

Project Data Summary Sheet<sup>165</sup>

|   |                                |
|---|--------------------------------|
| Project Number                          | JP 2008 Phase 5A               |
| Project Name                            | INDIAN OCEAN REGION UHF SATCOM |
| First Year Reported in the MPR          | 2010-11                        |
| Capability Type                         | Upgrade                        |
| Acquisition Type                        | MOTS                           |
| Capability Manager                      | Chief of Joint Capabilities    |
| Government 1st Pass Approval            | Mar 09                         |
| Government 2nd Pass Approval            | Mar 09 and Mar 10              |
| Budget at 2 <sup>nd</sup> Pass Approval | \$460.9m                       |
| Total Approved Budget (Current)         | \$421.8m                       |
| 2018–19 Budget                          | \$14.8m                        |
| Project Stage                           | Detailed Design Review         |
| 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 **June 2019**, project JP 2008 Phase 5A recorded an underspend of **\$5.4m** against a planned FY 2018/2019 Budget of **\$14.8m**. This was due to **Prime Contractor** delays in achieving the **Contracted Milestones of Product Baseline Review**, Test Readiness Review and **Head Quarters Northern Command (HQNORCOM) Completion**. **Subsequently, Stop Payments in accordance with the provisions of the contract were imposed on Viasat.**

Project Financial Assurance Statement

As at **30 June 2019**, project JP 2008 Phase 5A has reviewed the approved scope and budget for those elements required to be delivered by **Defence**. Having reviewed the current financial and contractual obligations of Defence for this project, current known risks and estimated future expenditure, Defence considers, as at the reporting date, there is sufficient budget 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

**In November 2018, Contract Change Proposal 4 (CCP4) was executed between the Commonwealth and Viasat to re-baseline the project schedule and remediate delays caused mostly by Viasat software development. In February 2019, Viasat advised further schedule delays due to persistent software and system security integration issues. Accordingly, achievement of the Product Baseline Review was delayed from February 2019 to July 2019. Viasat forecasts indicate that Final System Acceptance will slip from August 2019 to December 2019, a further 4 months delay. This delay will have flow on impacts for the Network Control System (NCS) Final Material Release (FMR) milestone, which Defence forecasts will be achieved in March 2020. The requirement for US Government certification of the NCS is a key input for Final Operating Capability (FOC), which is forecast by December 2021.**

## 165 Notice to reader

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

**Material Capability Delivery Performance**

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

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

The NCS contract was executed on 16 May 2012, factoring United States Government (US) requirements of Defense Information Systems Agency and Space and Naval Warfare System Command. The implementation strategy was reported to Government. The Integrated Waveform (IW) NCS is the largest remaining scope to be delivered. Issues with the modification and integration of Commercial Off The Shelf (COTS) software has been the cause of the delay. **Due to the scale of modification and integration, it is considered developmental for this project.** To partially mitigate the impact of the delay, IW Phase I was introduced in 2016 under an Interim Capability (IC) state. **IW Phase II is forecast for delivery in December 2019.**

**Note**

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

## 1.3 Project Context

**Background**

The JP 2008 Phase 5 project was created to provide capability originally planned for under the JP 2008 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 JP 2008 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 rebaselined and delivery forecast for April 2018 (49 months behind schedule). Defence in an attempt to minimise the capability impacts of the JP 2008 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 system integration and security issues. This additional delay slipped the contract completion forecast to December 2019.**

**Uniqueness**

The contract with Intelsat is based on the standard 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.

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| Major Risks and Issues  |
|---|
| <p>There is a risk that further security and integration challenges during site installation may cause further schedule delays. Recent evidence suggests that the NCS is continuing to experience system integration issues which may have been caused by the implementation of security requirement improvements to the system.</p> <p>There has been an ongoing risk relating to facility issues that may cause delay to project closure related to compliance with current Australian Standards, i.e. electrical distribution. If realised, this risk may cause schedule delay as time would be required to repair non-compliances. The Project Office has been working with sites to remediate non-compliances as they have been identified. Facilities works to refurbish HMAS Stirling have been assessed to no longer have a significant impact to the project delivery schedule. As a result, the severity of this risk has been reduced.</p> <p>There is a risk that the Project Office may exhaust contingency before the final delivery of the program. The prolonged schedule delay has required the project to retain a contracted workforce beyond original estimates which put significant pressure on project finances. The successful outcomes negotiated under CCP4 has alleviated the pressure and the risk has been reduced to low.</p> <p>There is a risk that the US Government certification of the NCS system may delay FOC as the certification is subject to US priorities and demand for the services of the test agency. Assessment of the NCS system 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 will continue to manage the certification requirements with JITC.</p> <p>There is an emergent risk that Viasat will be delayed in delivering the Integrated Logistics Support products necessary to complete the Support System. The Project Office has taken action to assist Viasat in the development of products in order to mitigate likelihood of this risk occurring.</p> |
| Other Related Projects and Phases   |
| <p><b>JP 2008 Phase 3E Advanced SATCOM Terrestrial Infrastructure System:</b> This project provides the supporting ground infrastructure for Satellite Communications including UHF, X and Ka band communication services.</p> <p><b>JP 2008 Phase 3F ADF SATCOM Terrestrial Enhancements:</b> This project will provide the mature Australian anchoring capability for the WGS constellation.</p> <p><b>JP 2008 Phase 4 Next Generation SATCOM Capability:</b> This project provides WGS capability.</p>   |
| Note  |
| Major risks and issues are excluded from the scope of the review.   |

## Section 2 – Financial Performance

### 2.1 Project Budget (out-turned) and Expenditure History

| Date                | Description   | \$m            | Notes |
|---------------------|---|----------------|-------|
|                     | <b>Project Budget</b>   |                |       |
| Feb 09              | Original Approved   | 4.0            |       |
| Apr 09              | <b>Government Initial Second Pass Approval</b>  | 269.1          |       |
| Apr 10              | <b>Government Subsequent Second Pass Approval</b>   | 187.8          | 1     |
|                     | <b>Total at Second Pass Approval</b>  | <b>460.9</b>   |       |
| Jun 14              | Real Variation – Real Cost Decrease   | (18.0)         | 2     |
| Jul 10              | Price Indexation  | 18.0           | 3     |
| Jun 19              | Exchange Variation  | (39.1)         |       |
| Jun 19              | <b>Total Budget</b>   | <b>421.8</b>   |       |
|                     | <b>Project Expenditure</b>  |                |       |
| Prior to Jul 18     | Contract Expenditure – Intelsat   | (294.4)        |       |
|                     | Contract Expenditure – Viasat   | (28.9)         | 4     |
|                     | <b>Other Contract Payments / Internal Expenses</b>  | <b>(38.0)</b>  | 5     |
|                     |   | <b>(361.3)</b> |       |
| FY Jul 18 to Jun 19 | Contract Expenditure – Viasat   | (3.9)          |       |
|                     | Other Contract Payments / Internal Expenses   | (5.5)          | 6     |
|                     |   | <b>(9.4)</b>   |       |
| Jun 19              | <b>Total Expenditure</b>  | <b>(370.7)</b> |       |
| Jun 19              | <b>Remaining Budget</b>   | <b>51.1</b>    |       |
| <b>Notes</b>        |   |                |       |
| 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 <b>November 2018. Stop Payments were triggered again from March 2019 pending achievement of Product Baseline Review and Stirling Completion.</b>  |
| 5 | <b>Other Contract Payments / Internal Expenses of \$38.0m comprise of Capital and Operating Expenditure (\$19.4m) and expenditure for contracted workforce related contractor support services provided by Nova Defence (18.6m).</b>   |
| 6 | <b>Other Contract Payments / Internal Expenses total \$5.5m comprise of other Capital and Operating Expenditure (\$0.2m) and expenditure for contracted workforce related contractor support services provided by Nova Defence (\$5.3m).</b>   |

## 2.2A In-year Budget Estimate Variance

| Estimate<br>PBS \$m | Estimate<br>PAES \$m | Estimate<br>Final Plan \$m | Explanation of Material Movements   |
|---------------------|----------------------|----------------------------|---|
| 20.3                | 18.4                 | 14.8                       | <b>PBS to PAES: Reduction in estimates</b> due to delay in completing contract milestones.<br><b>PAES to Final Plan: Reduction in estimates</b> due to delay in completing contract milestones. |
| Variance \$m        | (1.9)                | (3.6)                      | Total Variance (\$m): (5.5)   |
| Variance %          | (9.4)                | (19.6)                     | Total Variance (%): (27.1)  |

## 2.2B In-year Budget/Expenditure Variance

| Estimate<br>Final Plan \$m | Actual<br>\$m | Variance<br>\$m | Variance Factor                          | Explanation   |
|----------------------------|---------------|-----------------|--|---|
|                            |               | (1.5)           | Australian Industry                      | Figures are as per the end of <b>June 19. Current underspend is due to delay in achieving the Prime Contract milestones, Product Baseline Review, Test Readiness Review and Head Quarters Northern Command Completion.</b> These milestones have slipped to FY 19/20. |
|                            |               | (3.9)           | Foreign Industry                         |   |
|                            |               |                 | Early Processes                          |   |
|                            |               |                 | Defence Processes                        |   |
|                            |               |                 | Foreign Government Negotiations/Payments |   |
|                            |               |                 | Cost Saving                              |   |
|                            |               |                 | Effort in Support of Operations          |   |
|                            |               |                 | Additional Government Approvals          |   |
| 14.8                       | 9.4           | (5.4)           | <b>Total Variance</b>                    |   |
|                            |               | (36.5)          | <b>% Variance</b>                        |   |

## 2.3 Details of Project Major Contracts

| Contractor  | Signature Date   | Price at      |   | Type (Price Basis) | Form of Contract   | Notes |
|---|--|---------------|---|--------------------|--------------------|-------|
|   |  | Signature \$m | 30 Jun 19 \$m   |                    |                    |       |
| Intelsat  | Mar 09   | 202.5         | 294.4   | Firm               | ASDEFCON (COMPLEX) | 1, 3  |
| Viasat  | May 12   | 36.5          | 41.5  | Firm               | ASDEFCON (COMPLEX) | 2, 3  |
| <b>Notes</b>  |  |               |   |                    |                    |       |
| 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 <b>for support of the Communications System Monitor.</b>   |               |   |                    |                    |       |
| 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. <b>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.</b> |               |   |                    |                    |       |
| 3   | Contract value as at 30 June 2019 is based on actual expenditure to 30 June 2019 and remaining commitment at current exchange rates and includes adjustments for indexation (where applicable).  |               |   |                    |                    |       |
| Contractor  | Quantities as at   |               | Scope   | Notes              |                    |       |
|   | Signature  | 30 Jun 19     |   |                    |                    |       |
| 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. |                    |                    |       |
| <b>Major equipment received and quantities to 30 Jun 19</b>                         |  |               |   |                    |                    |       |
| All 20 channels were delivered successfully on 25 May 2012 and are now operational. |  |               |   |                    |                    |       |

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## Section 3 – Schedule Performance

### 3.1 Design Review Progress

| Review                         | Major System / Platform Variant   | Original Planned | Current Planned | Achieved /Forecast | Variance (Months) | Notes |
|--------------------------------|---|------------------|-----------------|--------------------|-------------------|-------|
| System 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                 |       |
| <b>Product Baseline Review</b> | NCS   | May 17           | <b>Feb 19</b>   | <b>Jul 19</b>      | <b>26</b>         | 2, 3  |
| <b>Notes</b>                   |   |                  |                 |                    |                   |       |
| 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                              | <b>This milestone was re-scheduled under CCP3 signed in March 2017. The previously contracted NCS Software Readiness milestone was removed as part of CCP4.</b>   |                  |                 |                    |                   |       |
| 3                              | <b>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.</b> |                  |                 |                    |                   |       |

### 3.2 Contractor Test and Evaluation Progress

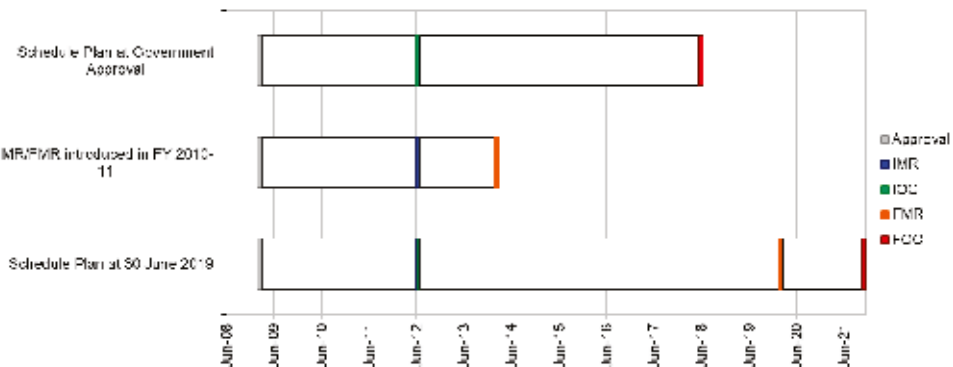
| Test and Evaluation | Major System / Platform Variant   | Original Planned | Current Planned | Achieved /Forecast | Variance (Months) | Notes          |
|---------------------|---|------------------|-----------------|--------------------|-------------------|----------------|
| System Integration  | IS-22 Hosted Payload  | Nov 10           | N/A             | Feb 11             | 3                 | 1              |
|                     | CSM   | Sep 11           | N/A             | Oct 11             | 1                 | 2              |
|                     | NCS   | Nov 13           | <b>Jun 19</b>   | <b>Nov 19</b>      | <b>72</b>         | <b>3,5,6</b>   |
| Acceptance          | IS-22 Hosted Payload  | Jun 12           | N/A             | May 12             | (1)               |                |
|                     | CSM   | Jul 12           | N/A             | Jun 12             | (1)               |                |
|                     | NCS   | Mar 14           | <b>Aug 19</b>   | <b>Dec 19</b>      | <b>69</b>         | <b>3,4,5,6</b> |
| <b>Notes</b>        |   |                  |                 |                    |                   |                |
| 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 <b>and</b> 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                   | <b>In February 2019, Viasat experienced security and system integration issues which caused further schedule delays to achievement of Final Acceptance for the NCS.</b>   |                  |                 |                    |                   |                |

### 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           | <b>N/A</b>         | <b>0</b>          | <b>5</b> |
| Final Materiel Release (FMR) # 2 (Network Control System) | Mar 14           | <b>Mar 20</b>      | <b>72</b>         | 2        |
| Final Operational Capability (FOC) (Pacific Ocean)        | Jun 18           | <b>Dec 21</b>      | <b>42</b>         | 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 impacted FOC.   |
| 3     | CIOG will be in a position to acquire agreed UHF capacity from the US as their capacity builds up in the region. A review of project submission documents to Government highlighted the omission of some key milestone dates in the PDSS.   |
| 4     | FOC (Pacific Ocean) is scheduled to be delayed due to FMR#2 being <b>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.</b>   |
| 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 Material Acquisition Agreement requirements. <b>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.</b>  |
| 6     | <b>The original FOC date of June 18 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.</b> |

Schedule Status at 30 June 2019



Note  
Forecast dates in Section 3 are excluded from the scope of the review.

### Section 4 – Materiel Capability Delivery Performance

#### 4.1 Measures of Materiel Capability Delivery Performance

| Pie Chart: Percentage Breakdown of Materiel Capability Delivery Performance   |  |
|---|--|
| <p>A pie chart consisting of a single green circle representing 100% of the performance. A line points from the center of the circle to the '100%' label.</p> | <p><b>Green:</b><br/>The project is currently meeting overall performance requirements which are determined by the hosted payload.</p> |
|   | <p><b>Amber:</b><br/>N/A</p>   |
|   | <p><b>Red:</b><br/>N/A</p>   |

|  |
|--|
| <b>Note</b>  |
| This Pie Chart represents Defence's expected capability delivery. Capability assessments and forecast dates are excluded from the scope of the review. |

#### 4.2 Constitution of Initial Materiel Release and Final Materiel Release

| Item                                   | Explanation   | Achievement       |
|--|---|-------------------|
| Initial Materiel Release (IS-22)       | <ol style="list-style-type: none"> <li>In Orbit Test of hosted payload.</li> <li>IMR was achieved in July 2012.</li> </ol>  | Achieved.         |
| Initial Operational Capability (IS-22) | <ol style="list-style-type: none"> <li>UHF SATCOM services on the IS-22 hosted payload. Quantity of ten 25kHz channels.</li> </ol>  | Achieved.         |
| Final Materiel Release (IS-22)         | <ol style="list-style-type: none"> <li>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.</li> <li>CSM and initial training for CSM.</li> <li>FMR IS-22 was achieved in December 2012.</li> </ol> | Achieved.         |
| Final Materiel Release (NCS)           | <ol style="list-style-type: none"> <li>NCS comprising three channel control sites, and NCS/NCS Manager (IW) training package.</li> <li>FMR NCS is forecast to be achieved in March 2020.</li> </ol>   | Not yet achieved. |
| Final Operational Capability           | <ol style="list-style-type: none"> <li>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. Forecast delivery is December 2021.</li> </ol>   | 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 Final Capability installations will be delayed at Defence Communication Station – Perth as it has been identified the building's roof is damaged and requires replacement. This may result in delay in delivering the UHF NCS.   | The timeframe on which remedial works are required has not been established. However, the severity of the impact to the project has decreased. The Project Office is monitoring the risk.  |
| There is a risk that current facilities are not fit for purpose or do not comply with Building Safety Regulations.  | The Project Office established a project safety case report that identified a series of risks for remediation. Activities are progressing to remediate current risks through existing maintenance support Contracts available within Defence.      |
| There is a risk that the project may exhaust contingency funding before delivery of FOC. The prolonged schedule delays has put significant pressure on project finances.  | The risk is now assessed as very low post-mitigation. The successful outcomes of CCP4 mean exhausting Contingency funding is unlikely. The project is anticipated to be delivered within the approved budget.                                      |
| Emergent Risks (risk not previously identified but has emerged during 2018-19)  |  |
| 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. Assessment of the NCS system by the Joint Interoperability and Test Command is a US Government requirement for access to US military satellites. | The risk has become the focus of the relevant working groups between Defence and the US Government. The risk is being managed by a campaign test plan that has been agreed by all stakeholders and is reviewed monthly.                            |
| There is a risk that further security and integration issues may materialise during site installation which may cause further schedule delays.  | Viasat has deployed additional engineering resources onto the project in the last seven months. Additionally, Viasat has undertaken testing of the final capability offsite in its Carlsbad facility to further mitigate site installations risks. |
| 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 is managing the risk by undertaking some of the supporting works required to develop artefacts to support training. The Project Office will monitor the risk through ongoing reviews.   |



5.2 Major Project Issues

| Description   | Remedial Action  |
|---|--|
| The project has and continues to suffer significant schedule slippage related to the development of NCS software. | Viasat has applied more resources to resolve the issue. Viasat has also been working closely with the Commonwealth to identify ways to recover schedule, i.e. sharing risks in the test and acceptance program. There are also Senior Leadership engagement between Chief Joint Capabilities, Deputy Secretary CASG and Viasat President to ensure Viasat is delivering against the final capability schedule forecasts. |
| Note  |  |
| Major risks and issues in Section 5 are excluded from the scope of the review.                                    |  |

Section 6 – Project Maturity

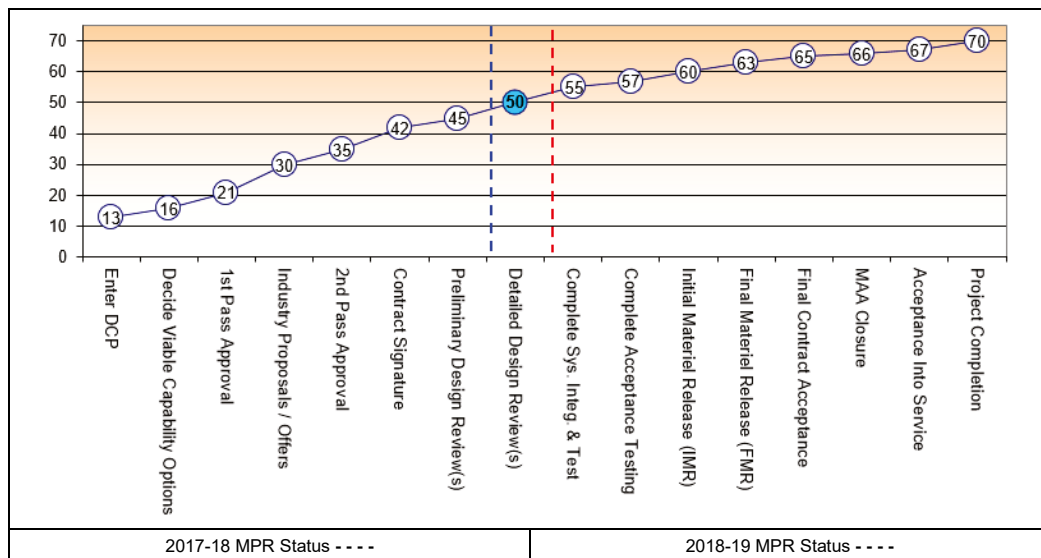
6.1 Project Maturity Score and Benchmark

| Maturity Score         |                | Attributes   |      |             |                         |                      |            |                        | Total |
|------------------------|----------------|--|------|-------------|-------------------------|----------------------|------------|------------------------|-------|
|                        |                | Schedule   | Cost | Requirement | Technical Understanding | Technical Difficulty | Commercial | Operations and Support |       |
| Project Stage          | Benchmark      | 7  | 7    | 7           | 8                       | 7                    | 7          | 7                      | 50    |
| Detailed Design Review | Project Status | 7  | 9    | 8           | 7                       | 8                    | 8          | 7                      | 54    |
|                        | Explanation    | <p>Project Maturity Scores reflect delivery of the NCS outcomes only. The IS-22 Hosted Payload (Materiel Release 1) was achieved in 2012 and has been supporting UHF SATCOM operations since this time.</p> <ul style="list-style-type: none"> <li><b>FOC Schedule:</b> The schedule for the NCS has slipped 42 months. The confidence level of the latest forecast is high.</li> <li><b>Cost:</b> IS-22 and the NCS are on firm fixed price contracts. Overall costs for the NCS have gradually increased due to additional work required by the Project Office following signing of CCP2 and CCP3. However, CCP4 has resulted a contract price reduction and increases in project costs are being offset through recovery of compensation from Viasat for the prolonged project delays.</li> <li><b>Requirement:</b> IS-22 has been in operation since 2012. The NCS Interim Capability has been delivered and supporting operations since November 2016. The only remaining project scope is the NCS final capability.</li> <li><b>Technical Understanding:</b> Support of the IS-22 capability has been established with a long term Through Life Support contract established. Viasat is supporting the NCS Interim Capability until the NCS final capability is delivered.</li> <li><b>Technical Difficulty:</b> In the last 12 months, the core software product has matured significantly. Viasat is vigorously undertaking integration tests in their Carlsbad facility to prove the maturity of the final capability before undertaking site installations.</li> <li><b>Commercial:</b> Services are being delivered as contracted.</li> </ul> |      |             |                         |                      |            |                        |       |

Project Data Summary Sheets

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**Section 7 – Lessons Learned**

7.1 Key Lessons Learned

| Project Lesson | Categories of Systemic Lessons |
|----------------|--------------------------------|
| N/A            | N/A                            |

**Section 8 – Project Line Management**

8.1 Project Line Management as at 30 June 2019

| Position         | Name                   |
|------------------|------------------------|
| Division Head    | Mr Ivan Zlabur         |
| Branch Head      | Ms Myra Sefton         |
| Project Director | Ms Michelle Liu-Aves   |
| Project Manager  | <b>Mr Kasey Jordan</b> |

