancements to fleet management and vehicle replacement planning that has been driven by improvements in the data being provided by the whole of government Fleet Services Contractor.
Health Systems	JHC01	53	61	8	The forecast variation is due to bringing forward critical hardware procurements into 2018-19 for continued modernisation across garrison services.
Maritime Domain					
Adelaide Class Frigate	CN01	70	74	4	The forecast variation is due to the SM2 project transitioning to sustainment and foreign exchange fluctuations.
Anzac Class Frigate	CN02	374	367	-8	There will be no significant variation to financial estimate for delivery of Anzac Class Frigate.
Armidale Class Patrol Boat	CN09	70	98	28	The forecast variation is due to funding provided to Armidale Class Patrol Boat for additional identified planned and corrective maintenance requirements.
Destroyer Designated Guided (Air Warfare)	CN40	163	161	-2	There will be no significant variation to financial estimates for delivery of Destroyer Designated Guided (Air Warfare).
Collins Class Submarine	CN10	592	595	4	Expenditure is as per work program and full achievement is expected.
Hydrographic Support	CN46	68	74	6	The forecast variation is due to the introduction into service of the Rapid Environmental Assessment capability and safety and seaworthiness requirements for the Hydrographic fleet.
Canberra Class Landing Helicopter Dock	CN34	118	128	10	The forecast variation is due to funding adjustments for additional identified engineering activities and support requirements.
Maritime Cross Platform	CN49	64	79	14	The forecast variation is due to funding provided to Maritime Cross Platform for additional procurement of common material across multiple Navy platforms.
Mine Hunter Coastal	CN14	66	70	4	The forecast variation increase is due to additional activities undertaken and subsequent adjustment to planned and corrective maintenance work.

Table 64: Top 30 Sustainment Products by 2018–19 Forecast Expenditure (Continued)

Domain/ Project Name	Product Serial	Budget Estimate 2018-19 \$m	Revised Estimate 2018-19 \$m	Variation \$m
Total - Top 30 Products				
		4,358	4,450	92
Other Approved Sustainment Product Estimates		1,660	1,935	275
Total Sustainment Product Funds Available		6,018	6,385	367
Support to Operations		323	323	0
Total Sustainment and Operations Funding		6,341	6,708	367

APPENDIX D: FACILITIES AND INFRASTRUCTURE PROGRAM

Table 65: Approved Major Capital Facilities Projects by State and Federal Electorate

	State and Electorate	Total Estimated Expenditure \$m	Cumulative Expenditure to 30 June 2018 \$m	2018-19 Budget Estimate \$m	2018-19 Revised Estimate \$m	Variation \$m	Project Performance Update and Explanation of financial variation	
New Air Combat Capability Facilities Project (AIR 6000 Phase 2A/B)^[1]								
	RAAF Williamtown	NSW - Paterson	-	797.8	93.8	92.1	-1.7	The financial variation is a result of change in delivery schedule
	RAAF Tindal	NT - Lingiari	-	224.7	128.7	174.3	45.6	The financial variation is a result of change in delivery schedule
	RAAF Darwin	NT - Solomon	-	-	0.1	0.0	-0.1	The financial variation is a result of change in delivery schedule
	RAAF Townsville	QLD - Herbert	-	-	-	0.0	0.0	
	RAAF Edinburgh	SA - Wakefield	-	-	-	0.0	0.0	
	RAAF Pearce	WA - Pearce	-	-	-	0.0	0.0	
	RAAF Learmonth	WA - Durack	-	-	0.1	0.0	-0.1	The financial variation is a result of change in delivery schedule
	RAAF Curtin	WA - Durack	-	-	-	0.0	0.0	
	RAAF Scherger	QLD - Leichhardt	-	-	-	0.0	0.0	
	Defence Establishment Myambat	NSW - Hunter	-	2.1	3.3	0.0	-3.3	The financial variation is a result of change in delivery schedule
	Total		1,485.8	1,024.6	226.0	266.4	40.4	
Enhanced Land Force (ELF) Stage 2^[1]								
	Lone Pine Barracks	NSW - Hunter	-	115.8	-	0.0	0.0	
	Puckapunyal Training Area	VIC - McEwan	-	11.7	-	0.0	0.0	
	Simpson Barracks, Watsonia	VIC - Jagajaga	-	20.2	-	0.0	0.0	
	RAAF Amberley	QLD - Blair	-	9.6	-	0.0	0.0	
	Lavarack Barracks, Townsville	QLD - Herbert	-	66.1	-	0.0	0.0	
	Townsville Training Area	QLD - Kennedy	-	3.9	-	0.0	0.0	
	Greenbank Training Area	QLD - Rankin	-	120.7	-	0.0	0.0	
	Gallipoli Barracks, Enoggera	QLD - Ryan	-	807.9	-	0.0	0.0	
	Wide Bay Training Area	QLD - Wide Bay	-	91.8	-	0.0	0.0	
	Kokoda Barracks, Canungra	QLD - Wright	-	71.8	-	0.0	0.0	
	Cultana Training Area	SA - Grey	-	40.7	15.2	27.2	11.9	The financial variation is a result of change in the delivery schedule

Table 65: Approved Major Capital Facilities Projects by State and Federal Electorate (Continued)

	State and Electorate	Total Estimated Expenditure \$m	Cumulative Expenditure to 30 June 2018 \$m	2018-19 Budget Estimate \$m	2018-19 Revised Estimate \$m	Variation \$m	Project Performance Update and Explanation of financial variation
RAAF Edinburgh	SA - Wakefield	-	34.5	-	0.0	0.0	
Majura Field Training Area	ACT - Fenner	-	22.4	-	0.0	0.0	
Total		1,457.8	1,417.2	15.2	27.2	11.9	
Maritime Patrol Aircraft Replacement (AIR 7000 Phase 2B)^[1]							
RAAF Edinburgh	SA - Wakefield	-	323.0	57.9	138.8	80.8	The financial variation is a result of change in the delivery schedule
RAAF Darwin	NT - Solomon	-	-	75.6	0.0	-75.6	The financial variation is a result of change in the delivery schedule
RAAF Townsville	QLD - Herbert	-	-	-	0.0	0.0	
RAAF Pearce	WA - Pearce	-	-	57.1	0.0	-57.1	The financial variation is a result of change in the delivery schedule
HMAS <i>Stirling</i>	WA - Brand	-	4.5	1.8	0.0	-1.8	The financial variation is a result of change in the delivery schedule
Total		707.9	327.5	192.4	138.8	-53.6	
Hardened & Networked Army Phase 2 Facilities Project^[1]							
RAAF Edinburgh	SA - Wakefield	-	519.9	-	0.0	0.0	
Murray Bridge	SA - Barker	-	29.6	-	0.0	0.0	
Cultana Training Area	SA - Grey	-	5.1	1.3	7.9	6.6	The financial variation is a result of change in the delivery schedule
Total		597.4	554.5	1.3	7.9	6.6	
Larrakeyah Defence Precinct Redevelopment Program							
Larrakeyah Defence Precinct	NT - Solomon	495.5	-	-	22.7	22.7	Project has been approved since the PBS 2018–19
HMAS <i>Cerberus</i> Redevelopment							
HMAS <i>Cerberus</i>	VIC - Flinders	463.1	11.6	100.0	90.0	-10.0	The financial variation is a result of change in delivery schedule
Air Traffic Control Complex Infrastructure Project and Fixed Base Defence Air Traffic Management and Control System (AIR 5431 Phases 2 and 3)^[1]							
RAAF Amberley	QLD - Blair	-	44.6	1.9	6.4	4.5	The financial variation is a result of change in delivery schedule
Army Aviation Centre Oakey	QLD - Groom	-	15.0	9.7	14.9	5.2	The financial variation is a result of change in delivery schedule
RAAF Townsville	QLD - Herbert	-	22.7	11.2	8.7	-2.5	The financial variation is a result of lower than anticipated tender prices
RAAF Richmond	NSW - Greenway	-	11.5	8.6	8.0	-0.6	The financial variation is a result of lower than anticipated tender prices
HMAS <i>Albatross</i>	NSW - Gilmore	-	3.8	5.9	11.6	5.7	The financial variation is a result of change in delivery schedule
RAAF Williamtown	NSW - Paterson	-	21.1	13.4	14.6	1.2	The financial variation is a result of higher than anticipated tender prices

Table 65: Approved Major Capital Facilities Projects by State and Federal Electorate (Continued)

	State and Electorate	Total Estimated Expenditure \$m	Cumulative Expenditure to 30 June 2018 \$m	2018-19 Budget Estimate \$m	2018-19 Revised Estimate \$m	Variation \$m	Project Performance Update and Explanation of financial variation
RAAF East Sale	VIC - Gippsland	-	8.8	0.3	0.7	0.4	The financial variation is a result of higher than anticipated tender prices
RAAF Woomera	SA - Grey	-	0.7	5.1	0.0	-5.1	The financial variation is a result of change in delivery schedule
RAAF Edinburgh	SA - Wakefield	-	7.3	0.5	0.5	0.0	
RAAF Gingin	WA - Pearce	-	4.8	2.4	1.2	-1.2	The financial variation is a result of lower than anticipated tender prices
RAAF Pearce	WA - Pearce	-	17.1	10.2	8.5	-1.7	The financial variation is a result of lower than anticipated tender prices
RAAF Darwin	NT - Solomon	-	8.6	19.7	11.5	-8.2	The financial variation is a result of change in delivery schedule
RAAF Tindal	NT - Lingiari	-	33.7	7.9	5.6	-2.3	The financial variation is a result of lower than anticipated tender prices
Total		409.9	199.8	96.9	92.2	-4.7	
Battlefield Airlifter Facilities (AIR 8004 Phase 2)^[5]							
RAAF Amberley	QLD - Blair	370.4	222.1	80.8	112.2	31.4	The financial variation is a result of change in delivery schedule
HMAS Stirling Redevelopment Stage 3A							
HMAS <i>Stirling</i> , Rockingham	WA - Brand	366.8	53.7	154.6	142.5	-12.1	The financial variation is a result of lower than anticipated tender prices
Growler Airborne Electronic Attack Capability Facilities (AIR 5349 Phase 3)^[1]							
RAAF Amberley	QLD - Blair	-	157.1	77.6	71.2	-6.4	The financial variation is a result of change in delivery schedule
Delamere Weapons Range	NT - Lingiari	-	46.5	16.4	16.4	0.0	
Total		348.6	203.7	94.0	87.6	-6.3	
Pilot Training System Facilities (AIR 5428 Phase 1)^[1]							
RAAF East Sale	VIC - Gippsland	-	163.9	17.8	42.8	24.9	The financial variation is a result of change in delivery schedule
RAAF Pearce	WA - Pearce	-	74.8	7.4	7.4	0.0	
RAAF Edinburgh	SA - Wakefield	-	-	3.7	0.0	-3.7	
RAAF Williamtown	NSW - Paterson	-	-	1.0	0.0	-1.0	
RAAF Gingin	WA - Pearce	-	10.0	2.5	2.5	0.0	
Total		329.8	248.7	32.4	52.6	20.2	The financial variation is a result of change in delivery schedule
LAND 121 Stage 2A ^{[1][5]}							
Lavarack Barracks, Townsville	QLD - Herbert	-	107.5	24.8	23.0	-1.8	The financial variation is a result of change in delivery schedule
Gallipoli Barracks, Enoggera	QLD - Ryan	-	33.2	16.9	11.4	-5.5	The financial variation is a result of lower than anticipated tender prices

Table 65: Approved Major Capital Facilities Projects by State and Federal Electorate (Continued)

	State and Electorate	Total Estimated Expenditure \$m	Cumulative Expenditure to 30 June 2018 \$m	2018-19 Budget Estimate \$m	2018-19 Revised Estimate \$m	Variation \$m	Project Performance Update and Explanation of financial variation
RAAF Williamtown	NSW - Paterson	-	11.8	1.4	0.1	-1.3	The financial variation is a result of lower than anticipated tender prices
Holsworthy Barracks, Holsworthy	NSW - Hughes	-	1.7	-	0.0	-	
Puckapunyal Training Area	VIC - McEwan	-	21.7	1.2	2.1	0.9	The financial variation is a result of higher than anticipated tender prices
Campbell Barracks	WA - Curtin	-	0.8	5.8	5.8	0.0	
RAAF Edinburgh	SA - Wakefield	-	10.3	-	0.0	-	
Robertson Barracks	NT - Lingiari	-	0.8	0.5	0.5	0.0	
RAAF Darwin	NT - Solomon	-	3.2	-	0.0	-	
Total		276.5	190.9	50.5	42.9	-7.6	
RAAF Base Williamtown Redevelopment Stage 2							
RAAF Williamtown	NSW - Paterson	274.0	104.6	83.3	97.1	13.8	The financial variation is a result of change in delivery schedule
Maritime Operational Support Capability Facilities (SEA 1654 Phase 3)^[1]							
HMAS <i>Stirling</i>	WA - Brand	-	-	12.0	5.4	-6.6	The financial variation is a result of change in delivery schedule
Randwick Barracks	NSW - Kingsford Smith	-	-	25.1	21.1	-4.0	The financial variation is a result of change in delivery schedule
Garden Island Defence Precinct	NSW - Sydney	-	-	0.1	0.1	0.0	
Total		231.2	-	37.2	26.6	-10.6	
Explosive Ordnance Logistics Reform Program^[1]							
RAAF Amberley	QLD - Blair	-	0.8	11.2	11.2	0.0	
Mount Stuart	QLD - Kennedy	-	0.4	10.0	10.0	0.0	
RAAF Darwin	NT - Solomon	-	0.6	13.7	13.7	0.0	
Defence Establishment Myambat	NSW - Hunter	-	1.6	25.9	13.4	-12.5	The financial variation is a result of change in delivery schedule
Twofold Bay	NSW - Eden-Monaro	-	0.3	3.1	3.1	0.0	
RAAF Williamtown	NSW - Paterson	-	0.2	-	0.0	-	
HMAS <i>Cerberus</i>	VIC - Flinders	-	0.4	8.7	8.9	0.2	The financial variation is a result of additional costs relating to scope
Mangalore	VIC - Murray	-	0.9	13.3	13.3	0.0	
Point Wilson	VIC - Corio	-	0.4	-	0.0	-	
Fort Direction	TAS - Franklin	-	0.1	2.5	2.7	0.2	The financial variation is a result of additional costs relating to scope

Table 65: Approved Major Capital Facilities Projects by State and Federal Electorate (Continued)

	State and Electorate	Total Estimated Expenditure \$m	Cumulative Expenditure to 30 June 2018 \$m	2018-19 Budget Estimate \$m	2018-19 Revised Estimate \$m	Variation \$m	Project Performance Update and Explanation of financial variation
RAAF Edinburgh	SA - Wakefield	-	0.4	14.6	14.6	0.0	
HMAS <i>Stirling</i>	WA - Brand	-	0.5	10.3	10.3	0.0	
Total		230.9	6.4	113.3	101.3	-12.0	
Campbell Barracks Redevelopment							
Campbell Barracks	WA - Curtin	230.4	192.2	31.4	38.2	6.8	The financial variation is a result of a real cost increase approved by Government.
C-17 Maintenance Facility, Aircraft Apron and Associated Infrastructure (AIR 8000 Phase 3)							
RAAF Amberley	QLD - Blair	219.4	124.7	59.8	43.8	-16.0	The financial variation is a result of change in the delivery schedule
Garden Island (East) Critical Infrastructure Recovery (CIRP) - Stage 1^[6]							
Garden Island Defence Precinct	NSW - Sydney	213.4	4.0	67.4	38.4	-29.0	The financial variation is a result of change in delivery schedule
Garden Island (East) Critical Infrastructure Recovery (CIRP) - Stage 2							
Garden Island Defence Precinct	NSW - Sydney	286.5	-	-	18.0	18.0	Project has been approved since the PBS 2018–19
Joint Health Command Garrison Facilities Upgrades^{[1][6]}							
Simpson Barracks, Watsonia	VIC - Jagajaga	-	-	1.6	0.0	-1.6	The financial variation is a result of change in delivery schedule
Puckapunyal Training Area	VIC - McEwan	-	-	3.3	0.0	-3.3	The financial variation is a result of change in delivery schedule
A bury-Wodonga, South Bandiana	VIC - Indi	-	-	19.0	10.0	-9.0	The financial variation is a result of change in delivery schedule
Royal Military College	ACT - Canberra	-	-	20.0	10.0	-10.0	The financial variation is a result of change in delivery schedule
Holsworthy Barracks	NSW - Hughes	-	-	6.4	4.0	-2.4	The financial variation is a result of change in delivery schedule
Robertson Barracks	NT - Lingiari	-	-	8.0	3.0	-5.0	The financial variation is a result of change in delivery schedule
Larrakeyah Barracks	NT - Solomon	-	-	17.7	2.0	-15.7	The financial variation is a result of change in delivery schedule
Army Aviation Centre Oakey	QLD - Groom	-	-	-	0.0	-	
Gallipoli Barracks, Enoggera	QLD - Ryan	-	-	-	0.0	-	
Campbell Barracks	WA - Curtin	-	-	17.1	7.0	-10.1	The financial variation is a result of change in delivery schedule
RAAF Townsville	QLD - Herbert	-	-	-	0.0	-	
RAAF Pearce	WA - Pearce	-	-	4.0	4.0	0.0	The financial variation is a result of change in delivery schedule
Total		212.5	-	97.1	40.0	-57.1	
Airfield Capital Works P0007 (East Sale, Pearce, Gingin and Oakey)^{[1][6]}							
RAAF East Sale	VIC - Gippsland	-	-	42.0	45.7	3.6	The financial variation is a result of change in delivery schedule
RAAF Pearce	WA - Pearce	-	-	12.6	0.0	-12.6	The financial variation is a result of change in delivery schedule
RAAF Gingin	WA - Pearce	-	-	3.1	0.0	-3.1	The financial variation is a result of change in delivery schedule

Table 65: Approved Major Capital Facilities Projects by State and Federal Electorate (Continued)

	State and Electorate	Total Estimated Expenditure \$m	Cumulative Expenditure to 30 June 2018 \$m	2018-19 Budget Estimate \$m	2018-19 Revised Estimate \$m	Variation \$m	Project Performance Update and Explanation of financial variation
Army Aviation Centre Oakey	QLD - Groom	-	-	11.8	11.8	0.0	The financial variation is a result of change in delivery schedule
Total		149.0	-	69.5	57.5	-12.1	
Defence Terrestrial Communications Network Facilities Upgrade (JP 2047 Phase 3)^[2]							
National		131.1	116.4	8.5	13.8	5.3	The financial variation is a result of variations within the approved project scope
Defence Force School of Signals (DFSS), Redevelopment Project^{[5][6]}							
Simpson Barracks, Watsonia	VIC - Jagajaga	-	93.4	15.9	13.5	-2.4	The financial variation is a result of change in delivery schedule
HMAS Cerberus	VIC - Flinders	-	-	1.4	0.9	-0.5	The financial variation is a result of change in delivery schedule
Total		115.6	93.4	17.3	14.4	-2.9	
Airfield Capital Works P0006 (Curtin, Tindal and Townsville)^{[1][6]}							
RAAF Townsville	QLD - Herbert	-	-	-	0.0	0.0	
RAAF Curtin	WA - Durack	-	15.1	0.1	0.1	0.0	
RAAF Tindal	NT - Lingiari	-	43.3	13.2	7.3	-5.9	The financial variation is a result of lower than anticipated tender prices
Total		95.3	58.4	13.3	7.4	-5.9	
Space Surveillance Telescope (JP 3029 Phase 2)							
Harold E Holt, Exmouth	WA - Durack	79.0	48.4	5.5	31.3	25.9	The financial variation is a result of additional costs to deliver enhanced scope items
Russell Office Precinct Upgrade R5 and R6 Midlife upgrade							
Russell Offices	ACT - Canberra	75.4	6.9	31.0	31.0	-	
Delamere Range Facilities Redevelopment							
Delamere Air Weapons Range	NT - Lingiari	74.4	59.7	11.6	17.1	5.4	The financial variation is a result of higher than anticipated tender prices
Land 17 Phase 1B/1C^[1]							
Gallipoli Barracks, Enoggera	QLD - Ryan	-	8.7	-	0.0	0.0	
Lavarack Barracks	QLD - Herbert	-	10.3	-	0.1	0.0	
Robertson Barracks	NT - Solomon	-	8.4	0.6	6.1	5.5	The financial variation is a result of additional costs to deliver additional approved scope
Puckapunyal Training Area	VIC - McEwan	-	6.3	1.0	1.8	0.8	The financial variation is a result of change in delivery schedule
Campbell Barracks	WA - Curtin	-	2.4	0.7	0.6	-0.1	The financial variation is a result of change in delivery schedule
Holsworthy Barracks	NSW - Hughes	-	3.4	0.4	0.4	0.0	
RAAF Williamtown	NSW - Paterson	-	3.4	0.6	0.9	0.3	The financial variation is a result of change in delivery schedule

Table 65: Approved Major Capital Facilities Projects by State and Federal Electorate (Continued)

	State and Electorate	Total Estimated Expenditure \$m	Cumulative Expenditure to 30 June 2018 \$m	2018-19 Budget Estimate \$m	2018-19 Revised Estimate \$m	Variation \$m	Project Performance Update and Explanation of financial variation
Proof & Experimental Establishment - Port Wakefield	SA - Wakefield	-	1.5	-	0.0	0.0	
Total		57.1	44.2	3.3	9.8	6.4	
Jindalee Operational Radar Networks (JORN) Phase 6 Facilities Project							
Alice Springs	NT - Solomon	50.7	-	-	8.6	8.6	Project has been approved since the PBS 2018–19
REDFIN Infrastructure (JP 2097 Phase 1B)⁽¹⁾							
Holsworthy Barracks	NSW - Hughes	-	17.8	0.1	0.5	0.5	The financial variation is a result of change in delivery schedule
Campbell Barracks	WA - Curtin	-	15.6	0.0	0.2	0.2	The financial variation is a result of change in delivery schedule
Defence Establishment Howard Springs	NT - Solomon	-	6.3	-	0.0	0.0	
Lavarack Barracks	QLD - Herbert	-	3.9	0.0	0.2	0.2	The financial variation is a result of change in delivery schedule
Total		50.5	43.6	0.1	0.9	0.9	
Replacement Aviation Refuelling Vehicles Infrastructure (JP 157 Phase 1)⁽¹⁾							
RAAF Amberley	QLD - Blair	-	-	0.3	0.3	0.0	
RAAF Townsville	QLD - Herbert	-	-	6.2	6.2	0.0	
RAAF Williamtown	NSW - Paterson	-	-	4.5	4.5	0.0	
RAAF Richmond	NSW - Greenway	-	-	3.5	3.5	0.0	
Holsworthy Barracks	NSW - Hughes	-	-	1.7	1.7	0.0	
RAAF Darwin	NT - Solomon	-	-	2.0	2.0	0.0	
Robertson Barracks	NT - Lingiari	-	-	1.9	1.9	0.0	
RAAF Tindal	NT - Lingiari	-	-	2.5	2.5	0.0	
RAAF Learmonth	WA - Durack	-	-	4.9	3.9	-1.0	The financial variation is a result of lower than anticipated tender prices
RAAF Curtin	WA - Durack	-	-	0.1	0.1	0.0	
HMAS <i>Stirling</i>	WA - Brand	-	-	1.3	1.3	0.0	
RAAF Edinburgh	SA - Wakefield	-	-	3.9	3.9	0.0	
Woomera Test Facility	SA - Grey	-	-	1.4	2.4	1.0	The financial variation is a result of higher than anticipated tender prices
Total		40.4	-	34.1	34.1	0.0	
Woomera Range Remediation Facilities (AIR 3024 Phase 1)⁽⁵⁾							
Woomera	SA - Grey	48.6	28.1	1.0	16.3	15.3	The financial variation is a result of change in the delivery schedule

Table 65: Approved Major Capital Facilities Projects by State and Federal Electorate (Continued)

	State and Electorate	Total Estimated Expenditure \$m	Cumulative Expenditure to 30 June 2018 \$m	2018-19 Budget Estimate \$m	2018-19 Revised Estimate \$m	Variation \$m	Project Performance Update and Explanation of financial variation
Puckapunyal Military Area High Voltage Upgrade							
Puckapunyal Training Area	VIC - McEwan	32.7	29.2	1.3	3.3	2.0	The financial variation is a result of enhanced scope to achieve new legislative requirements
Electronic Warfare Operational Support (JP 500 Phase 2)							
RAAF Edinburgh	SA - Wakefield	24.9	9.0	2.4	5.4	3.0	The financial variation is a result of change in the delivery schedule
LAND 155 Enhanced Gap Crossing Capability^[1]							
Wallangarra	QLD - Maranoa	-	5.5	0.9	0.1	-0.8	The financial variation is a result of lower than anticipated tender prices
Lavarack Barracks	QLD - Herbert	-	3.2	0.1	0.5	0.3	The financial variation is a result of lower than anticipated tender prices
Robertson Barracks	NT - Solomon	-	-	0.5	0.0	-0.4	The financial variation is a result of lower than anticipated tender prices
Liverpool Military Area	NSW - Fowler	-	3.9	0.3	0.1	-0.2	The financial variation is a result of lower than anticipated tender prices
Total		23.4	12.6	1.8	0.6	-1.2	
LAND 2110 Phase 1B – Chemical, Biological, Radiological and Nuclear Defence (CBRND) Facilities^[1]							
HMAS <i>Stirling</i>	WA - Brand	-	-	-	0.2	0.2	Project has been approved since the PBS 2018–19
Bindoon Training Area	WA - Durack	-	-	-	0.0	0.0	Project has been approved since the PBS 2018–19
Robertson Barracks	NT - Solomon	-	-	-	0.7	0.7	Project has been approved since the PBS 2018–19
RAAF Edinburgh	SA - Wakefield	-	-	-	0.4	0.4	Project has been approved since the PBS 2018–19
Lavarack Barracks	QLD - Herbert	-	-	-	0.3	0.3	Project has been approved since the PBS 2018–19
Gallipoli Barracks	QLD - Ryan	-	-	-	0.1	0.1	Project has been approved since the PBS 2018–19
RAAF Amberley	QLD - Blair	-	-	-	0.4	0.4	Project has been approved since the PBS 2018–19
Holsworthy Barracks	NSW - Hughes	-	-	-	0.1	0.1	Project has been approved since the PBS 2018–19
Kapooka Military Area	NSW - Riverina	-	-	-	0.3	0.3	Project has been approved since the PBS 2018–19
RAAF Base Wagga	NSW - Riverina	-	-	-	0.1	0.1	Project has been approved since the PBS 2018–19
HMAS <i>Creswell</i>	ACT - Fenner	-	-	-	0.2	0.2	Project has been approved since the PBS 2018–19
Majura Range	ACT - Canberra	-	-	-	0.2	0.2	Project has been approved since the PBS 2018–19
HMAS <i>Cerberus</i>	VIC - Flinders	-	-	-	0.1	0.1	Project has been approved since the PBS 2018–19
Totson Air Weapons Range	VIC - Gippsland	-	-	-	0.1	0.1	Project has been approved since the PBS 2018–19
Total		16.7	-	-	3.2	3.2	

Table 65: Approved Major Capital Facilities Projects by State and Federal Electorate (Continued)

	State and Electorate	Total Estimated Expenditure \$m	Cumulative Expenditure to 30 June 2018 \$m	2018-19 Budget Estimate \$m	2018-19 Revised Estimate \$m	Variation \$m	Project Performance Update and Explanation of financial variation
HMAS Moreton Unit Relocation							
HMAS Moreton	QLD - Griffith	15.6	1.3	8.9	12.6	3.8	The financial variation is a result of change in the delivery schedule
Projects in or about to enter Defects Liability Period^[3]				5.1	4.8	-0.3	The financial variation is a result of change in the delivery schedule
Total		10,288.2		1,748.2	1,758.6	10.2	

Notes

1. These projects cross state and electoral boundaries. Estimated cumulative expenditure to 30 June 2018 and expenditure estimates for 2018-19 are provided in the table per location.
2. This project is delivering facilities at over 200 locations that cross state and electoral boundaries.
3. This amount represents the expenditure estimates for contract administration of nine completed projects during their first year in-use.
4. Sum of the individual items may differ to the totals due to rounding. Budget estimates shown as 0.0 are amounts greater than \$0 but less than \$50,000.
5. Project name was incorrectly reported in the PBS 2018-19.
6. Project name has been updated since the PBS 2018-19.

Explanation of Projects

Information is as reported in the *PBS 2018–19*, with the following updates:

New South Wales

Garden Island (East) Critical Infrastructure Recovery Project (CIRP) Stage 1

This project will address critical structural, condition and engineering services risks on the Cruiser Wharf at Garden Island (East), Sydney, NSW. The project is scheduled for completion by early 2022.

Garden Island (East) Critical Infrastructure Recovery Project (CIRP) Stage 2

This project will provide upgraded wharves and engineering services to address condition, capacity and compliance issues on the Cruiser Wharf at Garden Island (East), Sydney, NSW. This project is scheduled for completion by late 2023.

Queensland

Battlefield Airlifter Facilities (AIR 8004 Phase 2)

This project will provide facilities at RAAF Base Amberley, QLD to accommodate and support the operation of the new C-27J Battlefield Airlifter (BFA) aircraft. The project is scheduled for completion by mid 2019.

Growler Airborne Electronic Attack Capability Facilities (AIR 5349 Phase 3)

This project will provide necessary working accommodation, maintenance, warehousing and training facilities at RAAF Base Amberley, QLD to support the introduction of the Growler Airborne Electronic Attack Capability. The project is scheduled for completion by mid 2020.

C-17 Maintenance Facility, Aircraft Apron and Associated Infrastructure (AIR 8000 Phase 3)

This project will provide a maintenance facility, working accommodation, an aircraft apron and associated facilities at RAAF Base Amberley. This project is scheduled for completion by late 2019.

HMAS Moreton Unit Relocation

This project will ensure that Navy's operational and administrative functions are retained after the partial disposal of surplus Defence land at Bulimba Barracks. The project also seeks to construct new facilities and services on the remaining portion of the site to replace those functions that will be displaced due to the partial disposal of the site. The project is scheduled for completion by mid 2019.

Western Australia

Space Surveillance Telescope (JP 3029 Phase 2)

This project will provide facilities and infrastructure to support the operations of the Space Surveillance Telescope, which will enable ADF space surveillance capability, enhanced global surveillance capability, and an increased ability to track space debris. The project is scheduled for completion by late 2019.

Northern Territory

Delamere Range Facilities Redevelopment

This project will redevelop key range facilities and infrastructure to enable Growler and Mobile Threat Training Emitter Systems capability at Delamere Air Weapons Range, NT. The project is scheduled for completion by early 2019.

Larrakeyah Defence Precinct Redevelopment Program

This program of works will upgrade critical base infrastructure, improve the working environment for Defence personnel including new facilities for North West Mobile Force (NORFORCE), and support future growth on Larrakeyah Defence Precinct. This project will also deliver a new wharf, fuel storage and refuelling capabilities to support Navy's major surface combatant ships operating in the north of Australia. The project is scheduled for completion by mid 2023.

South Australia

Woomera Range Remediation Facilities (AIR 3024 Phase 1)

This facilities project will provide new and upgraded facilities and infrastructure that are capable of facilitating the operation of a new range safety and control system at Woomera, SA. The project is scheduled for completion by early 2019.

Electronic Warfare Operational Support Facilities (JP 500 Phase 2A)

This project will provide facilities to support Joint Project 500 Phase 2A – Electronic Warfare Operational Support, at the Edinburgh Defence Precinct, SA. Construction is complete and the project is currently in the Defects Liability Period.

Victoria

HMAS Cerberus Redevelopment

This project will provide engineering services upgrade, consolidation of Living In Accommodation and Mess Facilities, co-location of Clothing Store with Naval Store, School of Survivability and Ship Safety upgrade, Gym upgrade, Armoury, Explosive Ordnance and Weapons Storage Facility upgrade, and demolition. The project is scheduled for completion by mid 2025.

Puckapunyal Military Area High Voltage Upgrade

The project will provide an essential upgrade to the High Voltage power supply and reticulation network at the Puckapunyal Military Area, VIC. The project is scheduled for completion in early 2019.

Defence Force School of Signals (DFSS) Redevelopment Project

This project will provide working accommodation at Simpson barracks, VIC to support DFSS Maritime Communications and Information Systems Wing at HMAS Cerberus. Construction is scheduled to be complete by early 2020.

Various Locations

LAND 2110 Phase 1B – Chemical, Biological, Radiological and Nuclear Defence (CBRND) Facilities

This project will provide new and refurbished facilities including training and storage facilities at 14 Defence sites to support Australian Defence Force CBRND activities. Construction is scheduled to commence in mid 2019 and is scheduled for completion by late 2019.

Explosive Ordnance Logistics Reform Program

This project will address explosive ordnance storage capacity shortfalls through delivery of new and enhanced explosive ordnance facilities at 12 Defence sites. The project is scheduled for completion by late 2020.

Enhanced Land Force (ELF) Stage 2

This project will provide modern purpose-built facilities and supporting infrastructure for the 8th/9th Battalion, the Royal Australian Regiment and supporting elements of the Army's 7th Brigade at Gallipoli Barracks in Enoggera, Brisbane. The project includes the construction of new and refurbished accommodation and training facilities, as well as common use facilities and site infrastructure upgrades, at Enoggera and other Defence sites across four States and both mainland Territories.

Facilities at Townsville, Singleton, Duntroon and Watsonia provide modern accommodation and supporting infrastructure for increased Army career training. In Sydney, at RAAF Bases Amberley and Edinburgh, and at nine other Defence Training Areas, new and refurbished facilities with site infrastructure upgrades will be provided for Army and joint enabling elements supporting the Enhanced Land Force capabilities.

All works are complete with the exception of works at Cultana Training Area, including delivery of a wash point approved as part of Hardened Networked Army Phase 2 facilities project, which are scheduled for completion by early 2019.

Hardened & Networked Army Phase 2 Facilities Project

This project will provide facilities and infrastructure to support the establishment of a mechanised battle group in the Edinburgh Defence Precinct. Some additional infrastructure has also been provided at Murray Bridge and, will provide infrastructure at the Cultana Training Area. All works are complete with the exception of works at Cultana Training Area which is scheduled for completion by early 2019.

Maritime Patrol Aircraft Replacement (AIR 7000 Phase 2B)

This project will provide new and upgraded facilities and infrastructure to support the introduction of the P-8A aircraft at RAAF Base Edinburgh, SA, RAAF Base Townsville, QLD, RAAF Base Pearce, WA and RAAF Base Darwin, NT, as well as additional explosive ordnance facilities at HMAS Stirling. The project is scheduled for completion by early 2020.

LAND 121 Stage 2A

This project will provide facilities across nine bases to sustain the B-vehicle fleet IAW the Basis of Issue for Army, RAAF and JLC. These facilities will maintain (workshops and repair parts storage), support (fuel points, loading ramps, wash points and weigh bridges) and sustain (shelters and hardstand) the vehicles from vehicle acquisition Phase 3A (G-Wagon), Phase 3B (Light/Light Weight and Medium/Heavy) and Phase 4 (Protected Mobility Vehicles Light). The project is scheduled for completion by early 2020.

Defence Terrestrial Communications Network Facilities Upgrade (JP 2047 Phase 3)

This project will provide upgraded and new communications infrastructure and supporting facilities at multiple Defence owned and leased sites across Australia. The project will support the introduction into service of the new Defence Terrestrial Communications Network. The project is scheduled for completion by early 2019.

Airfield Capital Works P0006 (Curtin, Tindal and Townsville)

This project will resurface asphalt pavement and replace airfield lighting at RAAF Base Curtin, WA, RAAF Base Tindal, NT and RAAF Base Townsville, QLD. The project is scheduled for completion by mid 2022.

REDFIN Infrastructure (JP 2097 Phase 1B)

This project will provide facilities for the Special Operations Vehicle fleet to support mobility and communications for Special Operations Forces. The project is scheduled for completion by late 2019.

LAND 17 Phase 1B/1C

This project will provide facilities at eight Defence establishments to provide the necessary working, storage, maintenance and training facilities to support the additional Lightweight Towed Howitzer and simulation capability being acquired under LAND 17 Phase 1B/1C. The project is scheduled for completion by late 2019.

Maritime Operational Support Capability Facilities (SEA 1654 Phase 3)

This project will provide new and upgraded facilities and infrastructure to support the introduction of a single class of Auxiliary Oiler Replenishment vessels, being provided under SEA 1654 Phase 3 MOSC Project. This project is scheduled for completion by late 2020.

Airfield Capital Works P0007 (Pearce, Gingin, East Sale and Oakey)

This project will provide major maintenance to aircraft pavement and aeronautical ground lighting to RAAF Bases Pearce, Gingin, East Sale and Army Aviation Centre Oakey. The project is scheduled for completion by late 2020.

Joint Health Command Garrison Facilities Upgrades

This project will provide fit for purpose, contemporary Garrison Health Facilities at 13 sites across Australia. The project is scheduled for completion by late 2020.

Replacement Aviation Refuelling Vehicles Infrastructure (JP 157 Phase 1)

This project will provide new and upgraded facilities to support a new fleet of aviation refuelling vehicles at 15 locations. The project is scheduled for completion by late 2019.

LAND 155 Enhanced Gap Crossing Capability

This project will replace current bridging capability with the acquisition of new Military Off The Shelf bridging equipment. Construction is complete and the project is currently in the Defects Liability Period.

Jindalee Operational Radar Networks (JORN) Phase 6 Facilities Project

This project will provide new facilities and infrastructure to support the mid-life upgrade of the JORN capability under AIR2025Ph6, with priority works at the JORN Radar 3 Receive (Mount Everard) and Transmit (Harts Range) sites near Alice Springs, NT. The project is scheduled for completion by late 2020.

APPENDIX E: STATUS OF MAJOR PROJECTS FORESHADOWED FOR GOVERNMENT AND PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS CONSIDERATION (PWC) IN 2018–19

Program of Works Foreshadowed for Consideration and Approval

Information is as reported in the *PBS 2018–19*.

Table 66: Major Capital Facilities Projects Foreshadowed for PWC Consideration and Approval in 2018-19^[1]

	State/Electorate	Actual/Indicative PWC Referral Date	Actual/ Indicative PWC Hearing Date ^[2]	Parliamentary Approval Date ^[3]
LAND 2110 Phase 1B Chemical, Biological Radiological and Nuclear Defence Capability Facilities	Multiple	10 May 2018	30 July 2018	23 August 2018
Jindalee Operational Radar Network Phase 6 Facilities	Multiple	24 May 2018	30 July 2018	23 August 2018
Point Wilson Waterside Infrastructure Remediation, Pt Wilson, Victoria ^[3]	VIC - Corio	28 June 2018	24 August 2018	Early 2019
Naval Guided Weapons Maintenance Facilities Project	NSW - Lindsay	16 August 2018	9 November 2018	Early 2019
LAND 200 Tranche 2 -Battlefield Communications Systems Facilities Project	Multiple	16 August 2018	9 November 2018	Early 2019
LAND 4502 Phase 1 - Additional Chinook Facilities Project	QLD - Herbert	23 August 2018	9 November 2018	Early 2019
Defence High Performance Computing Centre ^[4]	SA - Wakefield	13 September 2018	29 October 2018	Early 2019
Navy Capability Infrastructure Sub-program (combining SEA 5000 Phase 1 Future Frigates and SEA 1180 Phase 1 Offshore Patrol Vessels Project (OPV) Batch 1) ^[5]	Multiple	Early 2019	Mid 2019	Mid 2019
AIR 7000 Phase 1B Remotely Piloted Aircraft System Facilities Project ^[3]	Multiple	Mid 2019	Mid 2019	Mid 2019
HMAS <i>Watson</i> Redevelopment	NSW - Wentworth	Early 2019	Mid 2019	Mid 2019
AIR 555 Phase 1 Airborne Intelligence, Surveillance, Reconnaissance, Electronic Warfare Facilities Project	Multiple	Mid 2019	Mid 2019	Mid 2019

Table 66: Major Capital Facilities Projects Foreshadowed for PWC Consideration and Approval in 2018-19 (Continued)

	State/Electorate	Actual/Indicative PWC Referral Date	Actual/ Indicative PWC Hearing Date ^[2]	Parliamentary Approval Date ^[3]
Singleton Mid-Term Refresh	NSW - Hunter	Early 2019	Mid 2019	Mid 2019
Shoalwater Bay Training Area Redevelopment to Support Amphibious Capability	QLD - Capricornia	Mid 2019	Mid 2019	Late 2019

Notes:

1. The following projects were reported in the PBS as being foreshadowed for approval in FY 2018-19 however have slipped to future financial years. LAND 555 Phase 6 – Force Level Electronic Warfare, Signals Intelligence & Vehicles; SEA 1397 Phase 5D Nulka Assembly Maintenance Facilities; Puckapunyal Health and Wellbeing Centre; Puckapunyal Military Area Mid Term Refresh; KC-30A Multi Role Tanker Airfield Upgrades, RAAF Base Learmonth; and Facility Upgrade Australian Defence Simulation and Training Centre & JP 9711 Phase 1 Core Simulation Capability Facilities.
2. Hearing dates are subject to the Committee's consideration and agreement.
3. Full dates confirm actual Parliamentary approval date. Forecasted approval dates are shown as "Early", "Mid", "Late".
4. Project name has changed since the 2018-19 PBS.
5. The Navy Capability Infrastructure Sub-program was previously reported in the 2018-19 PBS as two projects and now combines SEA 5000 Phase 1 Future Frigates and SEA 1180 Phase 1 Offshore Patrol Vessels Project (OPV) Batch 1

Table 67: Medium Projects Foreshadowed for Consideration and Approval

	State/Electorate	PWC Notification ^[1] ^[2]
Building 106 Extensions and Alterations, Environmental Test Facility Proof and Experimental Establishment Project	SA - Wakefield	10 May 2018
Robertson Barracks Close Training Area Post Acquisition Works Project	NT - Solomon	18 October 2018
2 CER Compensatory Hardstand Project	QLD - Ryan	Early 2019
Facilities for LAND 154 Phase 2 Stage 1 Joint Counter Improvised Explosive Device Capability	Multiple	Early 2019
United States Force Posture Initiative Marine Rotational Force Darwin Modular Accommodation RAAF Base Darwin Project	NT - Solomon	Early 2019
Facilities for SEA 1442 Phase 6 Collins Satellite Communication	Multiple	Mid 2019

Notes:

1. Notification dates are subject to the Committee's consideration and agreement.
2. Full dates confirm actual Committee approval date. Forecasted approval dates are shown as "Early", "Mid", "Late".

Explanation of Projects

Information is as reported in the *PBS 2018–19*, with the following updates:

South Australia

Defence High Performance Computing Centre

This proposed project will provide information and communications technology equipment facilities, and secure meeting, conference and training facilities. Subject to Parliamentary approval, construction is planned to commence in early 2019 and be completed by mid 2020.

Queensland

LAND 4502 Phase 1 – Additional Chinooks Facilities Project

This proposed project will provide new facilities for 5th Aviation Regiment to support the introduction and sustainment of the three new additional CH-47F Chinook Medium Lift Helicopters and associated integration systems at RAAF Base Townsville. Subject to Parliamentary approval, construction is planned to commence in early 2019 and be completed by mid 2021.

Shoalwater Bay Training Area Redevelopment to Support Amphibious Capability

This proposed project will redevelop Shoalwater Bay Training Area (SWBTA) to support the introduction of amphibious capability and ensure the Training Area remains sustainable into the future. SWBTA requires major developments in internal roads, tracks and creek crossings, including redevelopment of training and support facilities. Subject to Government and Parliamentary approval, construction is planned to commence in late 2019 and be completed by mid 2022.

Victoria

Point Wilson Waterside Infrastructure Remediation, Pt Wilson, Victoria

This proposed project will address deficiencies in the current waterside infrastructure at Point Wilson. Subject to Parliamentary approval, construction is planned to commence in early 2019 and be completed by late 2021.

New South Wales

HMAS Watson Redevelopment

This proposed project will deliver a major redevelopment/upgrade of Base Engineering Services and Facilities at HMAS Watson to maintain support for Defence capability, in particular Navy training. Subject to Government and Parliamentary approval, construction is planned to commence in early 2020 and be completed by early 2026.

Naval Guided Weapons Maintenance Facilities Project

This proposed project will provide facilities at Defence Establishment Orchard Hills to support maintenance of guided weapons. Subject to Parliamentary approval, construction is planned to commence in mid 2019 and be completed by late 2020.

Singleton Mid-Term Refresh

This proposed project will remediate Singleton Military Area (SMA) trunk infrastructure to provide sustainment until a decision is made on the long term future of School of Infantry (SOI) in 2025-27. Base Support logistics and administrative functions will be relocated to support SMA Estate Plan beyond the potential relocation of SOI in 2030. Subject to Government and Parliamentary approval, construction is planned to commence in early 2020 and be completed by early 2022.

Various Locations

LAND 200 Tranche 2 – Battlefield Communication System Facilities

This proposed project will provide training and storage infrastructure to support the rollout of Battle Management Systems across the nation. Subject to Parliamentary approval, construction is planned to commence in early 2019 and be completed by late 2019.

Navy Capability Infrastructure Sub-program

This proposed program of works will provide new and upgraded facilities and infrastructure required around Australia to support the Navy's introduction into service and sustainment of the new Hunter Class Frigates (SEA5000 Phase 1) and Arafura Class Offshore Patrol Vessels (SEA1180 Phase 1). Works are planned at HMAS Stirling WA, HMAS Coonawarra NT, HMAS Cairns QLD, Garden Island Defence Precinct NSW, Henderson WA and Osborne SA. Subject to Parliamentary approval, construction is planned to commence in late 2019 and be completed by mid 2027.

SEA 5000 Phase 1 – Future Frigates

This proposed project will provide upgraded facilities and infrastructure to support the introduction of a new class of frigates to replace the current Anzac class Frigates. Subject to Parliamentary approval, construction is planned to commence in mid 2019 and be completed by mid 2025.

SEA 1180 Phase 1 – Offshore Patrol Vessels (OPV) Batch 1

This proposed project will provide berthing, training, maintenance, logistics, and support facilities at HMAS Stirling, HMAS Coonawarra, and HMAS Cairns to support the introduction into service of 12 new OPVs. Subject to Parliamentary approval, construction is planned to commence in mid 2020 and be completed by mid 2027.

AIR 7000 Phase 1B – Remotely Piloted Aircraft System Facilities Project

This proposed project will provide new facilities and infrastructure to support the introduction of the Northrop Grumman MQ-4C Remotely Piloted Aircraft System. Subject to Parliamentary approval, construction is planned to commence in late 2019 and be completed by mid 2023.

AIR 555 Phase 1 – Airborne Intelligence, Surveillance, Reconnaissance, Electronic Warfare (ISREW) Facilities Project

This proposed project will replace the Airborne ISREW capability currently provided by the Air Force's Orion to support intelligence, surveillance, reconnaissance, kinetic and non-kinetic joint effects across all levels of conflict and all operating environments. Subject to Parliamentary approval, construction is planned to commence in late 2019 and be completed by late 2023.

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