

Department of Education and Training

Project Review – Australian Apprenticeships Management System



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1. Executive summary



Terms of Reference

This review was an independent assessment of the Australian Apprenticeships Management System (AAMS) project with specific focus on areas managed by the Department as outlined in the scope. Additionally, the review identified relevant lessons learnt to inform future management of projects in the Department of Education and Training (Education). The review has been undertaken between January - March 2018 in accordance with the scope at *Appendix B*.



Overview of AAMS

First pass business case approval was given for an in house AAMS build by the Government in 2012 and subsequent second pass approval was given in 2013. However in late 2014, the Government approved a revised delivery approach for an enhanced AAMS.

The objective of the project remained, which was to replace the outdated Training and Youth Internet Management System (TYIMS) and reduce administrative burden on Network Providers thus enabling these Providers to deliver greater support services to Australian apprentices and their employers.



Context

The following summation gives context in terms of events and factors leading to the current state of AAMS:

- The project commenced within the Department of Industry in 2014 and was transferred to Education in December 2015.
- The four year contract between Education and the vendor was signed 28 May 2015, with the objective of delivering a full end-to-end solution, to replace the aging and unsustainable TYIMS. The original solution go-live date was set at 1 July 2016 with three years of subsequent support.
- The initial project planning was under the direction of departmental policy and business areas with varying levels of involvement from ICT executive across both Departments. The Project executive has remained relatively consistent with the same Senior Sponsoring Office (SSO) since signing of the vendor contract. In addition to this role, the project has had an Senior Responsible Officer (SRO) and Project Manager/s.
- During solution delivery the schedule had four significant changes to the go-live date of 1 July 2016. This was revised to 3 October 2016 and subsequently to 3 July 2017 and 6 November 2017.
- At the time of this review, the solution is not in production and the aging TYIMS remains in operation. Support arrangements for TYIMS and remaining useful or functional life are being confirmed by Education.



Summary of observations (against scope areas)

Overall view

- Our independent assessment identified weaknesses in practices across project governance, project management, contract and stakeholder management over the delivery of AAMS. This materially contributed to the non-delivery of the project and inability to achieve the benefits outlined in the business case.
- This report recommends the Department take action to strengthen its project, risk and contract management arrangements, as well as undertake an immediate review of other high priority projects to ensure practices identified by this review over AAMS are not widespread.

a) design /effectiveness of governance and assurance arrangements

- While the AAMS governance arrangements were largely designed appropriately for the size of the project with relevant representation, these forums did not always operate effectively. For example, the Programme Sponsor Group (PSG), was focused on operational issues rather than strategic matters such as confirming the ongoing alignment to the business case. Additionally, User Design Groups met for three to four months during initiation, however there is no evidence to confirm meetings occurred post this to inform delivery.
- A SSO and an SRO are appointed with some overlap of responsibilities causing a level of confusion over ownership for AAMS. At times, this also contributed to an inefficient approach to decision making and escalation of issues (as outlined below).
- The independent assurance provider could have been better utilised by aligning activity to critical decision points and risks. Additionally, recommendations made by the assurance provider were not consistently implemented in a timely manner.

b) the response to the issues arising from delays in delivery of AAMS

- Several critical issues were experienced by AAMS (e.g. critical contract milestone not being met by the vendor) and evidence of a consistently timely response from Project Executives to these was not found.
- AAMS project risks were discussed at the PSG and some risks were captured in departmental risk tool. However, there is evidence that risks were not consistently managed and updated with appropriate treatments.

c) appropriateness of practices in managing the project

- The AAMS solution was not regularly validated against policy objectives, requirements or expected benefits as outlined in the business case. Additionally, we identified gaps in project management practices.
- A comprehensive scope change process was not established. Specifically, evidence of an impact assessment against schedule, resources and project costs for three major scope changes agreed with the vendor could not be provided.

d) contract and vendor management practices

- While specialised skills are often required to effectively establish and manage ongoing contract with an ICT vendor, contract management assistance provided during the initiation phase was not ongoing. It is likely that AAMS Project executive would have benefited from this expertise, particularly when the vendor missed critical go-live milestones and during periods of contract re-negotiations.
- Vendor performance meetings were held on a weekly basis from mid 2016 until September 2017. These were attended by AAMS Senior Executives, the SSO and SRO, which reflected a high level of management attention but did limit escalation and independence in management of vendor performance issues.

e) stakeholder engagement approach

- End users were not consistently consulted on their needs from design and throughout the project lifecycle for the proposed AAMS solution. Additionally, a recent independent assurance review in July 2017 indicated the proposed AAMS solution was not fit for purpose nor would it realise the benefits as intended in the business case.

1. Executive summary (cont'd)



Key Observations

1. AAMS governance arrangements could have been strengthened throughout the project lifecycle to support these forums being used to inform key project decisions.
2. Multiple senior roles (SSO and SRO) resulted in areas of perceived overlap of responsibility, accountability and ownership for AAMS across key project stakeholders.
3. The role of the independent assurance provider could have been better utilised by AAMS to target key project risk areas and/or validate vendor progress and contract deliverables. Further, response to review recommendations were not managed appropriately (e.g. where concerns over the validity of business case were raised in January 2017, we could not sight evidence of any appropriate action to address this concern and the project remains live).
4. Where concerns were raised by Network Providers during the business process workshop in late 2016, there is no evidence that this issue was escalated to the PSG for appropriate discussion.
5. A timely response following the failure to meet a 31 July 2017 critical contract milestone was not achieved.
6. Risks were reported to governance forums, however, the supporting management practices were not consistently applied. For example, multiple risk registers existed; risk treatments not consistently updated; and misalignment between risks reported and those captured in project risk register(s).
7. Issues encountered by the AAMS project were not always appropriately reflected in project registers or shared and communicated to relevant stakeholders.
8. Management practices did not validate the proposed solution regularly to confirm it would continue to meet policy objectives, requirements, expected benefits and the needs of end users.
9. Dedicated Project Management Office (PMO) capability did not exist for the life of the AAMS Project. Had this been maintained, vendor status reports may have been more heavily scrutinised to provide an accurate snapshot of status and visibility over the vendor's delivery activities.
10. Changes to the proposed scope of the Project occurred without a consistent assessment of key items relating to non-vendor costs, timing and impact on end users.
11. There were gaps in the vendor contract establishment (e.g. insufficient performance milestones) and ongoing contract management practices (including performance meetings). Additionally a Contract Management Plan did not exist which may have assisted in triggering of performance mechanisms when required.
12. The AAMS project did not consistently engage stakeholders to ensure buy in from users.



Environmental changes and improvements

We acknowledge that Education has taken steps, particularly over the past 12 months, to help mature the management of projects agency wide.

Some of these key changes relating to areas of our review include:

- **Corporate Strategy:** Education has recruited a Corporate Strategy Deputy Secretary in late 2016 who is responsible for making improvements to the organisation's corporate practices.
- **Contract Management:** Education has revised the contractual arrangements with the vendor to include more specific contractual obligations and agreement to two critical milestones for delivery in 2017. Further work is also being explored to build capability in terms of a central and dedicated contract management function for Education.
- **Investment in ICT:** Education has invested in building ICT capability and involvement across key projects, including AAMS. For example, there is evidence of the Education's CIO and ICT Executives' involvement across the later phases of the project lifecycle, particularly in the Programme Sponsor Group and weekly meetings with the vendor from mid 2017.
- **Policy, Business and ICT working together:** There is evidence of policy and business areas working more closely with ICT to help inform business case development, particularly with the recent approval of Education's ICT Strategy which governs all new business cases and projects. For example, other business cases are currently being co-designed and led between both areas.
- **Investment in project management capability:** An ICT PMO was established in 2017 to mature the management of programmes and projects being managed across Education. This also includes the release of a departmental Project Management Framework for ICT projects. Both provide the foundation for maturing capability moving forward.
- **Lessons learnt:** The Education Executive have recognised that there are many lessons to be learnt from the AAMS project. This review was commissioned to identify lessons learnt that can be actioned now and on future projects to improve the management and likelihood of success of ICT projects being managed by Education.

Lastly, it was acknowledged in our discussions with the Digital Transformation Agency (DTA) that undertaking a review over the AAMS project, which has experienced some issues, is a beneficial initiative to assess viability moving forward.






2. Recommendations overview

Detailed below are recommendations to strengthen Education's management practices in respect of areas identified for improvement in this review. Recommendations 1-5 provide the foundations to further mature Education's ICT project and contract management practices. The outcomes from these recommendations will help to inform Recommendation 6.

Recommendation	Suggested Owner	Indicative Timing
1. Improve the governance practices in Education by:		
a) Reviewing all programmes (with a particular focus on Tier 1 projects) to ensure their governance bodies have appropriate accountability, responsibility and escalation processes in place; and confirm Senior Executive's key programme and project roles are defined, appropriate, responsibilities are assigned.	Deputy Secretary, Corporate Strategy / CIO	May 2018
b) Establishing a portfolio reporting approach to enable visibility of progress across all relevant ICT projects (at least Tier 1) to the Senior Executive. This should consider established tolerances and report accordingly.		
2. Mature the ICT project management framework and assurance practices in Education by:		
a) Updating the ICT Project Management Framework to provide clear guidance on the following: - assurance requirements over all ICT Projects aligned to existing Tiers which consider risk, complexity and value. - required skills, experience and qualification/certification of key project roles (e.g. SRO, Programme or Project Managers) aligned to the established Tiers. - required tolerances for relevant project categories (e.g. schedule, risk, budget, benefits, quality) and protocols for escalation of exceptions to Executive.	Deputy Secretary, Corporate Strategy / CIO	June 2018
b) Assessing current ICT projects to confirm alignment with updated assurance requirements (outlined in the Project Management Framework) and address gaps where required.		
c) Establishing appropriate assurance capability within the ICT PMO to provide oversight of projects underway (with priority on Tier 1 projects).		
3. Mature project risk management practices in Education by:		
• Reviewing all programmes (with a particular focus on Tier 1 projects) to ensure risk reporting practices are aligned to project risk management guidance.	Deputy Secretary, Corporate Strategy / CIO/ CRO	May 2018
4. Mature the project management capability and practices across Education by:		
a) Conducting a review targeting Tier 1 Projects (at a minimum) to confirm: - mechanisms exist for revalidation of solution/deliverable against the business case. - project budget and cost reporting. - appropriate mechanisms for engaging stakeholders/users exist from design and throughout project lifecycle (in accordance with DTA mandate). - project change control practices are in place and assess impact on schedule, costs, risks and benefits. - extent of consistent programme and project reporting practices in place. - current state of project management capability across ICT projects underway to confirm required skills, experience and qualification/certification of Senior Personnel.	Deputy Secretary, Corporate Strategy	July 2018
b) Use the outcomes from this review to inform an action plan to build project management maturity, capability and practices (where relevant).		
5. Mature the contract management arrangements in Education by:		
• Creating a framework and structures to support management and ongoing monitoring of contracts throughout the programme and project lifecycles.	Deputy Secretary, Corporate Strategy / CFO / CIO	July 2018
• Mandating contract management plans for Tier 1 projects (at a minimum) and providing specific guidance on roles, responsibilities and performance management mechanisms.		
6. Leverage on the outcomes, lessons learnt from Recommendations 1 to 5 to confirm the feasibility (and implementation plan if required) for establishing the following:	Deputy Secretary, Corporate Strategy	October 2018
• An enterprise Project Management Office including project assurance capability (potentially extending the ICT Project Management Office).		
• A central Contract and Procurement function (leveraging relevant practices from existing shared services arrangements).		

3. Summary of lessons learnt

Listed below are summarised lessons learnt identified from the AAMS Project that Education can consider for future projects, these are not recommendations.

				
Governance & assurance arrangements	Issue response	Management practices, progress reporting and business processes	Contract and vendor management	Stakeholder management
<ol style="list-style-type: none"> 1. A Senior Responsible Officer (SRO) with appropriate expertise and authority (provided) should be appointed as owner of future projects. 2. Establish a fit for purpose governance arrangement(s) that clearly identifies the role, authority and has appropriate representation (across relevant business, policy, ICT and external stakeholders) allowing a focus on users, project delivery and strategic alignment to deliver policy intent. 3. Independent assurance to be utilised relevant to the risk profile of the project (e.g. high value/risk projects to utilise assurance from inception). The services should be flexible, dynamic and align activity to major decision points and risks throughout the lifecycle. 	<ol style="list-style-type: none"> 4. Project Executive and governance structures should promote a culture of proactive risk management to ensure strategic and operational risks are identified, assessed and managed regularly. In addition to the prompt addressing of issues. 5. Embedding appropriate practices to empower Project Executive and team members to proactively identify, manage, and escalate issues (when relevant) in a timely manner. 	<ol style="list-style-type: none"> 6. A Project Manager with appropriate skills, experience and qualification/certification (relevant to the risk profile) to deliver future project. 7. All projects should have appropriate revalidation of the proposed solution or deliverable against the business case so that decision makers can make a determination on the ongoing viability of the initiative at critical milestones. All key decisions should be made with consideration of the business case objectives and benefits. 8. Embed a project change mechanism to ensure that where project changes are required, they are assessed to maintain alignment to the business case, and these changes are assessed using an appropriate change control framework. <p><i>Note: This framework should state the criteria requiring an impact assessment as part of any proposed change.</i></p> <ol style="list-style-type: none"> 9. In line with lesson 2, establish fit for purpose project reporting guidelines which seek to balance reporting on key project delivery areas (scope, budget, schedule), business benefits and user engagement. 	<ol style="list-style-type: none"> 10. The nature of ICT-enabled initiatives involving third party solution development requires ICT vendor management expertise and relevant experience to ensure that appropriate mechanisms exist to manage the contract effectively. <p><i>Note: This should include visibility and validation of progress, performance management, escalation processes and contingency planning.</i></p>	<ol style="list-style-type: none"> 11. In line with DTA's Digital Service Standard, users should be engaged to help inform requirements and facilitate ongoing buy-in (and revalidation when relevant) throughout the lifecycle of a project. 12. Appropriate stakeholder (internal and external) impact assessments should inform all business cases, the design of the solution, quality acceptance criteria and all stakeholder engagement strategies.



Observations

4. Observations – Governance & assurance arrangements

Context

Governance arrangements were established for AAMS in 2015 within the Department of Industry (prior to machinery of government move to Education). These arrangements included the AASS Programme Management Board and Programme Sponsoring Group (PSG), which had largely appropriate representation from both internal and external membership from Policy, Business, ICT and the external vendor.

These arrangements remained relatively stable until July 2017 when changes were made to reflect a broader portfolio view on projects being managed by the Skills and Training Cluster.

Over the life of the project, AAMS has had a range of secondary and working group related governance bodies which each had a Terms of Reference (ToR) with the exception of the Operational Working Group and the Change Management Committee (highlighted below).

An independent project assurance provider was appointed in 2015 to undertake regular reviews reporting to the SSO. The independent assurance provider was not a member of the key governance bodies and therefore presented their review findings and recommendations straight to the SSO/SRO.

Key Observations

Governance arrangements could be strengthened throughout the project lifecycle.

A total of 11 Governance arrangements were identified across the lifecycle of AAMS, specifically:

- The PSG, existed to provide “strategic direction and assurance, and make decisions on matters referred to it.” Feedback received during the review indicated that the PSG tended to be focused on operational matters, particularly, monitoring defects associated with ICT build of AAMS. This was supported by the independent assurer who recommended in December 2016 and May 2017 that the PSG needed to move its focus to more strategic matters (e.g. consider whether the business case was still valid; contingency arrangements for discontinuing with the vendor).
- There were also some inconsistencies in the operations of some governance working groups, particularly relating to user engagement and design. For example, the User Reference Group and Design Reference Groups met between August and October/November 2015 and there is no evidence that they met again.
- The extent of governance bodies represented below indicate that the value of these mechanisms was diluted, especially where roles and responsibilities between groups were not clear.

The illustration below lists each of the governance bodies of the Programme and highlights their continuation:

[illegible]

4. Observations – Governance & assurance arrangements (cont'd)

Key Observations (cont'd)

Key project decisions were often made without consulting or informing governance forums.

- In accordance with the Terms of Reference, the PSG's role focused on "making decisions referred to it by the AAMS Programme Management Board."
- While we acknowledged there were some decisions brought to the PSG by the SSO (e.g. movement of Go-live date to July 17), feedback received from executive stakeholders consistently reported that this governance forum was used for discussions on relevant issues facing the project (rather than informing decision making).
- Furthermore, we could not sight evidence that change orders were discussed or approved by the PSG before acceptance by SSO/SRO.
- Multiple sources (stakeholder interviews and independent assurer reports) highlighted that although the PSG received information relating to project progression, the discussion focused on operational issues (e.g. defect counts) which limited their ability to influence strategic decisions. This was also supported by recommendations from the Independent Assurer between December 2016 and May 2017.

Multiple senior roles (SSO and SRO) resulted in areas of perceived overlap of responsibility for AAMS across key project stakeholders.

- An SSO role was appointed as the key approver on all elements of the broader programme, such as issue resolution, conflicts with other projects and all changes to scope, schedule or deliverables. An SRO was also appointed with accountability for ensuring that the project objectives were met and benefits are realised.
- Several stakeholders noted in our review that having both senior roles in AAMS 'created a level of confusion relating to ownership and escalating relevant project issues.' The blurring and duplication of responsibilities and accountabilities between the SSO and SRO roles is illustrated in the table by comparing these roles to the SRO description described in Managing Successful Programmes (MSP) guidance.
- We acknowledge the appointment of an SSO and SRO could not be sighted in another project within Education.

As per the previous review, in conjunction with monitoring schedule, budget, risks and issues, the PSG [should] focus some attention on matters of strategic importance.

Independent assurance report – May 2017

The table below highlights duplications and gaps between SSO and SRO roles according to their role descriptions in the AASS Programme Sponsor Group Terms of Reference (March 2015) aligned to Managing Successful Programmes (MSP) guidance:

SRO Responsibilities – MSP Guidance	SSO	SRO
Appoint, chair, and set priorities for the programme board	✗	✓
Create and communicate the vision for the programme	✗	✓
Provide clear leadership and direction	✓	✓
Maintain alignment of the programme with the organisation's strategic direction	✓	✗
Ensure programme delivers coherent capability, achieves strategic outcomes and realises benefits	✓	✓
Maintain the interface with key senior stakeholders, keeping them engaged and informed	✓	✓
Monitor the key strategic risks facing the programme	✗	✓
Secure investment required to set up and run the programme	✗	✓
Establish the programme's governance arrangements and ensuring appropriate assurance is in place	✗	✓
Ensure the viability of the business case	✗	✓
Commission assurance and audit reviews	✗	✗
Ensure the effectiveness and performance of programme organisation	✗	✗

✗ Duplication or gap in responsibilities between SSO and SRO compared to MSP guidance on the role of an SRO

The PSG needs to move its focus on matters of strategic importance... [including]...Is the business case still valid, i.e. is 'what' the Department is seeking to achieve through AAMS still valid?

Independent assurance report – May 2017

4. Observations – Governance & assurance arrangements (cont'd)

Key Observations (cont'd)

The role of the independent assurance provider could have been better utilised by AAMS.

- The independent assurance provider conducted reviews of the project approximately every six months. The project could have benefited from establishing a flexible assurance plan, updated regularly to align activities to major decision points, critical milestones and risks.
- Also, the independent assurance provider did not have an ongoing role on key AAMS project governance forums noting that we could not sight evidence of regular attendance to provide input from work undertaken. This would have been beneficial for Governance executives to regularly hear from the independent assurance provider on their views over risks and for the discussion to help inform future activity.

Recommendations made by the independent assurance provider were not managed appropriately.

- The independent assurance provider has delivered more than 60 recommendations during the period of mid-2015 to mid-2017, noting that two Independent Assurance reports (February 2016 and July 2016) were commented upon within reports provided for review, but were not provided for this review to consider.
- Recommendations made by the independent assurance provider were not always addressed in a timely manner. For example, there is evidence that multiple instances of similar recommendations were made by the independent assurer in successive reports, indicating a lack of appropriate action being taken following the initial recommendation.
- There is no evidence of a regularly maintained recommendation tracker to maintain visibility over the progress against agreed actions.

Detailed below is a summary of three key areas of recommendations made by the independent assurance provider between July 2015 and April 2017.

Independent assurance report recommendations	Jul 2015	Nov 2015	Dec 2016	Apr 2017	Times observed
Governance The PSG needs to move its focus on to matters of strategic importance	x	x	✓	✓	2
Schedule Prioritise functional and non-functional requirements from a business perspective	✓	✓	x	x	2
Quality and Testing The project team (vendor to lead) as a matter of priority provide in more detail the defect resolution rate, expected defect numbers during the up-coming testing phases, and defect resolution time	x	x	✓	✓	2



Recommendations

- Improve the governance practices in Education by:
 - Reviewing all programmes (with a particular focus on Tier 1 projects) to ensure their governance bodies have appropriate accountability, responsibility and escalation processes in place; and confirm Senior Executive's key programme and project roles are defined, appropriate, responsibilities are assigned.
 - Establishing a portfolio reporting function to enable visibility of progress across all relevant ICT projects (at least Tier 1) to the Senior Executive. This should consider established tolerances and report accordingly.
- Mature the ICT project management framework and assurance practices in Education by:
 - Updating the Project Management Framework to provide clear guidance on the following:
 - assurance requirements over all ICT Projects aligned to existing Tiers which consider risk, complexity and value.
 - required skills, experience and qualification/certification of key project roles (e.g. SRO, Programme or Project Managers) aligned to established Tiers.
 - required tolerances for relevant project categories (e.g. schedule, risk, budget, benefits, quality) and protocols for escalation of exceptions to Executive.
 - Assessing current ICT projects to confirm alignment with updated assurance requirements (outlined in the Project Management Framework) and address gaps where required.
 - Establishing appropriate assurance capability within the ICT PMO to provide oversight of projects underway (with priority on Tier 1 projects).



Lessons Learnt

- A Senior Responsible Officer (SRO) with appropriate expertise and authority (provided) should be appointed as owner of future projects.
- Establish a fit for purpose governance arrangement(s) that clearly identifies the role, authority and has appropriate representation (across relevant business, policy, ICT and external stakeholders) allowing a focus on users, project delivery and strategic alignment to deliver policy intent.
- Independent assurance to be utilised relevant to the risk profile of the project (e.g. high value/risk projects to utilise assurance from inception). The services should be flexible, dynamic and align activity to major decision points and risks throughout the lifecycle.

5. Observations – Issue response

Context

Given the critical factors for successful AAMS delivery, particularly relating to managing a broad group of internal and external stakeholders (e.g. Network Providers and State Training Authorities) and a third party vendor for ICT delivery, it is essential that project risks and issues are managed effectively.

The AAMS project had established several mechanisms to manage risks and issues, these include:

- **Project:** Both the Programme Sponsoring Group (PSG) and AAMS Programme Board were provided with monthly status updates by the Project Manager outlining relevant risk and issues relating AAMS for consideration and action (where relevant).
- **Vendor:** Project status updates were provided by the vendor to Education on a weekly basis from engagement. In the later stages of the project (from June 2016), a weekly meeting was held between the SSO and the vendor to discuss project status (specifically defect resolution).

Key Observations

Key decisions to address some critical issues were not consistently made in a timely manner.

We acknowledge that several critical issues were experienced by the Project, and evidence of a timely response to these issues could not be sighted. Additionally, we could not sight evidence that an issues rating matrix has been developed to provide clear support and guide escalation to responses to key issues encountered by the Project.

Some examples of these relate to the following over the page:

- **Network Providers raising concerns:** Evidence was not sighted during the review to confirm that concerns raised by Network Providers during the business process workshop in late 2016 was escalated to the AAMS Programme Board for discussion.
- **Business case not reviewed:** The independent assurance provider raised the need to review the AAMS business case in January 2017, however evidence was not available at the time of our review in February 2018 to support that this occurred.
- **Contract milestones missed:** The agreed 31 July 2017 critical delivery milestone was not met and a contractual termination clause was triggered. A decision on the way forward for the project (i.e. continuation or termination of vendor contract) has recently been made in March 2018.

The table* below highlights three issues where a project response has not come in a timely manner:

Event	Date	Key responses	Date of response	Impact of delay	Notes/current position
Network Provider stakeholders raised concerns that AAMS would not provide planned efficiencies	April 2016	The Programme Board noted the concerns and that Network Providers had been asked to provide evidence.	April 2016	Network Providers went to the Assistant Minister with their concerns, which contributed to the initial delay to go-live.	Engagement with Network Providers has been inconsistent throughout the project. Extent of concerns not formally recognised by project until delivery of additional independent assurer report in July 2017.
		Further Network Provider concerns arising from Business Process Workshop and Business Transition Workshop activities were not recorded or discussed by contemporary governance forums.	October – December 2016	Network Provider concerns deepened, but were not addressed through governance and stakeholder forums.	
Independent Assurer recommended that the AAMS business case be reviewed.	January 2017	The PSG discussed the Independent Assurer's report, the SSO noted that discussion regarding the business case review would be at the next meeting.	February 2017	The business case review was not discussed at the following PSG. Further discussion was delayed until the 8 May 2017 PSG meeting.	While the independent assurer raised concerns over the validity of business case in January 2017, we could not sight evidence of a formal review over business case.
		Programme Manager provided a report to PSG on benefits, further information was agreed to be sought.	May 2017	Deed of Variation 2, and Change Order 3 were developed by Education and formally signed off in June 2017.	
		New Programme Manager commissioned and received the July 2017 additional independent assurer report.	July 2017	Education and the vendor each incurred further costs into development of the AAMS solution before independent review of the business case occurred.	
31 July 2017 critical contract milestone was not achieved	1 August 2017	Vendor was advised that Education were considering their options	29 August 2017	Letter did not require any action, or cessation of action, by the vendor.	Critical contract milestones not met in July 2017 and recent decision made on external vendor.
		Options were developed to continue or terminate the vendor contract	September 2017	The vendor continued to work to develop the contracted AAMS solution.	
		Further information was sought on an AAMS-JobReady integration	October 2017	The vendor was engaged in the Capability Gap report process.	
		AAMS Branch contractor staff did not have their contracts renewed while vendor engaged on way forward.	December 2017	Unable to test AAMS v1.40 delivered December 2017, triggering Deemed Acceptance.	
		Decision reached on the external vendor for delivery of AAMS Project	March 2018	n/a	

*table based on key responses identified during review and may not reflect all responses

5. Observations – Issue response (cont'd)

Key Observations (cont'd)

Risk management practices were not consistently applied.

AAMS project risks were discussed at the PSG and some risks were captured in the departmental risk tool (RiskActive). However, there is evidence that risks were not actively managed with updated appropriate treatments (e.g. treatment for high risk of “users are not adequately prepared and their expectations are not aligned with the final AAMS solution” not updated since July 2015).

- Further it was identified that defined treatments were not actioned when relevant, an example from RiskActive (1 December 2016) is provided in the below table:

Risk ID 29277	Treatment ID 50875	Note
There may be unanticipated scope changes resulting in changes to requirements resulting in rework or additional work	Any changes to agreed functionality are subject to strict governance oversight and approval processes to ensure any impact to project schedule and budget are understood	No change orders were assessed for impact to project schedule or total project budget prior to approval. Refer to key observation in regards to proposed scope changes in Section 6.

- We identified two tools for the management of project risks including a project risk register and RiskActive. These tools captured risks inconsistently, as evidenced by:
 - Risk ratings were different between the two tools for common risks (e.g. “There may be unanticipated scope or requirement changes” was rated medium on Programme Dashboard 30 November 2016 and rated high in RiskActive on 1 December 2016); and
 - Misalignment between the high risks identified in RiskActive on 1 December 2016 and the high risks highlighted on the AAMS Programme Dashboard on 30 November 2016. E.g. Risk Active had 9 high risks and the dashboard highlighted 2 high risks.
- We noted that RiskActive was updated periodically, rather than when critical milestones were missed or risks were realised.

Actions mitigations by the AAMS project were not consistently reflected in relevant registers.

- Instances were identified where risks may be inappropriately assessed by the project (as reflected in risk registers) which could have limited visibility of these risks and issues to governance forums.
- For example in June 2016, the risk register included a low risk that ‘stakeholders may be inadequately informed about AAMS.’
- This low rating was despite a ministerial briefing which outlined lack of stakeholder preparedness as a reason for the delay of go-live. This was also written during the same period where we could not sight evidence of a Change Champion Working Group in operation to engage stakeholders.



Recommendations

- Mature project risk management practices in Education by:
 - Reviewing all programmes (with a particular focus on Tier 1 projects) to ensure risk reporting practices are aligned to project risk management guidance.



Lessons Learnt

- Project Executive and governance structures should promote a culture of proactive risk management to ensure strategic and operational risks are identified, assessed and managed regularly. In addition to the prompt addressing of issues.
- Embedding appropriate practices to empower Project Executive and team members to proactively identify, manage, and escalate issues (when relevant) in a timely manner.

6. Observations – Management practices, progress reporting and business processes

Context

The business and industry changes required to achieve the AAMS business case objectives required up front and ongoing engagement with users to ensure alignment of ICT build with identified needs.

Additionally, to support the delivery of a large change project (particularly ICT-enabled), there is often a dedicated PMO capability to provide support and direction/challenge for initiative management resources (e.g. SRO or Project Manager).

Key Observations

There was no evidence that the solution was regularly validated against policy objectives, requirements or expected benefits.

- Where better practice is to regularly revalidate the intended solution to ensure that it is going to meet policy objectives, user needs and support benefits realisation, there was no evidence of this occurring on the AAMS project.
- The independent assurer raised concerns regarding the business cases ongoing viability in the December 2016 report, however, we could not observe evidence that these concerns were addressed (e.g. through solution revalidation).
- User acceptance testing (UAT) by stakeholders (Network Providers and State Training Authorities) in April 2016 confirmed that the functionality of the solution did not meet their needs in many areas. Despite this feedback and a large number of defects (277), this did not prompt a revalidation of the proposed solution against the business case to ensure the benefits could be realised.

Dedicated PMO capability did not exist for the life of the AAMS Project.

- At the inception of the project, an external service provider provided PMO services to the project, however following the machinery of government change to Education, these services were discontinued in early 2016.
- Independent assurance recommended in July 2015 that “Departmental staff are involved as co-workers to the external service provider in the PMO to ensure skills transfer before services conclude”.
- Following the external provider leaving the project, staff members from the AAMS Branch contributed to responsibilities associated with a PMO. However, a dedicated function providing PMO services (e.g. project reporting, schedule management, risk and issue management, benefits management, tracking actions, change management etc.) was not in place.
- Some example of gaps in PMO functionality are outlined in the illustration to the above right.



A benefits plan has been drafted. This document remains key to ensuring that the original policy intent and reasons for conducting this project are not lost, or diluted over time. Further work is required to enhance this plan to include a focus on benefits associated with reducing time and administrative burden on Network Providers and STAs.

Independent assurance provider report – December 2016

Illustration of some gaps in PMO capability



Improvements in reporting project status

- Over the course of the project, we identified several areas for improvement relating to project and vendor reporting. These relate to:
 - The lack of adequate agreed tolerances for all elements of project delivery meant it was unclear what exceptions to the agreed plan were to be escalated to governance forums for discussion or decision.
 - Without uniform agreed reporting criteria, including what each of the project status (red, amber, green) mean, there was no way to easily convey the vendor's own assessment of project progress into departmental reports in alignment with Education's reporting frameworks.
 - Vendor status reports did not provide appropriate visibility or commentary over the actual status of the solution delivery. For example, the vendor status update reports leading up to the need to delay UAT due to build quality problems (April 2016) reported all 'green' status and did not mention anything about UAT activity. *Note: Management advised that the vendor replaced the project team responsible for ICT build in mid-2016.*
- We acknowledge that there is weekly Executive issues reporting process across the Department. In relation to AAMS, updates were provided on the project status each week in 2017. The updates reported a red project status for most of year (except March to late July).
- While these give an update on some actions being taken by the project, these reports could be strengthened to highlight additional information. This includes: implications of a continual red status (e.g. tolerances); outcomes of independent assurance activity (specifically in August 2017 highlighting a critical functionality gap with original requirements for AAMS); and an escalation provision for requesting specific action by the relevant Executive.

6. Observations – Management practices, progress reporting and business processes (cont'd)

Key Observations (cont'd)

Proposed scope changes were not consistently assessed on their impact against key items and therefore did not inform decision making.

- Project change requests submitted for decision were not completed in full. The requests often did not include required key details concerning the impact to schedule, resources and cost of the proposed change.
- Stakeholder interviews reported that comprehensive impact assessments were not documented due to project delivery time pressures. Without appropriate impact analysis, it is impossible to make an informed decision in regards to accepting changes to the scope of a project.

The table below summarises changes approved by Change Orders 1-3, and notes the approver and whether impact assessments were noted in relevant fields of the Change Order form:

Summary of Change Order	Date	Approver	Plan to action	Effect on contract cost	Effect on project cost	Effect on timing	Impact on end users
Change Order 1 Critical and High priority changes identified through engagement with Network Providers	22 February 2016	SRO	✖	✓ \$100,400	✖	✖	•
Change Order 2 Functionality for bulk signups, bulk claims and new STA-specific field on the Training Contract	29 March 2016	SRO	✖	✓ \$495,068	✖	✖	•
Change Order 3 This change order included funding for STA Code Table Changes, Intellex and CRM Changes, and an Enhanced Disaster Recovery Environment	21 June 2017	SRO	✖	✓ \$794,824	✖	✖	•

✓ = Appropriate analysis ✖ = No analysis • = Incomplete analysis



Recommendations

- Mature the project management capability and practices across Education by:
 - Conducting a review targeting Tier 1 Projects (at a minimum) to confirm:
 - mechanisms exist for revalidation of solution/deliverable against the business case.
 - project budget and cost reporting.
 - appropriate mechanisms for engaging stakeholders/users exist from design and throughout project lifecycle (in accordance with DTA mandate).
 - project change control practices are in place and assess impact on schedule, costs, risks and benefits.
 - extent of consistent programme and project reporting practices in place.
 - current state of project management capability across ICT projects underway to confirm required skills, experience and qualification/certification of Senior Personnel.
 - Use the outcomes from this review to inform an action plan to build project management maturity, capability and practices (where relevant).



Lessons Learnt

- A Project Manager with appropriate skills, experience and qualification/certification (relevant to the risk profile) to deliver future projects.
 - All projects should have appropriate revalidation of the solution or deliverable against the business case so that decision makers can make a determination on the ongoing viability of the initiative at critical milestones. All key decisions should be made with consideration of the business case objectives and benefits.
 - Embed a project change mechanism to ensure that where project changes are required, they are assessed to maintain alignment to the business case, and these changes are assessed using an appropriate change control framework.
- Note: This framework should state the criteria requiring an impact assessment as part of any proposed change.*
- In line with lesson 2, establish fit for purpose project reporting guidelines which seek to balance reporting on key project delivery areas (scope, budget, schedule), business benefits and user engagement.

7. Observations – Contract and vendor management

Context

The contract and vendor management skillsets required to manage ICT solution development contracts successfully is often specialised due to the technical nature of delivery.

Central expertise in this area remained with previous Departments (including Department of Industry and the Department of Employment) following machinery of government changes.

Basic contract management support is currently accessible to Education through a shared service arrangement with Department of Jobs and Small Business, however it is unclear whether this support would have been appropriate to assist with contract and vendor management throughout the project.

Key Observations

There were gaps in the vendor contract establishment and ongoing contract management practices.

- Despite the specialised skills required to effectively manage a third party vendor's contract, the corporate assistance provided during the procurement phase was not ongoing throughout the initiation of the original contract or the project lifecycle.
- Specifically, there was no dedicated, central contract management function available within Education to provide assistance to AAMS (noting that there was a basic service available through the Department of Employment). This function may have benefited AAMS Project Executive, particularly in instances of critical milestones being met and re-negotiations.
- We also note that the project did not have a Contract Management Plan for the ongoing management of the vendor contract. This plan is where clearly defined and documented roles, responsibilities and mechanisms for performance management (including expectations on the service provider) are usually documented.

Performance meetings with the vendor could have been improved.

- We note that the weekly meetings that occurred between Education and the vendor were largely focused on the number, and subsequent resolution, of solution build defects.
- There was an opportunity in these meetings to focus more broadly on issues impacting the project and the build's progress (in line with the original business case). Minutes of these meetings did not provide evidence that the discussion focused on these areas.
- Both SSO and SRO attended these weekly meetings. While this was a good indication of the level of senior management attention being applied to the project from Senior Executives, it diluted the potential escalation pathways available to the project as the most senior departmental representatives were present at each meeting.

The table below summarises the key vendor contract events of the Project with the associated target dates and the dates that the targets were revised. It highlights the large number of missed go-live dates and contract variations over the course of the Project.

Key Vendor Contract Date	Initial Date	Date of Revision	Comment
Contract executed	28 May 2015	N/A	N/A
Milestone targets set	11 Sep 2015	N/A	Within the AAMS Project Management Plan.
Initial Go-Live	1 Jul 2016	26 Apr 2016	Revised go-live primarily to provide more time for stakeholder transition.
2nd Go-Live	3 Oct 2016	14 Nov 2016	Noted go-live revision due to re-baselining of the AAMS implementation.
3rd Go-Live	3 Jul 2017	21 Feb 2017	Noted go-live revision due to the vendor's re-baselined schedule being incomplete.
Deed of Variation 2 executed	19 Jun 2017	N/A	Delivered the contract amendments outlined (above). These included critical milestones to provide Education with explicit mechanisms to terminate the vendor contract in case of default.
Critical Milestone 7	31 Jul 2017	N/A	The vendor did not deliver critical contract milestone 7 in accordance with Deed of Variation 2.
4th Go-Live	6 Nov 2017	N/A	This go-live date has not yet been revised, and is currently outstanding.

7. Observations – Contract and vendor management (cont'd)

Key Observations (cont'd)

There was a lack of independent validation or assurance over contract deliverables.

- We noted that the scope of the independent assurance provider was focused on Education's management of the AAMS project. It did not focus on either the progress or quality of the ICT solution build by the vendor.
- There was a missed opportunity for Education to utilise independent assurance to gain insight into the vendor's build progress. This was particularly relevant when issues were identified that implied the solution was not progressing as intended.

“ It is our view that the Department should not request vendor to provide a disaster recovery plan or option. Vendor should simply be required to demonstrate, as a matter of course, that they will provide disaster recovery capability as part of solution design and have the ability to meet the service levels under the contract.

Independent assurance provider report – November 2015

“ there is still a significant level of 'trust me' with vendor as substantial material evidence of successful delivery and increase in quality of the build will not materialise until March 2017.

Independent assurance provider report – December 2016



Recommendations

5. Mature the contract management arrangements in Education by:
 - Creating a framework and structures to support management of contracts throughout the programme and project lifecycles.
 - Mandating contract management plans for Tier 1 projects (at a minimum) and providing specific guidance on roles, responsibilities and performance management mechanisms.



Lessons Learnt

10. The nature of ICT-enabled initiatives involving third party solution development requires ICT vendor management expertise and relevant experience to ensure that appropriate mechanisms exist to manage the contract effectively.

Note: This should include visibility and validation of progress, performance management, escalation processes and contingency planning.

8. Observations – Stakeholder management

Context

Given the AAMS business case proposed significant changes to stakeholder operations that would lead to benefits through improved efficiencies in the business processes, the ongoing management and buy-in of those stakeholders was critical to the success of the project.

The project's engagement of stakeholders improved over the course of the project lifecycle. However, the nature of the initial stakeholder engagement could've been strengthened to ensure that the intended solution would be fit for purpose in meeting business case objectives and benefits.

Despite numerous opportunities to revalidate the proposed solution's appropriateness and reset the project, these opportunities have not been taken.

Key Observations

Stakeholder management mechanisms were not adequate to engage stakeholders to ensure ongoing buy-in from users.

- Following design of the solution and selection of the preferred vendor, the project commenced stakeholder engagement through a User Reference Group (URG) that was established in August 2015.
- The URG was planned to run from August 2015 until delivery, however stopped after 2 months. The Change Champion Reference Group was stood up in November 2016 following the Business Process Workshops.
- The Project Management Plan drafted by the vendor (September 2015) did not include mention of external stakeholders, nor a stakeholder management strategy/plan to ensure they were kept informed of changes effecting them.
- There is no evidence of an approved AAMS stakeholder management strategy until November 2017. It is unclear what strategy or plan was being used by the project before this to govern their engagement with stakeholders.
- The independent assurer did not seek external stakeholder views for their early reports in 2015. This was a missed opportunity to gain stakeholder feedback to inform early project decision making.

The table* below summarises project events where we would expect to see stakeholder (e.g. end users) input into the design of documentation or the testing of project deliverables to ensure they are fit for purpose.

Project Event	Responsible Department	Evidence of Stakeholder input
Business case development	Industry	✗
Pre-RFT solution design	Industry	✗
Functional requirements confirmation	Education	•
Non-functional requirements confirmation	Education	•
Revalidation of business case	Education	✗
Ongoing engagement to maintain and increase buy in (Change Champion Working Group)	Education	•
User acceptance testing (April 2016)	Education	✓
User acceptance testing (Embedding process)	Education	✓
Capability gap workshops	Education	•
Roadshows	Education	✓

*table based on evidence provided at time of review

✓ = Appropriate input ✗ = No input • = Evidence of input, possible improvements noted



The divergent views about the functional scope and its relationship to the Network Providers' business needs has been the root cause of the gap that exists today.

Additional independent assurer report – July 2017

8. Observations – Stakeholder management (cont'd)

Key Observations (cont'd)

The end-to-end solution for AAMS was designed without appropriate end user input.

- There was no evidence to suggest that users were adequately consulted during the design of the solution with the exception of a small number of consultations conducted by the external service provider during an initial design of requirements that was later discarded.
- The June 2017 'embedding exercise' was conducted prior to UAT to familiarise end user testers with AAMS functionality and highlighted the fact that many requirements were missing while other requirements were incorrect. At the time AAMS could only demonstrate 60% functionality.
- It was only following feedback from the June 2017 'embedding exercise' that further investigation into the solution's appropriateness was then commissioned and a review performed by an additional independent assurer.
- The independent assurer report stated that "*Network Providers feedback indicates that there will be significant duplication of effort and operational problems with the system in its current form.*"

Expected change impact assessments for stakeholders during the design and early build phases are not evident.

- In order to understand the impacts of the new solution on stakeholders, change impact assessments for each stakeholder cohort should be undertaken. There was no evidence to suggest that users were adequately consulted during the design of the solution with the exception of a small number of consultations conducted by the external service provider during an initial design of requirements that was later discarded.
- The independent assurance provider report from December 2016 highlighted that it "*become clear that expectations on what AAMS will deliver for stakeholders and their dependence on third party software [i.e. JobReady] are materially different*". It was recommended that external stakeholder engagement be targeted and consistent, and that more focus on rebuilding stakeholder confidence that product delivery would achieve policy objectives was required. There was no evidence that the Change Champions Reference Group, June 2017 embedding exercise or any other actions of the project achieved this.



Significant expectation mismatch amongst stakeholders and customers will impact change readiness and sustain an elevated risk of reputational damage.

Additional independent assurer report – July 2017



Recommendations

Mature the stakeholder management in Education by:

- See Recommendation 4



Lessons Learnt

11. In line with DTA's Digital Service Standard, users should be engaged to help inform requirements and facilitate ongoing buy-in (and revalidation when relevant) throughout the lifecycle of a project.
12. Appropriate stakeholder (internal and external) impact assessments should inform all business cases, the design of the solution, quality acceptance criteria and all stakeholder engagement strategies.

Appendices

Appendix A – Scope limitations

Appendix A – Scope exclusions, limitations

1. This review was undertaken in accordance with the scope attached at *Appendix B*.
2. This review was undertaken at a point in time based on the documentation available to the review team.
3. This review focused on the management of AAMS in the Department of Education. However, we did not review the management of AAMS within the Department of Industry. This included project initiation, requirements gathering, tender process and establishment.
4. This review does not provide comment on the quality of services delivered by external service providers, nor delivery against contractual obligations.
5. An assessment of the capability and expertise of project resources was not undertaken in this review.

Appendix B – Agreed scope

Appendix B – Agreed scope

The objectives of this review was to:

- Conduct an independent assessment of the AAMS project with specific focus on areas including: project and contract management; stakeholder engagement and communication management.
- Understand, document the extent to which the project had delivered against the areas within scope; reasons for non-delivery (where applicable) and identify relevant lessons learned to inform future management of projects in the department.

This review was achieved by undertaking an independent assessment of the following:

1. The department's management of the AAMS project, specifically:
 - a. the design/effectiveness of governance, assurance arrangements (including roles, responsibilities);
 - b. the response to the issues arising from delays in delivery of the new AAMS;
 - c. the appropriateness of practices and business processes to date in managing the project; and
 - d. contract and vendor management practices in place with respect to managing delivery of agreed obligations and performance management.
2. The Project's stakeholder engagement approach to keep stakeholders and users engaged in solution design and appraised of progress.
3. Appropriateness of communications to the Executive on the project's progress against budget, scope and benefits in accordance with the agreed decision of Government.

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