Project Data Summary Sheet[167]

Project Number	**JNT2008 Phase 5A**
Project Name	**INDIAN OCEAN REGION UHF SATCOM**
First Year Reported in the MPR	2010-11
Capability Type	Upgrade
Capability Manager	Chief of Joint Capabilities
Government 1st Pass	Mar 09
Government 2nd Pass Approval	Mar 09 and Mar 10
Budget at 2nd Pass Approval	$461.0m
Total Approved Budget (Current)	**$421.3m**
2020-21 Budget	**$7.7m**
Complexity	ACAT II

Section 1 – Project Summary

1.1 Project Description

This Project will provide the Australian Defence Force (ADF) with twenty 25kHz UHF SATCOM channels on a hosted payload on a commercial Intelsat Satellite (IS-22), to provide coverage of the Indian Ocean Region, and associated ground infrastructure to provide network control.

1.2 Current Status

Cost Performance

In-year

As at 30 June 2021, project JNT2008 Phase 5A recorded variance of $1.3m against an estimated planned FY 2020/21 Budget of $7.7m. The variance of $1.3m is attributable to delays in receiving invoices and supplies and establishing planned ICT support contracts for obsolescence risks identified in Section 5 and decrease in payments owed to the NCS Prime Contractor.

Project Financial Assurance Statement

As at 30 June 2021, project JNT2008 Phase 5A has reviewed the project's approved scope and budget for those elements required to be delivered by Defence. Having reviewed the current financial obligations of Defence for this project, current known risks and estimated future expenditure, Defence considers, as at the reporting date, there is sufficient budget including contingency remaining for the project to complete against the agreed scope.

Contingency Statement

The project has not applied contingency in this financial year.

Schedule Performance

Following updates to software and other defect rectification activities by Viasat Inc., the Final Capability Acceptance for the Network Control System (NCS) was achieved in December 2020. Contract Change Proposal 5 (CCP5) between the Commonwealth and Viasat Inc. was executed in January 2021 with remediation of agreed minor defects to complete by December 2021.

The Materiel Acquisition Agreement (MAA) delivery schedule was updated in January 2021, re-baselining the schedule for delivery of the NCS capability milestones Final Materiel Release (FMR) NCS and Final Operating Capability (FOC) NCS. The MAA included the new milestone Materiel Release (MR) NCS. MR (NCS) was declared in March 2021 providing interim operational release of the System to the ADF. The Project expects to achieve the FMR (NCS) and FOC (NCS) milestones within the MAA timeframes. Under changes to the MAA, the existing milestone FOC Pacific Ocean Region, delivered by Chief Information Officer Group (CIOG), was recognised as being achieved in January 2018.

The requirement for United States (US) Government certification of the NCS **and Operational Test and Evaluation (OT&E) by the Joint Test and Evaluation agency within Defence** are key inputs for FOC **(NCS),** which is forecast to occur by the end of 2021. **OT&E commenced in August 2020 with activities forecast to complete in November 2021.**

Materiel Capability Delivery Performance

The IS-22 satellite is currently meeting all performance measures, including:

- the hosted payload; and
- the Communications System Monitor (CSM).

With update of the MAA in January 2021, the Project is meeting performance measures to declare FMR (NCS) in July 2021 and FOC (NCS) in December 2021.

Note

167 Notice to reader

Forecast dates and Sections: 1.2 (Materiel Capability Delivery Performance), 1.3 (Major Risks and Issues), 4.1 (Measures of Materiel Capability Delivery Performance), and 5 (Major Risks and Issues) are excluded from the scope of the ANAO's review of this Project Data Summary Sheet. Information on the scope of the review is provided in the *Independent Review Report by the Auditor-General* in **Part 3** of this report.

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

1.3 Project Context

Background

The JNT2008 Phase 5 project was created to provide capability originally planned for under the JNT2008 Phase 4 Next Generation SATCOM Capability project (a result of Phase 4 of the project being re-scoped to provide access to the Wideband Global Satellite (WGS) capability).

UHF SATCOM provides critical tactical radio coverage over the Middle East Area of Operations. Coverage was provided by leases on two commercial satellites and channels loaned by the US Government on an availability basis, which proved to be significantly less than the capability needed by the ADF. This project was also formed on the basis that LEASAT 5 would reach end of life in 2011.

A market survey was conducted in September 2008 to inform cost and capability options for JNT2008 Phase 5A. It revealed an opportunity for Defence to host a payload on an Intelsat commercial satellite over the region in mid-2012. A Restricted Request For Tender was subsequently let to ten companies for the capability in November 2008 and Intelsat was selected as the preferred tenderer.

Combined First and Second pass Government Approval was given in March 2009 and a contract was signed with Intelsat for eight 25 kHz channels and 15 years support in April 2009.

First pass Government approval was given for the project to pursue a Memorandum Of Understanding with the US to provide global UHF SATCOM coverage using US satellites in return for access to ten 25 kHz channels on IS-22. A subsequent Second Pass approval was given in March 2010 which allowed the project to procure the full payload on IS-22.

The IS-22 satellite was successfully launched on 25 March 2012. Materiel Release (MR) for the Indian Ocean Region was achieved on 21 December 2012.

In May 2012, a contract was signed with Viasat US to upgrade the existing NCS. In December 2013, a Contract Change Proposal (CCP1) was executed to re-baseline delivery of Final Materiel Release (FMR) for the NCS to September 2014. A second Contract Change Proposal (CCP2) was executed in December 2015 after Viasat experienced delays in software development. The delay resulted in a further slip to FMR (NCS) milestone which was subsequently re-baselined and delivery forecast for April 2018 (49 months behind schedule). Defence in an attempt to minimise the capability impacts of the JNT2008 Phase 5 project delays introduced two new milestones under CCP2; the NCS Manager Software Readiness Review (NSWRR) and Software Deployment Readiness Review (SDRR).

A third Contract Change Proposal (CCP3) was executed in March 2017 to introduce architectural enhancements to the NCS to align with increased Defence security requirements. In August 2017, delayed provision of GFM and persistent challenges in Viasat's development of the NCS triggered the need to execute a fourth Contract Change Proposal (CCP4). Technical discussions regarding capability delivery resulted in the Contractor providing a revising the schedule in April 2018. The revised schedule highlighted that Viasat was 10 months behind on its software development plan.

The parties entered into negotiations in June 2018 to implement strategies to constrain the delay and establish a new baseline for the project. CCP4 was signed in November 2018 with a forecast contract completion date of 29 August 2019. In February 2019, Viasat experienced further software and system integration and security issues and this **led to a schedule variance for contract completion to December 2020. The Contract milestone Final Capability Acceptance was achieved December 2020, with CCP5 raised subsequently for Viasat to remediate agreed defects by December 2021.**

Uniqueness

The contract with Intelsat is based on the Standard Defence Contract (ASDEFCON) template; however, it required significant tailoring based on input from specialist space lawyers. There are also a number of unique aspects to a contract for a satellite, including the unusual risk profile of the Launch and the corresponding high degree of schedule uncertainty which is typical of a satellite program where product quality requires a high priority.

A UHF Channel Control system was designed and developed to meet the requirements of Australian and US forces.

Major Risks and Issues

There was a risk that the US Government certification of the NCS may delay FOC as the certification is subject to US priorities and demand for the services of the test agency. Assessment of the NCS by the Joint Interoperability and Test Command (JITC) is a US Government requirement for access to US military satellites. Defence has had positive engagements and planning with JITC **and while a schedule between key stakeholders was established, delays were experienced in early 2021 and one aspect of this risk has been realised and is now reported as Issue 3 in Section 5.2. Certification is expected in August 2021 and will retire part of this risk. All residual risks have been captured in Emergent Risk 2 in Section 5.1.**

There was a risk that Viasat will be delayed in delivering the Integrated Logistics Support products necessary to complete the Support System acceptance, **therefore affecting FMR (NCS). In agreement with Viasat,** the Project Office undertook action to **complete these activities; subsequently the risk was retired.**

There was a risk that COVID-19 **work and travel restrictions would affect** NCS **installation and integration due to a reliance on international and interstate contractor staff.** Viasat utilised workforce from within its Australian subsidiary to manage **some of the risk; however, the risk materialised due to the dynamic COVID situation and is now being reported as Issue 1 in Section 5.2.**

An emergent risk identified by the Project Office relates to the suitability of software updates for the NCS. The Capability Manager has agreed the NCS software meets all operational requirements and any future updates on the Mission System to occur after FOC (NCS), if required, for this reason the risk is sufficiently mitigated.

There was an emergent risk that Joint Trial 019 (JT019) may identify major issues for remediation, which would affect the Capability Manager declaring material release and therefore delay FOC. The Project Office is engaging with the Capability Manager to the expedite trial and maintaining a core expertise to be able to respond to and close actions.

There was an emerging issue through 2020 that Original Equipment Manufacturer (OEM) support for some NCS products would expire; however, the Project Office has been able to re-establish support agreements and the issue has reduced in significance.

There was an emerging issue of Network Control System non-compliance against the relevant MIL-STD leading to delayed US Government certification (referred to as JITC certification) and FOC. The Project Office undertook testing of the Network Control System to identify and communicate non-compliances early to Viasat to ensure timely remediation of non-compliances and the issue is being mitigated sufficiently.

There was an emerging issue of the project continuing to incur schedule variation relating to development of NCS software. Viasat applied additional resources and actively engaged with the Commonwealth to identify strategies to recover schedule including sharing risks in the test and acceptance program with Defence and Viasat senior leadership engagement also assisting to establish priorities that supported achievement of the final contract milestone in December 2020.

Other Related Projects and Phases

JNT2008 Phase 3E Advanced SATCOM Terrestrial Infrastructure System: This project provides the supporting ground infrastructure for Satellite Communications including UHF, X and Ka band communication services.

JNT2008 Phase 3F ADF SATCOM Terrestrial Enhancements: This project will provide the mature Australian anchoring capability for the WGS constellation.

JNT2008 Phase 4 Next Generation SATCOM Capability: This project provides WGS capability.

Note

Major risks and issues are excluded from the scope of the Auditor-General's Independent Assurance Report.

Section 2 – Financial Performance

2.1 Project Budget (out-turned) and Expenditure History

Date	Description	$m		Notes
	Project Budget			
Feb 09	Original Approved	4.0		
Apr 09	Government Initial Second Pass Approval	269.1		
Apr 10	Government Subsequent Second Pass Approval	187.8		1
	Total at Second Pass Approval		**461.0**	
Jun 14	Real Variation - Real Cost Decrease		(18.0)	2
Jul 10	Price Indexation		18.0	3
Jun 21	Exchange Variation		**(39.7)**	
	Total Budget		**421.3**	
	Project Expenditure			
Prior to Jul 20	Contract Expenditure - Intelsat	(294.4)		
	Contract Expenditure - Viasat	**(36.5)**		4
	Other Contract Payments / Internal Expenses	**(45.7)**		5
			(376.6)	
FY to Jun 21	Contract Expenditure - Viasat	**(2.8)**		
	Other Contract Payments / Internal Expenses	**(3.6)**		6
			(6.4)	
Jun 21	**Total Expenditure**		**(383.1)**	
Jun 21	**Remaining Budget**		**38.2**	

Notes	
1	The Initial Second Pass Approval was for eight channels and the Subsequent Second Pass Approval was for the remaining channels of the hosted payload.
2	Real Cost Decrease was a result of Project Office negotiating insurance for payload launch into the contract. Separate launch insurance is no longer needed.
3	Up until July 2010, indexation was applied to project budgets on a periodic basis. The cumulative impact of this approach was $16.5m. In addition to this amount, the impact on the project budget as a result of out-turning was a further ($19.6m) having been applied to the remaining life of the project. For this project, that process was incorrectly executed but corrected in January 2012 by returning $30.9m to the budget; $21.1m and $9.9m for impacts of price and exchange variations respectively.
4	This contract was in Stop Payment from July 2014 to December 2015 and subsequently from December 2017 to November 2018. Stop Payment was triggered from March 2019 for of the Product Baseline Review, completed in July 2019. A Stop Payment for the Stirling Completion was triggered in May 2019 pending the completion of the Stirling and System Acceptance milestones. The Stirling Completion milestone was achieved June 2020 with the System Acceptance milestone remaining outstanding.
5	Other Contract Payments / Internal Expenses of **$45.7m** comprise of Capital and Operating Expenditure **($20.1m)** and expenditure for contracted workforce related contractor support services provided by Nova Defence **($25.6m).**
6	Other Contract Payments / Internal Expenses total **$3.6m** comprise of other Capital and Operating Expenditure **($0.9m)** and expenditure for contracted workforce related contractor support services provided by Nova Defence **($2.7m).**

2.2A In-year Budget Estimate Variance

Estimate PBS $m	Estimate PAES $m	Estimate Final Plan $m	Explanation of Material Movements
9.0	**8.1**	**7.7**	PBS to PAES: **decrease is attributable to a decrease in payments owed to the NCS Prime Contractor.**

			PAES to Final Plan: Reduction in estimates due to delay in executing planned contracts.
Variance $m	(0.9)	(0.4)	Total Variance ($m): (1.3)
Variance %	(10.0)	(5.0)	Total Variance (%): (15.0)

2.2B In-year Budget/Expenditure Variance

Estimate Final Plan $m	Actual $m	Variance $m	Variance Factor	Explanation
		(1.0)	Australian Industry	As at 30 June 2021, project JNT2008 Phase 5A recorded variance of $1.3m against an estimated planned FY 2020/21 Budget of $7.7m. The variance of $1.3m is attributable to delays in receiving invoices and supplies and establishing planned ICT support contracts for obsolescence risks identified in Section 5 and decrease in payments owed to the NCS Prime Contractor.
		(0.3)	Foreign Industry	
			Early Processes	
			Defence Processes	
			Foreign Government Negotiations/Payments	
			Cost Saving	
			Effort in Support of Operations	
			Additional Government Approvals	
7.7	6.4	(1.3)	Total Variance	
		(16.9)	**% Variance**	

2.3 Details of Project Major Contracts

Contractor	Signature Date	Price at		Type (Price Basis)	Form of Contract	Notes
		Signature $m	30 Jun 21 $m			
Intelsat	Mar 09	202.5	294.4	Firm	Standard Defence Contract (COMPLEX)	1, 3
Viasat	May 12	36.5	40.1	Firm	Standard Defence Contract (COMPLEX)	2, 3

Notes

1	The increase in contract price is due to a Contract Change Proposal in 2010 which included 12 additional hosted UHF payload channels and a Communications System Monitor. The contract was transferred to Sustainment in April 2014 for support of the Communications System Monitor.
2	CCP2, approved in December 2015, was a nil cost CCP related to the redevelopment of the NCS design. CCP3, approved in March 2017 increased the Viasat contract price. CCP4 in November 2018, decreased Viasat's contract price due to modifications to the scope of the contract. The scope modifications were implemented to constrain and mitigate further delays to the delivery of the NCS.
3	Contract value as at 30 June 2021 is based on actual expenditure to 30 June 2021 and remaining commitment at current exchange rates and includes adjustments for indexation (where applicable).

Contractor	Contracted Quantities as at		Scope	Notes
	Signature	30 Jun 21		
Intelsat	8	20	25kHz UHF SATCOM channels on IS-22 Hosted Payload	
Viasat	N/A	N/A	NCS comprising three channel control sites, and a Test and Training System for support.	

Major equipment accepted and quantities to 30 Jun 21

All 20 channels were delivered successfully on 25 May 2012 and are now operational.

Upgrades to the NCS were accepted on 8 December 2020 with agreed minor deviations.

Section 3 – Schedule Performance

3.1 Design Review Progress

Review	Major System / Platform Variant	Original Planned	Current Contracted	Achieved /Forecast	Variance (Months)	Notes
System Requirements	IS-22 Hosted Payload	Jun 09	N/A	Jun 09	0	
	NCS	Aug 12	N/A	Aug 12	0	
Preliminary Design	IS-22 Hosted Payload	Nov 09	N/A	Oct 09	(1)	
	CSM	Oct 10	N/A	Nov 10	1	1
Critical Design	IS-22 Hosted Payload	Sep 10	N/A	Sep 10	0	
	CSM	Mar 11	N/A	Mar 11	0	
	NCS	Mar 13	N/A	Mar 13	0	
Product Baseline Review	NCS	May 17	Feb 19	Jul 19	26	2, 3

Notes

1	The review was conducted in October 2010 but approval by the Project Office did not occur until November 2010 due to a number of issues with requirements traceability that required rectification.
2	This milestone was re-scheduled under CCP3 signed in March 2017. The previously contracted NCS Software Readiness milestone was removed as part of CCP4.
3	Criteria against the Software Deployment Readiness Review (SDRR) was amended, aligning delivery to a Commercial Of The Shelf (COTS) process. For this reason SDRR was renamed Product Baseline Review. The Product Baseline Review was held in June 2019 with actions forecast to be closed and milestone achieved in July 2019.

3.2 Contractor Test and Evaluation Progress

Test and Evaluation	Major System / Platform Variant	Original Planned	Current Contracted	Achieved /Forecast	Variance (Months)	Notes
System Integration	IS-22 Hosted Payload	Nov 10	N/A	Feb 11	3	1
	CSM	Sep 11	N/A	Oct 11	1	2
	NCS	Nov 13	Jun 19	Jun 20	79	3,5,6
Acceptance	IS-22 Hosted Payload	Jun 12	N/A	May 12	(1)	
	CSM	Jul 12	N/A	Jun 12	(1)	
	NCS	Mar 14	Aug 19	**Dec 20**	**81**	3,4,5,6

Notes	
1	Delay to commencement of integration was driven by a number of delays in sub system deliveries forming part of the hosted payload including C and Ku antennas (not forming part of this capability) and the UHF antenna.
2	While installation commenced in September 2011, testing to confirm that the installation met requirements was completed in October 2011.
3	In February 2014, Viasat advised the Commonwealth of software design delays affecting the NCS schedule. In February 2015 Viasat advised the Commonwealth of their decision to take on elements of work previously contracted to their sub-contractor and continue the software development in house. Variance is a result of software design delays captured in CCP2 signed in December 2015.
4	In March 2017, the Commonwealth signed CCP3 with Viasat for improvements to the network architecture and the inclusion of GFM into the NCS.
5	Delay to NCS System Integration and Acceptance milestones result from delay in delivery of Government Furnished Materiel and Viasat software development at August 2017.
6	In February 2019, Viasat experienced software, security and system integration issues that delayed commencement of upgrades to the NCS. Following approval of the Mandated System Review and Product Baseline Review (PBLR), Viasat delivered NCS upgrades in December 2019 and completed remedial works in April 2020. System Acceptance **was achieved December 2020 with agreed defects to be rectified by Viasat by December 2021, refer to CCP5.**

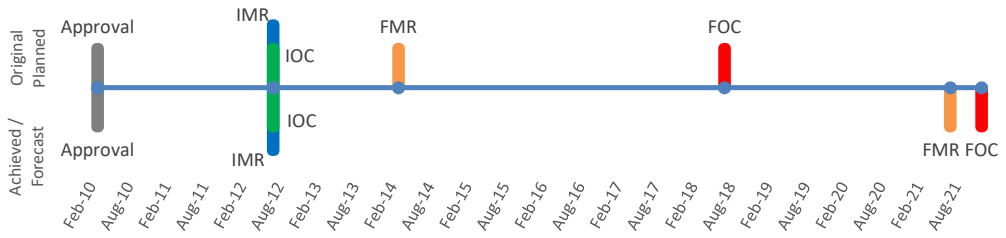
3.3 Progress Toward Materiel Release and Operational Capability Milestones

Item	Original Planned	Achieved /Forecast	Variance (Months)	Notes
Initial Materiel Release (IMR)	Jul 12	Jul 12	0	
Initial Operational Capability (IOC)	Jul 12	Jul 12	0	
Materiel Release (MR) # 1 (Indian Ocean)	Sep 12	Dec 12	3	1
Operational Capability (Indian Ocean)	Sep 12	N/A	0	5
Materiel Release Network Control System	**Dec 19**	**Mar 21**	**15**	**7**
Final Materiel Release (FMR) # 2 (Network Control System)	Mar 14	Jul 21	**88**	2
Final Operational Capability (FOC) (Pacific Ocean)	Jun 18	**Jan 18**	**0**	**3**
Final Operational Capability (FOC) Network Control System (NCS)	**Jul 18**	**Dec 21**	**42**	**3, 4, 6**

Notes	
1	MR was claimed on 28 September 2012. Chief Information Officer Group (CIOG) requested additional information which was supplied and MR was achieved on 21 December 2012.
2	Software delays noted in Section 3.2 Note 3 and Note 6 impacted **FMR**.
3	**MAA, version 2.4, separated the delivery of UHF Military Satellite Communication services in the Pacific Ocean Region (POR) and NCS. This has resulted in the approved milestones FOC POR and FOC (NCS). The FOC POR milestone was achieved in January 2018.**
4	FOC **(NCS)** is scheduled to be delayed due to FMR #2 being re-forecast for achievement by March 2020. The requirement for US Government certification of the NCS, additional security integration and implementation issues and subsequent accreditation are the key contributors to the delay.
5	FMR IOR was claimed on 28 September 2012. The ADF has been utilising the capability defined under the Operational Capability Indian Ocean (OC IOR) milestone since this time. The absence of an appropriate Technical Regulatory Framework (TRF) has limited the project to fully meet the MAA requirements. FMR IOR is not expected to be declared. This is not expected to have an impact on the achievement of FOC as the project has amalgamated outstanding Operational Capabilities.

6	The original FOC date of June 2018 did not contemplate the requirement that the Radio Frequency (RF) sub-system of the NCS requires US Government certification to be able to operate autonomously on the US military satellite in the POR. The test effort associated with the US Government certification is subject to priorities that are outside of Defence control. Defence has had positive engagements and planning with the relevant US Government agency and will continue to manage the certification requirements with the US Government. In the interim, the NCS will operate on approved waivers while the system goes through the US Government certification process. FOC is forecast for delivery by December 2021.
7	**The MR NCS milestone was approved under the MAA version 2.4 January 2021.**

Schedule Status at 30 June 2021



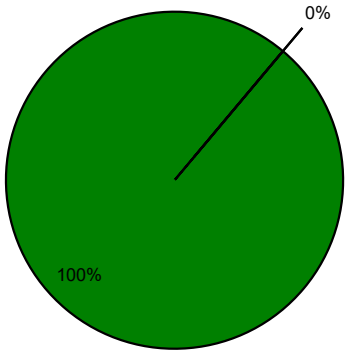
Note

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

Section 4 – Materiel Capability Delivery Performance

4.1 Measures of Materiel Capability Delivery Performance

Pie Chart: Percentage Breakdown of Materiel Capability Delivery Performance



Green:
The project is currently meeting overall performance requirements which are determined by the hosted payload.

Amber:
N/A

Red:
N/A

Note

This Pie Chart represents Defence's expected capability delivery. Capability assessments and forecast dates are excluded from the scope of the Auditor-General's Independent Assurance Report.

4.2 Constitution of Materiel Release and Operational Capability Milestones

Item	Explanation	Achievement
Initial Materiel Release (IS-22)	1. In Orbit Test of hosted payload. 2. IMR was achieved in July 2012.	Achieved.
Initial Operational Capability (IS-22)	1. UHF SATCOM services on the IS–22 hosted payload. Quantity of ten 25kHz channels.	Achieved.
Final Materiel Release (IS-22)	1. 20 channels on a UHF Hosted Payload, including Operational Support Services for life-of-type in place, telemetry feed operational and initial training for telemetry feed. CSM and initial training for CSM. FMR IS-22 was achieved in December 2012.	Achieved.
Final Operational Capability **(Pacific Ocean Region)**	1. Capability State FOC POR is the commencement of Australian assured access to 200 kHz in the POR and 50 kHz for the Rest of the World coordinated through the US Government. 2. **FOC POR was achieved 1 January 2018**	**Achieved**

Materiel Release (NCS)	1. NCS comprising three channel control sites, and NCS Manager (IW) training package. 2. **MR-NCS was achieved in March 2021.**	**Achieved**
Final Materiel Release (NCS)	1. **Full ICT accreditation (ICTA).** 2. **JITC Assessments with waivers in places as required.** 3. **Upgraded SATCOM Planning Tool.** 4. Forecast delivery for FMR NCS is July 2021.	Not yet achieved.
Final Operational Capability (NCS)	**1. Acceptance of the Joint Trial 19 Report by the Joint Capabilities Group (JCG)** **2. Operational Release of the NCS by JCG. Forecast delivery is December 2021.**	**Not yet achieved.**

Section 5 – Major Risks and Issues

5.1 Major Project Risks

Identified Risks (risk identified by standard project risk management processes)	
Description	Remedial Action
There is a risk that the US Government certification of the NCS system may delay FOC as the certification is subject to US Government priorities and demand for the services of the test agency. Restrictions on workplace attendance due to COVID-19 may affect the US Government schedule. Assessment of the NCS by the Joint Interoperability and Test Command is a US Government requirement for access to US military satellites.	**While a schedule between key stakeholders was established, delays were experienced in early 2021 and one aspect of this risk has been realised and is now reported as Issue 3 in Section 5.2. Certification is expected in July 2021 and will retire part of this risk. All residual risks have been captured in Emergent Risk 2.**
There is a risk that COVID-19 work and travel restrictions **will affect** the NCS installation and integration strategy due to project reliance on international and interstate contractor staff.	Viasat has utilised the workforce from within its Australian subsidiary to manage **the risk. The risk was realised through the reporting period and is now reported as an issue.**
There is a risk that there may be delay in Viasat delivering products necessary to complete the Support System. The risk is a consequence of Viasat's workforce limitations and commercial focus to complete Mission System installations.	The Project Office **has managed** the risk by undertaking some of the supporting works required to develop artefacts to support training. **Subsequently this risk has been retired.**
Emergent Risks (risk not previously identified but has emerged during 2020-21)	
The NCS and support system equipment has been affected by obsolescence leading to an impact on capability, supportability and ICT security accreditation.	**The risk remains open as remediation of all obsolescence is not possible. The Project Office has established an obsolescence register and Patch Management Plan to prioritise hardware and software issues to ensure economical mitigation of issues.**
There is a risk that the updated version of the Network Control System software (VISION ver. 3) will contain critical defects (bugs) that will affect its suitability for install onto the Mission System.	**The Project Office has active and ongoing engagement with Viasat, seeking updates and metrics relating software development progress and performance. The Project Office is monitoring the risk; however, the Capability Manager has agreed to the install of the software update after the achievement of the FOC (NCS) milestone; subsequently the risk does not affect remaining project milestones.**
There is a risk that Joint Trial 019 (JT019) may identify major issues for CASG to remediate which affects the JCG decision to declare material release and subsequently delays FOC.	**The Project Office is maintaining a core level of expertise to be able to respond to and close actions and is actively engaging with the Capability Manager representative seeking support to expedite trial timeframes.**

5.2 Major Project Issues

Description	Remedial Action
COVID-19 work and travel restrictions affected NCS installation and integration strategy due to project reliance on international and interstate contractor staff.	**Viasat has utilised the workforce from within its Australian subsidiary to manage the risk. The risk was realised through the reporting period and is now reported as an issue. The issue is forecast to be closed on achievement of FMR.**
An emerging issue arose through 2020 regarding the OEM support from some NCS products expiring. The issue was caused by support for an initial three year term being procured with products obtained in 2017 that supported the Commonwealth's Contract Change Three obligations. The issue was also influenced by changes in plans for ongoing support of the subject components.	**The Project Office expedited support extensions in order to mitigate the issue and the Commonwealth is undertaking a procurement to implement a long-term support contract to mitigate the issue.**

There is an emerging issue that the Network Control System will be affected by non-compliances against the relevant MIL-STD leading to delayed US Government certification (referred to as JITC certification) and delays to FOC.	The Project Office has been able to undertake testing of the Network Control System to identify and communicate non-compliances early to Viasat to ensure remediation of non-compliances to mitigate the issue. Support arrangements were established to ensure timely JITC assessment as Viasat delivers elements of the Network Control System.
The project has and continues to incur schedule variation related to the development of NCS software.	Viasat has applied more resources and actively engaged with the Commonwealth to identify ways to recover schedule, i.e. sharing risks in the test and acceptance program, to resolve the issue. Senior Leadership engagement between Chief Joint Capabilities, Deputy Secretary CASG and Viasat President also assisted to establish priorities that enabled Viasat to achieve the final contract milestone in December 2020. Subsequently, the issue has been retired with a new risk raised to monitor Viasat's planned update to software, which is planned to be complete by December 2021, to ensure Viasat are delivering against the final capability schedule forecasts.
Note	
Major risks and issues in Section 5 are excluded from the scope of the Auditor-General's Independent Assurance Report.	

Section 6 – Lessons Learned

6.1 Key Lessons Learned

Project Lesson	Categories of Systemic Lessons
The genuine ability of the vendor to achieve the contracted requirements must be assessed and validated prior to Contract and the engineering capability of the company, based on proven past performance, and a high level of engineering discipline and accreditation demanded.	Procurement Planning. Matters relating to Commercial Strategy, requirement definition, schedule management, resourcing, risk assessment and management.
When negotiating an MOU, be a smart buyer. The SATCOM Capability Manager should thoroughly understand the terms of future MOUs including costs, responsibilities, capability limitations, and administrative overheads.	Leadership. The ability to set and articulate the strategic direction, shape and influence the organisation to realise expected benefits.
Partnering imposes limitations but also increases ADF SATCOM capability. Collaborating with the US has provided Australia with an exceptional capability that would have otherwise been unachievable. The benefits available through international collaboration should be considered.	Capability Outcomes. Ability to meet Capability Manager's requirements as agreed in order to achieve operational capability.
Additional SATCOM capacity can be traded. The ADF traded excess UHF capacity on IS-22 for capacity on US satellites and the trade advantages of acquiring sovereign capacity additional to ADF needs, against the cost of acquisition and ownership is to be considered.	Risk, Issues and Opportunities. Matters relating to the management of risk, issues and opportunities, supporting frameworks, tools and both internal and external dependencies/integration.
External factors including US Joint Interoperability Test Command (JITC) can significantly impact schedule and it Is prudent to include a significant allowance within the schedule to better absorb unforeseen delays.	Schedule. Factors related to schedule including, but not limited to: planning, estimation, management, monitoring, controls, earned value, and internal and external dependencies/integration

Section 7 – Project Line Management

7.1 Project Line Management as at 30 June 2021

Position	Name
Division Head	Mr Gavin Rawlins
Branch Head	Ms Myra Sefton