# **Project Data Summary Sheet**<sup>223</sup>

Project Number	AIR 9000 Phase 2, 4 and 6
Project Name	MULTI-ROLE
	HELICOPTER
First Year Reported	2008-09
in the MPR	
Capability Type	Replacement
Acquisition Type	Australianised MOTS
Service	Royal Australian Navy and
	Australian Army
Government 1st Pass	Apr 06 (Phases 4 and 6)
Approval	
Government 2nd	Aug 04 (Phase 2), Apr 06
Pass Approval	(Phases 4 and 6)
Total Approved	\$3,747.5m
Budget (Current)	
2014-15 Budget	\$299.4m
Project Stage	Initial Materiel Release
Complexity	ACATI



## Section 1 – Project Summary

1.1 Project Description

The Multi-Role Helicopter (MRH) Program is a key component of the Australian Defence Force (ADF) Helicopter Strategic Master Plan that seeks to rationalise the number of helicopter types in ADF service. The MRH Program consists of three phases of AIR 9000. Phase 2 (12 helicopters) is the acquisition of an additional Squadron of troop lift aircraft for the Australian Army, Phase 4 (28 helicopters) will replace Army's Black Hawk helicopters in the Air Mobile and Special Operations roles, and Phase 6 (6 helicopters) will replace Royal Australian Navy (RAN) Sea King helicopters in the Maritime Support Helicopter role. All three phases are grouped under the AIR 9000 MRH Program.

1.2 Current Status

On 28 November 2011, the then Minister for Defence announced this project as a Project of Concern.

## **Cost Performance**

In-year

The project has spent \$300.5m against a budget of \$299.4m to June 2015. The positive variance of \$1.1m is due to minor adjustments to payment phasings and foreign currency gains.

Project Financial Assurance Statement

As at 30 June 2015, project AIR 9000 Phase 2, 4 & 6 has reviewed the approved scope and budget for those elements required to be delivered by the project. Having reviewed the current financial and contractual obligations of the project, current known risks and estimated future expenditure, Defence considers, as at the reporting date, there is sufficient budget remaining for the project to complete against the agreed scope.

#### 223 Notice to reader

Future dates and Sections: 1.3 (Major Risks and Issues), 4.1 (Measures of Materiel Capability Delivery Performance), 5.1 (Major Project Risks) and 5.2 (Major Project Issues) are out of scope for the ANAO's review of this Project Data Summary Sheet. Information on the scope of the review is provided in the *Independent Review Report by the Auditor-General* in **Part 3** of this report.

### Contingency Statement

The project has applied contingency in the financial year primarily for the treatment of various technical and integration risks, **including acquisition of a replacement cargo hook and Helmet Mounted Sight Display configuration upgrade.** 

### Schedule Performance

The project stopped accepting aircraft in November 2010 due to a number of technical and reliability issues, which impacted the achievement of capability milestones. The Commonwealth recommenced accepting aircraft in November 2011 after negotiating a remediation plan; however acceptance of aircraft was again suspended in February 2012 pending resolution of another technical concern related to the aircraft's cargo hook. In May 2012 the Commonwealth agreed to accept a further four aircraft based on **Airbus Group Australia Pacific's (AGAP), formerly Australian Aerospace**, agreement to the commercial terms associated with the rectification of the cargo hook issue. Scheduled aircraft acceptance recommenced in June 2012 with the most recent aircraft (#33) being accepted in **December** 2014.

As a result of the Deed 2 negotiations with the contractor, the final delivery of aircraft has been rescheduled to July 2017; this, and ongoing technical deficiencies, have resulted in delays to the Final Materiel Release (FMR) and Final Operational Capability (FOC) milestones. However, Navy Initial Operational Capability (IOC) was achieved in February 2015 and Army IOC achieved in December 2014.

**Thirty-three** aircraft have been accepted into service. The first thirteen aircraft require an in-service retrofit to bring them up to the full Phase 2/4/6 capability baseline. As at June **2015** nine of the thirteen aircraft had been retrofitted and accepted back into service, with the thirteenth aircraft scheduled for February 2016.

Remediation to rectify concerns regarding configuration management issues of production aircraft has slowed the acceptance of production aircraft, this in turn will slow the rate of capability growth. The Chief of Army has agreed to delay introduction of MRH90 into 6th Aviation Regiment by 3 years, extending the Black Hawk fleet to 2022 to mitigate the risk to capability. The delayed introduction to 6th Aviation Regiment will mean the growth in total MRH90 flying hours will temporarily stabilise below the planned mature rate.

Both Full Flight Mission Simulators have been accepted (the first in August 2013 and the second in October 2014).

### Materiel Capability Delivery Performance

Following achievement of In-Service Date (ISD) with agreed partial achievement of the contracted MRH capabilities, there has been significant work by both Industry and the Commonwealth to define and implement a series of capability block enhancements to bring the MRH90 to contracted standards. This includes a retrofit program to progressively bring all aircraft up to the contracted standard.

### Note

The capability assessments and forecasts by the project are not subject to the ANAO's assurance review.

#### 1.3 Project Context

#### Background

The Additional Troop Lift project was first foreshadowed in the Defence White Paper 2000.

The MRH Program consists of Phases 2, 4 & 6. Phase 2 was approved initially, providing 12 additional Troop Lift helicopters for Army. Phases 4 & 6 were approved subsequently with Phase 4 which provided 28 helicopters as the replacement of the Australian Army's fleet of 34 S-70A-9 Black Hawk helicopters, again for troop lift capability, and Phase 6 provided 6 helicopters as the replacement of the RAN's fleet of six Sea King helicopters, providing maritime support capability for Navy. The delivery of a 47th MRH90 was negotiated as part of Deed 2. This enables the use of one airframe as a Ground Training Device without impacting the operational fleet.

In total, the AIR 9000 MRH Program will acquire 47 MRH90 aircraft and support systems. Support capabilities, such as Electronic Warfare Self Protection Support System, MRH Software Support Centre, MRH Instrumentation System and a Ground Mission Management System, will be acquired along with training systems and in-service support.

The Phase 2 Acquisition Contract was signed with **AGAP** in June 2005 with the subsequent Sustainment and Program Agreement contracts signed in July 2005.

In November 2005 the Defence Capability and Investment Committee agreed that the way forward was to seek

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a combined first and second pass approval for both Phases 4 and 6 as part of a single approval process.

Cabinet endorsement was gained in April 2006 in a combined first and second pass process for Phase 4 and Phase 6. The agreed method of procurement, a two stage Contract Change Proposal (CCP), resulted in the execution of options contained in the Program Agreement for the procurement of additional aircraft approved under Phases 4 and 6. Initial CCPs for the Acquisition, Sustainment and Program Agreement Contracts were signed in June 2006.

A further CCP for development of associated systems including: Electronic Warfare Self Protection Support System, MRH Software Support Centre, MRH Instrumentation System and a **Ground Mission Management System**, as well as two part task trainers and a number of aircraft options were signed in October 2006.

The three AIR 9000 Phase 2/4/6 contracts (Program Agreement Contract, Acquisition Contract and Sustainment Contract) incorporate the above CCPs. On acceptance of two MRH90, appropriate training, maintenance and supply support, an **In-Service Date** of December 2007 was achieved with aircraft operating under a Special Flight Permit granted by the Chief of Air Force. This triggered the Sustainment Contract to come into effect and all three contracts are now currently active.

The Commonwealth suspended acceptance of aircraft from **AGAP** in November 2010; deliveries recommenced in November 2011 after negotiations of a remediation plan (Deed of Agreement and CCPs) to address a number of engineering and reliability issues. Concurrent with the recommencement of aircraft acceptance in November 2011, the then Minister for Defence announced that the project would be listed as a Project Of Concern citing exceedences of early warning thresholds for schedule, aircraft technical deficiencies and **AGAP's** performance.

The Commonwealth has conducted negotiations with the prime contractor to review and settle commercial, technical and schedule issues resulting in a variation to the original contract signed on 9 May 2013, which has been termed 'Deed 2'. Deed 2, which came into effect on 1 July 2013 re-baselined the delivery schedule and addressed commercial and technical issues.

### Uniqueness

The MRH90 aircraft is based upon the German Army variant of the NH90 Troop Transport Helicopter. The MRH90 design uses well established aerospace technologies, but will introduce new technologies into Army and Navy, primarily in the areas of composite structure, helmet mounted sight and display and fly-by-wire flight control systems.

The MRH Program is providing an MRH90 capability to two main users - Army and Navy. The capability delivery complexity this introduces has been mitigated through an agreement between Chief of Army and Chief of Navy. This provides the project with a single interface for introduction into service issues.

The MRH Program Office Design Acceptance Strategy is dependent upon the French Military Airworthiness Authority's (Direction Générale de l'Armament (DGA)) prior acceptance of the NH90 variants and certification recommendation for the MRH90. The DGA and other National Qualification Organisations' prior acceptance of European NH90s provides confidence for the ADF to leverage off common certification evidence for the MRH90.

#### Major Risks and Issues

Aircraft system lack of maturity has affected the certification schedule of the MRH90 and subsequently the declaration of capability milestones. **Cabin integration issues**, including the Fast Roping and Rappelling Device, the self defence gun mount **and** the cabin seating have impacted the achievement of these capability milestones.

The growing number of engineering change proposals has impacted aircraft delivery. In addition, the project is managing issues affecting MRH90 Search / Landing Light, software upgrades to the Full Flight Mission Simulators, the Electronic Warfare System and the Identify Friend or Foe Mode 4.

The remediation of these deficiencies and issues through replacement or re-design will draw upon significant engineering, logistic and commercial resources and will therefore form the critical path toward achieving the Final Materiel Release.

### **Other Current Sub-Projects**

AIR 9000 Phase 7 Helicopter Aircrew Training System (HATS): HATS will be an important link in the training continuum for inductees to the MRH 90 training system.

# **Section 2 – Financial Performance**

	Date						
		Project Budget					
Ap	r 04	Original Approved		3.3	1		
Au	g 04	Government Second Pass Approval	953.9				
Jur	n 06	Real Variation – Scope	2,565.6		2		
Oc	t 06	Real Variation – Transfer	(219.0)		3		
Oc	t 08	Real Variation – Transfer	(20.0)		4		
Oc	t 08	Real Variation – Scope	31.5		5		
				3.312.0			
Jul	10	Price Indexation		679.8	6		
Jur	15	Exchange Variation		(247 6)	Ū		
lur	n 15	Total Budget		3 747 5			
Jui	110			0,141.0			
1		Project Expenditure					
Pri	or to Jul 14	Contract expenditure – AGAP	(2.140.2)				
		Contract expenditure – CAF Australia	(145.4)				
		Other Contract Payments / Internal Expenses	(144 1)		7		
			(14.1)	(2 429 7)	,		
				(2,425.7)			
	to Jup 15	Contract expenditure - AGAB	(234.8)				
ГТ	10 Jun 15		(234.0)				
		Other Centrest Developments (Internal Evenence)	(19.0)		•		
		Other Contract Payments / Internal Expenses	(40.1)	(200 5)	0		
				(300.5)			
Jur	า 15	I otal Expenditure		(2,730.2)			
Jur	า 15	Remaining Budget		1,017.3			
No	tes						
1	This project's Approval.	s original DMO budget amount is that prior to	achieving Se	cond Pass Gov	vernment		
2	Incorporation (Maritime Sup	of AIR 9000 Phase 4 (Black Hawk Upgrade/F oport Helicopter).	Replacement) a	and AIR 9000 I	Phase 6		
3	The funding related to facilities elements of the project that will be managed by Defence Support and Reform Group (DSRG).						
4	Transfer to DSRG for Facilities Infrastructure						
5	Real Cost Increase funding for Full Flight Mission Simulator.						
6	Up until July impact of this result of out-to	2010, indexation was applied to project budgets approach was \$556.1m. In addition to this amour urning was a further \$123.7m having been applied	s on a periodic at, the impact or to the remaining	basis. The cunner the project buc g life of the proje	imulative Iget as a ct.		
7	Other expend expenditure n	iture comprises: operating expenditure, contractors ot attributable to the aforementioned contracts and	s, consultants, c minor contract	contingency, othe expenditure.	er capital		
8	Other experion operating ex attributable t	nditure: \$31.5m for Spares and Support an penditure, contractors, consultants, contingen to the aforementioned contracts.	d Test Equip	ment, and \$14 capital expendi	l.6m for ture not		

2.1 Project Budget (out-turned) and Expenditure History

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## 2.2A In-year Budget Estimate Variance

	<u> </u>		
Estimate	Estimate	Estimate	Explanation of Material Movements
PBS \$m	PAES \$m	Final Plan \$m	
285.7	267.7	299.4	The variance between PBS and PAES estimates is due to foreign exchange reduction and reprogramming of prime contract milestone deliverables. The variance between PAES and Final Plan estimates primarily reflects delivery of Spares and Support and Test Equipment.
Variance \$m	(18.0)	31.7	Total Variance (\$m): 13.7
Variance %	(6.3)	11.8	Total Variance (%): 4.8

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

Z.ZD III your D	uuget/Experie	alture vullarit		
Estimate Final Plan \$m	Actual \$m	Variance \$m	Variance Factor	Explanation
			FMS	The \$1.1m overspend
			Overseas Industry	reflects:
		1.8	Local Industry	<ul> <li>adjustments to payment</li> </ul>
			Brought Forward	phasings across various
			Cost Savings	contracts \$1.8m; and
		(0.7)	FOREX Variation	<ul> <li>foreign currency payment</li> </ul>
			Commonwealth Delays	gains to June (-\$0.7m).
			Additional Government	
			Approvals	
299.4	300.5	1.1	Total Variance	
		0.0	% Variance	

### 2.3 Details of Project Major Contracts

		Signaturo	Price at					
Cor	ntractor	Date	Signature \$m	30 Jun 15 \$m	Тур	e (Price Basis)	Form of Contract	Notes
AGA	Р	Jun 05	846.3	2,805.1	,	VARIABLE	ASDEFCON (Strategic)	1, 2, 3, 4
CAE Austr	alia	Dec 07	180.5	176.3	VARIABLE ASDEFCON (Complex)		ASDEFCON (Complex)	4
Notes								
1	This contract also includes an Electronic Warfare Self Protection Support System, MRH Software Support System, MRH Instrumented System and 23 <b>Ground Mission Management System</b> (GMMS) (4 Fixed GMMS, 7 Deployable GMMS, 1 Reduced, 9 Light and 2 interim GMMS). Contract Base date is January 2004.							
2	The MRH Instrumented System includes an airborne instrumentation pallet, some ground based instrumentation and three aircraft (from the total fleet of 47) that have provisions to have the instrumentation pallet installed.							
3	The increase from the original contract value is predominantly due to the increase in aircraft ordered and associated systems following government approved scope changes as described in Section 1.3. Since 1 July 2014, there have been three key CCPs processed for a new cargo hook, for the Aircraft Systems Trainer and for Helmet Mounted Sight Display Modification from Configuration 1 to Configuration 3.							
4	Contract value as at 30 June 2015 is based on actual expenditure to 30 June 2015 and remaining commitment at current exchange rates, and includes adjustments for indexation (where applicable).							
Contractor		tor	Quantiti	es as at		Sco	ne	Notos
	Contrac	101	Signature	30 Jun 15		300	he	Notes
AGA	P		12	47	Ν	/IRH90 Aircraft		1
CAE	Australia		2	2	F	Full Flight and Mis	sion Simulator	

## Major equipment received and quantities to 30 Jun 15

33 MRH aircraft have been accepted to date with some remaining for retrofit to achieve the current baseline configuration. Both Full Flight Mission Simulators have been accepted by the Commonwealth.

#### Notes

1 The delivery of a 47th MRH90 was negotiated as part of Deed 2. This enables the use of one airframe as a Ground Training Device without impacting the operational fleet.

# **Section 3 – Schedule Performance**

Review	N	Major System / Platform Variant	Original Planned	Current Planned	Achieved /Forecast	Variance (Months)	Notes
Syster	n	MRH aircraft - Phase 2	Aug 05	Oct 05	Sep 05	1	1
Requirements		MRH aircraft - Phase 4/6	Apr 07	Apr 07	May 07	1	1
		MRH Software Support Centre	N/A	Mar 07	Apr 07	1	
		Electronic Warfare Self Protection Support System	N/A	N/A	Nov 05	N/A	
		Ground based Mission planning and Management System	Oct 05	Oct 05	Feb 07	16	2
		MRH Instrumented System	N/A	Jun 07	Jul 07	1	
		Full Flight and Mission Simulators	May 08	Nov 08	Mar 09	9	3
System Design         Full Flight and Mission Simulators         Oct 08         Mar 09			Jun 09	8	3		
Prelim	inary	MRH aircraft - Phase 2	Jan 06	Jan 06	Apr 06	3	
Desigr	n	MRH aircraft - Phase 4/6	N/A	N/A	Jun 08	N/A	
		MRH Software Support Centre	N/A	Jun 07	Jun 07	0	
		Electronic Warfare Self Protection Support System	Mar 06	Mar 06	May 06	2	
		Ground based Mission planning and Management System	Jul 06	Apr 07	Jun 07	11	2
		MRH Instrumented System	N/A	Jun 07	Jul 07	1	
		Full Flight and Mission Simulators	Feb 09	Sep 09	Oct 09	8	3
Critical Design		MRH aircraft - Phase 2	May 06	May 06	Jun 06	1	
		MRH aircraft - Phase 4/6	Aug 08	N/A	Oct 08	2	
		MRH Software Support Centre	N/A	Oct 07	Sep 07	(1)	
		Electronic Warfare Self Protection Support System	Sep 06	Sep 06	Oct 06	1	
		Ground based Mission planning and Management System	Nov 06	Nov 07	Jul 08	20	2
		MRH Instrumented System	N/A	Jun 08	Jun 08	0	
		Full Flight and Mission Simulators	Aug 09	Feb 10	Apr 10	6	3
Notes							
1	Delays i aircraft s	n the Systems Engineering process h system, with the MRH90 variant being	ave resulted unique in se	I from the m ome ways.	ore developi	mental natur	e of the
2	Ground delivery	Mission Management System softwassip.	are delays a	are directly	attributable	to aircraft so	chedule
3	Full Flig requiren in the pr	ht Mission Simulators design review of nents into a suitable System and Sub ime contractor establishing a vital sub	delays stem system Spe contract wit	primarily from primarily from prification. The the aircraft	om slow Con This was com ft manufactur	itractor deriv pounded by rer.	ation of delays

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Test a Evalu	and ation	Major System / Platform Variant	Original Planned	Current Planned	Achieved /Forecast	Variance (Months)	Notes	
Syste	m	MRH aircraft - Phase 2	Jul 06	Nov 06	Dec 06	5		
Integ	ration	MRH aircraft - Phase 4/6	N/A	N/A	N/A	N/A	1	
		MRH Software Support Centre	N/A	Oct 08	Nov 08	1		
		Electronic Warfare Self Protection Support System	N/A	N/A	Nov 07	N/A		
		Ground based Mission planning and Management System	N/A	N/A	N/A	N/A	2	
		MRH Instrumented System	Nov 08	May 09	Dec 09	13	3	
		Full Flight and Mission Simulators	Jun 11	Sept 11	Sep 11	4	4	
Acce	otance	Type Acceptance Review Special Flight Permit 1	Oct 07	N/A	Dec 07	2	5	
		Australian Military Type Certificate	Dec 08	Dec 10	Apr 13	52	6	
		Full Flight and Mission Simulator #1	Jul 12	Aug 13	Aug 13	13	7	
		Full Flight and Mission Simulator #2	Jan 13	Oct 14	Oct 14	21	7	
		Ground based Mission planning and Management System Lot 1	Feb 09	Sep 09	Dec 09	10	8	
		Ground Mission planning and Management System Lot 2	Feb 09	Dec 09	Apr 10	14	8	
		Ground Mission planning and Management System Lot 3	Sep10	Sep10	Mar 13	30	8	
		MRH Software Support Centre	Feb 09	Feb 09	Dec 08	(2)		
		Electronic Warfare Self Protection Support System	Dec 07	Dec 07	Dec 07	0		
		MRH Instrumented System	Mar 10	Jun 10	Sep 11	18	9	
Aircra	aft	MRH aircraft #01 (First aircraft)	Dec 07	N/A	Dec 07	0		
Acce	otance	MRH aircraft #05 (First Australian built aircraft)	Dec 08	N/A	Dec 08	0		
		MRH aircraft #33 (Most Recent)	Dec 12	<b>Nov</b> 14	<b>Dec</b> 14	24	10	
		MRH aircraft #34 (Next aircraft)	Feb 13	Mar 15	Oct 15	32	10	
MRH aircraft #47 (Final Aircraft) Jul 17 Jul 17 Jul 17					0			
Notes	3							
1	Phases of aircraft	4/6 were rolled into the MRH Program from aircraft 13 onwards, which increased the number aft from 12 to 46.						
2	The acce into six l to aircrat area of t	acceptance and test-readiness of the Ground Mission Management System (GMMS) was broken six lots post contract signature. The lots compose of GMMS deliverables that have been aligned ircraft delivery – location and baseline. The acceptance of GMMS lots are listed in the acceptance a of this table.						
3	The 13 design is interim N	month delay to closure of Test Read ssues not resolved until November 20 IRH Instrumentation System capability	diness Revie 09. This del / used for a	ew was due ay was mitig test activity	to electroni gated by the in October 20	c compatibi developmei 009.	lity test nt of an	
4	Achieved	through completion of Test Readines	ss Review fo	r Contractor	r In-Plant Tes	st and Evalu	ation in	

## 3.2 Contractor Test and Evaluation Progress

Sep 11.

5	The first Airworthiness Board (for a Special Flight Permit (SFP)) was conducted in November 2007 and a SFP was granted in December 2007. There have been a number of SFP extensions to allow flight trials of the aircraft as it further develops. The most recent SFP was granted in December 2012 and expired in April 2013.
6	Achievement of the Australian Military Type Certificate proved problematic due to technical and reliability issues, leading to insufficient levels of Rate of Effort. Rate of Effort was required to validate that in-service support arrangements for the fleet are sufficient to cope with current numbers of aircraft and are growing in maturity to meet fleet requirements. Australian Military Type Certificate and Service Release was achieved 17 April 2013.
7	Refers to acceptance of Full Flight Mission Simulators in Oakey and Townsville. Delays have been incurred due to the late delivery of facilities and an underestimation of the time required to implement the design.
8	Lot 1, 2 and 3 have been altered to accommodate the variation in aircraft delivery date and configuration.
9	The MRH instrumented system incurred delays due to technical and supportability issues that resulted in contractual non-conformances. These non-conformances were rectified by September 2011.
10	The MRH90 program stopped accepting aircraft in November 2010 due to a number of technical and reliability issues. The Commonwealth recommenced accepting aircraft in November 2011 after negotiating a remediation plan to address a number of engineering and contractual issues; however acceptance of aircraft was again suspended in February 2012 pending resolution of another technical concern related to the aircraft's cargo hook. In May 2012 the Commonwealth agreed to accept a further four aircraft based on AGAPs agreement to the commercial terms associated with the rectification of the cargo hook issue. Scheduled aircraft acceptance recommenced in June 2012 with the most recent aircraft (#33) being accepted in December 2014.

3.3 Progress Toward Materiel Release and Operational Capability Milestones

Item			Original Planned	Achieved /Forecast	Variance (Months)	Notes	
Initial	Materiel Release (IMR)	Army/Navy	Jun 10	May 13	35	1	
Initial Operational Capability (IOC)		Navy	Jul 10	Feb 15	55	2	
		Army	Apr 11	<b>Dec</b> 14	44	3	
Final Materiel Release (FMR) Army/Navy			Oct 14	Dec 17	38	4	
Final Operational Capability (FOC)		Navy	Dec 12	-	-	5	
		Army	Jul 14	Jul 19	60	4	
Notes							
1	The MRH90 program stopped accepting aircraft in November 2010 due to a number of technical and reliability issues. This has impacted the achievement of capability milestones. The Commonwealth						

1	The MiKH90 program stopped accepting aircraft in November 2010 due to a number of technical and reliability issues. This has impacted the achievement of capability milestones. The Commonwealth recommenced accepting aircraft in November 2011 after negotiating a remediation plan to address a number of engineering and reliability issues; however acceptance of aircraft was again suspended in February 2012 pending resolution of another technical concern related to the aircraft's cargo hook. In May 2012 the Commonwealth agreed to accept a further four aircraft based on AGAPs agreement to the commercial terms associated with the rectification of the cargo hook issue. Scheduled aircraft acceptance recommenced in June 2012 with the most recent aircraft (#33) being accepted in December 2014. IMR was declared on 13 May 2013, based on 6 Product Baseline <b>00</b> 3 aircraft.
2	Affected by delays to IMR. (Refer to Note 1 above)
3	Affected by delays to IMR. (Refer to Note 1 above)

- 4 Dates directly impacted by delay to IMR. (Refer to Note 1 above).
- 5 FOC is now only forecast as a single date. The last capability subset is to be realised by Army.

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# Section 4 – Materiel Capability Delivery Performance



This Pie Chart does not necessarily represent capability achieved. The capability assessments and forecasts by the project are not subject to the ANAO's assurance review.

	4.2	Constitution	of In	nitial I	Materiel	Release	and	Final	Materiel	Release
--	-----	--------------	-------	----------	----------	---------	-----	-------	----------	---------

10			
Item	Explanation	Achievement	
Initial Materiel Release (IMR)	<ul> <li>Six Product Baseline 003 aircraft with associated role equipment to support Initial Operational Capability milestones;</li> <li>Issue of Australian Military Type Certificate and Service Release;</li> <li>Completion of all MRH90 facilities at Townsville, Oakey and Nowra;</li> <li>Establishment of mature planned contractor support to maintenance and logistics; and</li> </ul>	Achieved	

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•	Provision and certification of Mission Management systems necessary for Initial Operational Capability milestones. Initial Material Release was achieved in May 2013.	
Final Materiel Release (FMR)	47 aircraft configured to the contractual baseline including configuration amendments specified in Deeds 1 and 2 (one aircraft to be used as a Maintenance Training Device); Role equipment delivered to support aircraft; A mature sustainment organisation capable of discharging all in-service responsibilities; including logistic and training requirements; Mature training system with all training devices accepted, supported by an effective, functioning training organisation; and All facilities and support equipment, required to support the capabilities accepted. he project is focused on the timely elivery of capability to meet future perational milestones. This includes the elivery of crucial products such as the splacement Cargo Hook, the Fast Roping nd Rappelling Device and a Common round Mission Management System.	Not achieved

# Section 5 – Major Risks and Issues

5.1	Maior	Project	Risks
0.1	major	1 10,000	1 (10)(0

Identified Risks (risk identified by standard project risk management processes)					
Description Remedial Action					
There is a chance that Operational capability milestones will be affected by a number of cabin integration issues, leading to an impact on cost, schedule and performance.	<ol> <li>Formation of Cabin Integration Working Group.</li> <li>Industry Prototyping.</li> <li>Accept incremental improvements.</li> <li>Use of Liquidated Damages as offset.</li> <li>Leverage NATO Helicopters 90 (NH90) community solutions.</li> </ol>				
Achievement of <b>Initial Operating Capability</b> (IOC) Navy and / or IOC Army will slip due to delayed accomplishment of pre-requisite activities or delivery of required operational capabilities.	<ol> <li>Prioritise and focus resources toward capability deliverables in support of IOC.</li> <li>Early identification and mitigation of capability shortfalls.</li> <li>This risk has been retired as a result of achieving IOC.</li> </ol>				
Emergent Risks (risk not previously identified but has emerged during 2014-15)					
Description Remedial Action					
N/A	N/A				

5.2	Majo	r Pro	iect	Issues

Description	Remedial Action
Upgrading both <b>Full Flight Mission Simulator</b> to Sustainment Software Build 1.1 will be delayed due to an inability to negotiate a sustainable upgrade cost.	<ol> <li>Work with industry to identify and optimise cost drivers.</li> <li>Investigate alternate contracting strategies.</li> </ol>
The MRH90 Search / Landing Light (SLL) was assessed as not fit for purpose due to beam width and lack of covertness. This reduced the range of illuminations under which the aircraft could conduct night flying and limited operational use.	<ol> <li>Identify a replacement bulb for SLL capability.</li> <li>Implement solution to meet capability milestones.</li> </ol>
The electronic warfare system fitted to the MRH90 is not performing to specification during specific aircraft manoeuvres.	<ol> <li>Industry to conduct a technical assessment of the issues identified and provide recommendations for remediation.</li> <li>CoA to assess the validity of the recommendations with system specialists DSTO.</li> <li>Verification and validation of the remediation activities by Industry.</li> <li>Implement solution to meet capability requirements.</li> </ol>
The Identification Friend or Foe Mode 4 fitted to the MRH90 is not performing during specific scenarios.	<ol> <li>Assessment by Industry to identify the technical issues.</li> <li>CoA and Industry to assess the validity of the remediation options.</li> <li>Industry to implement solution across the MRH90 fleet.</li> </ol>
The growing number of engineering change proposals has impacted the timing and effective delivery of aircraft.	<ol> <li>Update MRH Configuration Control Board process to achieve Service Release of design changes prior to Commonwealth acceptance of aircraft.</li> <li>Closer alignment of acquisition and sustainment engineering processes.</li> <li>Final aircraft configuration implementation plan to be prioritised.</li> </ol>
The test program has been affected by competing priorities because of limited airframe/aircrew resources which will result in delayed identification of issues, resolution of identified issues and delayed subsequent Operational Test and Evaluation activities leading to an impact on schedule.	<ol> <li>Continue to closely manage test activities in consultation with other agencies, prioritising activities to support subsequent events.</li> <li>Outsource work where appropriate.</li> <li>Consider posting of key staff ahead of end of year.</li> <li>Try to balance test crews to maximise efficiency in test activities.</li> <li>Manage tasking/ workload and seek additional support overall as required.</li> <li>This issue has been downgraded to medium as a result of the close management and detailed planning of test activities.</li> </ol>
The Service Release and Operational capability will be affected by the <b>Fast Roping and Rappelling</b> <b>Device</b> being deemed not suitable leading to an impact on schedule and performance.	<ol> <li>Interim Fast Roping and Rappelling Device solution has been design accepted and service release has been achieved.</li> <li>Identify design options for enduring solution.</li> </ol>

# Section 6 – Project Maturity

6.1 Project Maturity Score and Benchmark

,	,					Attributes	;			
Matur	ity Score		Schedule	Cost	Requirement	Technical Understanding	Technical Difficulty	Commercial	Operations and Support	Total
Project Stage	Benchm	nark	10	8	8	8	9	8	9	60
Initial Materiel	Project	Status	8	7	9	9	8	7	9	57
Release	Explana	ation	<ul> <li>Sch Cap for rr</li> <li>Cos com</li> <li>Req phas outs seat cond serv</li> <li>Tecl and prov</li> <li>Tecl imm</li> <li>Com com arrai on c</li> </ul>	edule: I ability m emaining t: Not all pletion to uirement ses are standing . Addition ducting va ice require hnical Uir support iders. hnical Dir aturity of mercial in mercial in ngements apability re	nitial M ilestones activities activities i risks ha mitigate r : The M essentiall elements nally, the lidation tr ements. nderstand the platf fficulty: ( elements Deed 2 ssues ar to provide ealisation.	aterial have been to achieve ave been remains w IRH Syste y complet s such as project ials to del ding: The orm is b Capability of the cap 2 settled nd has a confider	Release een achie e Final M retired; vithin cont em desig ete, with s cargo office, with s cargo weing tran is still be cability. a num implement ice that in	and In ved and o ateriel Ro however ingency g n and ac activitie hook and with Nav e that the dge nece the nece the seferred the ber of I need sound dustry effor	tital Op detailed p elease is the estir guidance. cceptance s on-go d mission y and A system m ssary to o the in- d fully due ong outs nd mana ort will be	erating blanning sound. mate at testing ing for n troop rmy, is leets in- operate -service e to the standing igement focused
70								66	67	-70-
60					55	57-60	63	-00 00		
50			42	-45 50						
30										
20	21	~								
10 (13)	<i>y</i>									
0 Enter DCP	1st Pass Approval	2nd Pass Approval Industry Proposals / Offers	Contract Signature	Detailed Design Review(s) - Preliminary Design Review(s)	Complete Sys. Integ. & Test	Complete Acceptance Testing	- Final Materiel Release (FMR)	Final Contract Acceptance	- Acceptance Into Service	Project Completion
2013-14 MPR Status				201	4-15 MPF	R Status -				

### Project Data Summary Sheets ANAO Report No.16 2015–16 2014–15 Major Projects Report

# Section 7 – Lessons Learned

7.1 Key Lessons Learned

Project Lesson	Categories of Systemic Lessons
Early establishment of the Sustainment organisations. Both Commonwealth and Industry teams need to be set up well in advance of the delivery of the first of the deliveries. The provision of accepted aircraft to an Operational Squadron has led to a range of lessons in regard to command and control of assets and people, stakeholder management and the relationship with Industry.	Resourcing
The impact of attaining limited Intellectual Property rights has been critical to the ongoing development of the capability and achievement of value for money in further contract negotiations. It has also limited the provision of data for integration with other platforms (such as the Landing Helicopter Dock ships).	Contract Management
The MRH Project was incorrectly viewed as a Military off-the-Shelf (MOTS) acquisition. Lessons associated with intended MOTS procurements include: that it is essential that the maturity of any offered product be clearly assessed and understood; and that elements of a chosen off-the-shelf solution may not meet the user requirement.	Off-the-shelf Equipment
Better arrangements should be put in place to ensure appropriate considerations of contractor performance occur before the Commonwealth enters into similar contracts with the same contractor.	Contract Management

# Section 8 – Project Line Management

8.1 Project Line Management in 2014-15

Position	Name
General Manager	Ms Shireane McKinnie
Division Head	RADM Tony Dalton
Branch Head	BRIG Andrew Mathewson
Project Director	COL James Allen
Project Manager	Mr Hilton Hunter