QUESTION ON NOTICE
Budget Estimates 2018 - 2019

Outcome: Skills and Training

Department of Education and Training Question

Senator Cameron asked on 31 May 2018.

Question

1) Provide details of other reviews (besides PWC) on the AAMS project?
Q) How much were each of the "reviews"?
Q) When were these reviews undertaken?
Q) What were the scope of these reviews?
Q) Were there reports as a result of the reviews – can they be tabled?

Answer

Both internal and external reviews were undertaken on the project. See attached for details of dates, pricing and scope of reviews.

Reports resulting from these reviews are attached. Names of individuals have been redacted.

The tender process was not in scope for these reviews.

The capability of tenderers/contractors were assessed as part of the tender process according to the Commonwealth Procurement Rules (CRP) 2014.

The PWC *Independent Review of the Australian Apprenticeships Management System (AAMS)* report was published on the department's website on 18 May 2018.

Attachments

Summary	
06-07-2015	AAMS Projects Assured Review
16-11-2015	AAMS Projects Assured Review
24-03-2016	AAMS Projects Assured Review
31-07-2016	AAMS Projects Assured Review
18-08-2016	AAMS CRM Architectural Review
10-01-2017	AAMS Projects Assured Review
29-03-2017	AAMS Project Schedule Review and Recom
01-04-2017	AAMS Projects Assured Review
July 2017	Tetra AAMS Review
01-11-2017	Capability Gap Report

Evaluations (Dates, Pricing and Scope)

- The Australian Apprenticeships Management System (AAMS) project has been subject to both internal and external reviews and funded from the AAMS budget.

Supplier	Report	Review Date	Submitted	Paid (ex GST)	Scope
Projects Assured	First Assurance Review	June 2015 to July 2015	July 2015	$130,211.48	Engaged to provide direct assurance and objective advice to the Senior Sponsoring Officer (SSO, Deputy Secretary Skills and Training). Assurance was provided on the overall implementation, timeframes, risks and the associated mitigations strategies.
	Second Assurance Review	October 2015 to November 2015	November 2015		
	Third Assurance Review	February 2016 to March 2016	March 2016		
	Fourth Assurance Review	June 2016 to July 2016	July 2016		
	Fifth Assurance Review	December 2016	January 2017		
	Sixth Assurance Review	April 2017	May 2017		
Microsoft	CRM Architectural Review	August 2016	August 2016	$48,000.00	The purpose of the review was to assess if the CRM implementation was aligned to recommended Microsoft practices and an appropriate platform for the business requirement. The following was agreed to as in scope and covered as part of the high level review: • CRM Solution Configuration Customisation • Integration points • Implementation methodology
	Project Schedule Review	March 2017	March 2017	$30,000.00	To provide an independent review focused on the following key areas of quality: • AAMS Master Schedule • Validation that the Recommendations as part of the AAMS High Level Review conducted by

					• the response to the issues arising from delays in delivery; • the appropriateness of practices and business processes to date in managing the project; and • 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
			Total	$425,568.48	

PROJECTS ASSURED

DEPARTMENT OF EDUCATION & TRAINING

AUSTRALIAN APPRENTICESHIPS MANAGEMENT SYSTEMS PROJECT

ASSURANCE REVIEW

SENIOR SPONSORING OFFICER BRIEF

6 July 2015
Version 1.00

1 Background

The Australian Apprenticeship Management System (AAMS) will support the operation of the Australian Apprenticeship Support Network (AASN) by delivering a system to automate many of the current manual and paper based processes involved in Australian Apprenticeships. AAMS will replace the existing Training and Youth Internet Management System (TYIMS) and provide a platform for these functions and services and facilitate the electronic storage of employer, Apprentice, and service provider information, and make Commonwealth payments.

Key capabilities of the new system include:

- Client and contact management - enabling a single platform for customer information, online sign-up of apprenticeships and online management and filing of records and contracts
- Determining eligibility for payments – calculating if Apprentices, employers and service providers are eligible to receive payments under the Australian Apprenticeships Incentives Programme, Australian Apprenticeships Support Network and Trade Support Loan programme based on a business rules engine
- Payments – including automatic monitoring and calculation when payments should be made to Apprentices, employers and service providers who are eligible for payments with online claims submission and authorisation.

AAMS is scheduled to be fully implemented and available by 1 July 2016.

PROJECTS ASSURED has been engaged to provide direct assurance and objective advice to the Senior Sponsoring Officer, ███████████, Deputy Secretary Skills and Training. Assurance will be provided on the overall implementation, timeframes, risks and the associated mitigations strategies.

This briefing document is a summary of the key findings and recommendations arising from the first AAMS Assurance Review conducted during the period 29 June to 6 July 2015. It also provides the basis for a recommended regular communiqué from the Senior Sponsoring Officer to the Programme Team and other selected stakeholders following-on from the Assurance Review.

The Assurance Review approach is summarised below.

2 Approach

This Assurance Review is the first in a series of four reviews to be conducted on the AAMS Project leading up to the time of implementation on 1 July 2016. This Assurance Review was conducted during the period 29 June to 6 July 2015 by ███████████████ from PROJECTS ASSURED. During the course of the review, the reviewers examined project documentation and conduct interviews with key stakeholders. This brief and a more detailed review report was produced at the conclusion of the review, detailing a series of key findings and recommendations. A more detailed report will follow in due course.

The series of Assurance Reviews to be conducted provide the Department with a point-in-time assessment of 'Delivery Confidence' of the project, and are conducted in accordance with the Australian Government's Gateway Review Process.

More information on this process can be found at: http://www.finance.gov.au/gateway/review-process.html.

Key findings and recommendations arising from this first AAMS Assurance Review are detailed below.

3   Key Findings and Recommendations

The key findings and recommendations arising from our review are as follows:

Key Finding(s)	Recommendation(s)

Complexity and Schedule Risk
The AAMS Project is one of the largest and most complex ICT-enabled business transformations the Department has undertaken.
 	
The Department has limited experience in ICT-enabled transformations of this size, scale and delivery model and thus internal capability and capacity will be stretched.
 	
The timeframe for delivery of the project is non-negotiable.
 	
The allocated timeframe for delivery of the project presents a significant risk. The schedule indicates that there is limited time related contingency available.
 	
If the delivery timeframe is threatened, the project may have to de-scope functionality and/or implement workarounds until the full functionality is available to be delivered.
 	
Successful delivery is highly reliant on an extensive network of external providers (4,000 plus) utilising AAMS.
 	
Much has to go right for the project to deliver its full scope/quality on time and to budget.
	1. Ensure active SSO involvement in the project. This should be complimented by the establishment and maintenance of clear issues resolution and decision-making frameworks for timely resolution of issues and decision making during the project. Triggers for issues escalation and expectations for decision making at the various management levels should be well defined.
	
	2. Prioritise functional and non-functional requirements from a business value perspective in order to:
	   a. Derive the optimal ICT development/testing schedule for the project; and
	   b. Enable early contingency planning.
	
	3. While keeping utmost pressure on the project team, including NEC, to deliver their full-scope on time, commence contingency planning immediately (i.e. plan for the best, manage for the worst).

Stakeholders Overall there is a strong desire for the AAMS project to succeed. This was portrayed by Departmental staff and contractors, and the ICT vendor NEC. NEC is confident it will deliver the required ICT solution and 'trained trainers' by 1 July 2016. Departmental SES staff interviewed are cautiously optimistic, while Staff at EL2 level and below, and other contractors, are less optimistic about achieving successful delivery of the AAMS project prior to 1 July 2016. Engagement with Finance, Parliamentary and Assurance Group staff (██████ ICT teams), at the working level, has been minimal to date. We expect that this group ought to fulfil a 'technical assurance' role (e.g. to ensure that the solution designed and delivered by NEC conforms with Departmental and Industry standards and better practice). This may involve the Department calling on	4. Seek assistance from the Finance, Parliamentary and Assurance Group in relation to provision of ongoing technical assurance services.

Key Finding(s)	Recommendation(s)
Microsoft or Oracle at key design/development stages to provide this technical assurance as required.	
Planning Business Change Management planning and external stakeholder engagement is yet to commence in earnest. The Business Change Management Plan, when finalised, will need to be married-up with the ICT Project Plan to provide details of inter-dependent activities.	5. Invest in Business Change Management (including stakeholder analysis and engagement) planning and resources as soon as possible. 6. Consolidate all individual plans (including the Business Change Management Plan) into a single Project Management Plan that is cognisant of all deliverables and inter-dependencies.
Programme Support The Programme Management Office (PMO) established by Deloitte is proving to be effective. Skills transfer is required to ensure Departmental capability and capacity can be established and maintained.	7. Ensure several Departmental staff are involved as co-workers to Deloitte in the PMO to ensure skills transfer before Deloitte's services conclude.
Governance Governance appears to be effective at this stage of the project. Now that several other projects within the broader AASS Programme have recently been delivered, the AAMS project can gain greater Executive attention, which is positive. Informal and formal NEC involvement in the governance framework will be critical to success.	8. Establish informal/formal peer governance arrangements with NEC executives as follows: a. ▮▮▮▮ SSO – ▮▮▮▮ MD Australia; or ▮▮▮▮ Executive Director IT Solutions and Services. b. ▮▮▮▮ SRO – NEC ACT Branch Manager. c. New Assistant Secretary level Programme Manager and Project Director – ▮▮▮▮ ▮▮▮▮, Manager Business Solutions (Federal, ACT)

Resourcing
Key resource gaps exist as follows:
  • Assistant Secretary level Programme Manager/Director
  • EL1 to maintain TYIMS operational focus while ▮▮▮▮ focusses on Business Change and Stakeholder Management for AAMS hereafter
  • Change Management expertise for AAMS as part of ▮▮▮▮ team
	9. Fill existing resource gaps as soon as practicable.

Further detail is contained within our detailed report, which will be delivered separately. Should you have any queries between now and delivery of our detailed report, please let us know.

Yours sincerely,

Director

PROJECTS ASSURED

DEPARTMENT OF EDUCATION & TRAINING

AUSTRALIAN APPRENTICESHIPS MANAGEMENT SYSTEMS PROJECT

ASSURANCE REVIEW

REPORT

FOR

SENIOR SPONSORING OFFICER

16 November 2015
Version 0.2 DRAFT

1 Background

The Department of Education and Training (the Department) Australian Apprenticeship Management System (AAMS) will support the operation of the Australian Apprenticeship Support Network (AASN) by delivering a system to automate many of the current manual and paper based processes involved in Australian Apprenticeships. AAMS will replace the existing Training and Youth Internet Management System (TYIMS) and provide a platform for these functions and services and facilitate the electronic storage of employer, apprentice, and service provider information, and make Commonwealth payments.

Key capabilities of the new system include:

- Client and contact management - enabling a single platform for customer information, online sign-up of apprenticeships and online management and filing of records and contracts;
- Determining eligibility for payments – calculating if Apprentices, employers and service providers are eligible to receive payments under the Australian Apprenticeships Incentives Programme, Australian Apprenticeships Support Network and Trade Support Loan programme based on a business rules engine; and
- Payments – including automatic monitoring and calculation when payments should be made to Apprentices, employers and service providers who are eligible for payments with online claims submission and authorisation.

AAMS is scheduled to be fully implemented and available by 1 July 2016.

PROJECTS ASSURED has been engaged to provide direct assurance and objective advice to the Senior Sponsoring Officer (SSO), ██████████ Deputy Secretary Skills and Training. Assurance will be provided on the overall implementation, timeframes, risks and the associated mitigations strategies.

2 Review Approach

This Assurance Review is the second in a series of four reviews to be conducted on the AAMS Project leading up to the time of implementation on 1 July 2016. This second Assurance Review was conducted during the period 26 October 2015 to 11 November 2015 by ███████████████ from PROJECTS ASSURED.

During the course of the review, the reviewers examined project documentation and conduct interviews with key stakeholders. This report was produced at the conclusion of the review, detailing a series of key findings and recommendations. This report also provides the basis for a recommended regular communiqué from the Senior Sponsoring Officer to the Programme Team and other selected stakeholders following-on from the Assurance Review.

The series of Assurance Reviews shall be conducted in accordance with the Australian Government's Assurance Review (Gateway) Process. More information on this process can be found at:
http://www.finance.gov.au/gateway/review-process.html.

Key findings and recommendations arising from this second AAMS Assurance Review are detailed below.

3 Key Findings and Recommendations

The key findings and recommendations arising from our second review are as follows:

Key Finding(s)	Recommendation(s)
Schedule As was identified in the first Assurance Review in July 2015, the AAMS Project is one of the largest and most complex ICT-enabled business transformations the Department has ever undertaken. The Department has limited experience in ICT-enabled transformations of this size, scale and delivery model and thus internal capability and capacity will be stretched. The timeframe for delivery of the project remains non-negotiable. While stakeholders interviewed appear confident of meeting the delivery timeframe of 1 July 2016, we maintain the view that schedule is HIGH risk – in that there is limited schedule contingency (float) and many things will need to continue to go right for the project to deliver its full scope/quality on time and to budget. If the delivery timeframe is threatened, the project may have to de-scope functionality and/or implement workarounds until the full functionality is available to be delivered. We were advised during this review that a Contingency Plan, which addresses this situation, is currently being drafted. We are keen to review this plan in detail at the next Assurance Review. At the previous review we recommended that the functional and non-functional requirements be prioritised. We understand this has not yet occurred, but may occur as part of the Contingency Plan development activity discussed above.	1. Complete the work to prioritise functional and non-functional requirements from a business value perspective as soon as possible. 2. Complete contingency planning for the possibility of delays beyond 1 July 2016 as soon as possible.

Key Finding(s)	Recommendation(s)

Stakeholders
 	
Stakeholders and project team members interviewed maintain a strong desire for the AAMS project to succeed. This was portrayed by Departmental staff and contractors, and the ICT vendor NEC.
 	
NEC remains confident it will deliver the required ICT solution and 'trained trainers' by 1 July 2016. The Department and NEC have established a positive working relationship to date.
 	
At the time of the first Assurance Review in July 2015, Departmental SES staff interviewed were cautiously optimistic, while staff at EL2 level and below, and other contractors, were less optimistic about achieving successful delivery of the AAMS project prior to 1 July 2016.
 	
Optimism at all levels has improved since the last review, as visible progress is being made. This optimistic view is positive for the project, and should be leveraged, but tempered through maintaining a strong 'sense of urgency'.
 	
Engagement with Finance, Parliamentary and Assurance Group staff ⬛⬛⬛⬛⬛⬛ ICT teams) at the working level has improved since the last review. A Technical Assurance Group has been established consisting of the AASN PMO and the Finance, Parliamentary and Assurance Group, and NEC.
 	
External stakeholder views were not sought at this review, though we plan to engage with the following external stakeholders during the next review (February 2016) to gauge their potential readiness:
  • STAs;
  • ATO;
  • DHS (Centrelink); and
  • Network Providers (and/or Peak bodies).
	3. Continue to leverage the optimism and desire for a successful outcome which exists amongst staff and contractors at all levels, while ensuring it is tempered by maintaining a strong 'sense of urgency' for the remainder of the project.
	
	4. Continue to leverage the positive working relationship with NEC.

PROJECTS
ASSURED

Key Finding(s)	Recommendation(s)
Business Change Management Successful delivery remains highly reliant on an extensive network of external providers (4,000 plus) utilising AAMS. Change management effort will be significant, and will need to scale-up as the project progresses through User Acceptance Testing (UAT) and Implementation stages. Business Change Management planning and external stakeholder engagement has commenced, and appears to be proceeding well at this stage. As previously identified, the Business Change Management Plan, when finalised, will need to be married-up with the ICT Project Plan to provide details of inter-dependent activities.	5. As recommended previously, consolidate all individual plans (including the Business Change Management Plan – when complete) into a single Project/Programme Management Plan that is cognisant of all deliverables and inter-dependencies. 6. Scale-up business change management activity during UAT and Implementation stages.
Programme Management Office Support The Programme Management Office (PMO) established by Deloitte is continuing to be effective. Deloitte's contract expires in December 2015. Effective skills transfer, and recruitment of suitable Departmental PMO staff, are required to ensure Departmental capability and capacity can be established and maintained prior to Deloitte's contact completion. We were advised that recruitment of additional PMO staff (above the current 1.0 FTE level of Departmental PMO staff) is scheduled for January 2016.	7. Develop and implement a detailed Transition-Out Plan/activity for Deloitte to ensure robust Departmental PMO capacity and capability is in place by end December 2015. If this detailed planning and/or Transition-Out activity reveals deficiencies, consider extending Deloitte at a diminishing rate of effort and cost, to provide sufficient ongoing PMO support while existing or new Departmental PMO staff are assimilated.

Key Finding(s)	Recommendation(s)
Systems Integration / Interfaces Issues have emerged regarding funding and consequential readiness of some State Training Authority (STA) system interfaces, which will need to be actively worked through. SSO involvement in resolution of these issues may be necessary early to reduce the risk of some States and Territories not being ready for 1 July 2016. Integration / interfacing is required with the Australian Taxation Office and the Department of Human Services (Centrelink). Integration with the ATO appears to be the most critical to resolve in the short term. Integration of AAMS with internal systems such as SAP will be critical to success; requiring detailed planning, adequate resource allocation and regular Departmental Executive oversight. We were advised during the review (and as AAMS Project Issues Register ID 063 also identifies) the Department has sought quotation(s) from DHS (Centrelink) for the work required for them to provide the interface required for reconciliation of Living Away from Home Allowance. It is our understanding that DHS needs this interface from the Department, not the other way around, so DHS ought not be paid by the Department for any work DHS does in this regard. Providing DHS with access to the system without a built interface could be a suitable low cost alternative to the Commonwealth, which we understand is being investigated.	8. Consider SSO active involvement with peer level STA Executives to pro-actively resolve funding and readiness issues. 9. Ensure internal systems integration (SAP) is appropriately planned, and adequately resourced. 10. Pursue low cost interface with DHS.
Governance Governance appears to be effective at this stage of the project. Again, as stated in the previous review, informal and formal NEC involvement in the governance framework will be critical to success.	11. Maintain informal/formal peer governance arrangements with NEC executives.

Key Finding(s)	Recommendation(s)
Vendor Management We understand that the project has sought a proposal from NEC for Disaster Recovery options. The Commonwealth has specified in the Contract Statement of Work, Section 4.1 (d) that the Contractor must provide and support a disaster recovery environment which is logically and physically separate from the Production environment and database to be synchronised with Production including all system interfaces. Further, NEC has agreed to meet all required services levels of system availability in peak and off-peak times. Implicit in these contractual requirements is that NEC have a plan for handling a disaster situation. It is our view that the Department should not request NEC to provide a disaster recovery plan or options. NEC should simply be required to demonstrate, as a matter of course, that they will provide the disaster recovery capability as part of solution design and have the ability to meet the service levels under the contract. These aspects can be validated by the Department during design review and testing activities.	12. List on the agenda at the next Project Board a request for NEC to demonstrate how they will meet their obligation under the Statement of Work, Section 4.1 (d), and system availability requirements.
Resourcing Key resource gaps identified in the previous Assurance Review have been addressed, which is positive. Resourcing the PMO effectively appears to be the next resourcing challenge, as identified above.	Nil.
Testing Functional testing versus testing adherence to the policy outcomes (through the Business Rules Engine) are equally important. The latter can only be done by those who fundamentally understand the policy outcomes, legislation and regulations.	13. Ensure that testing of the Business Rules Engine is undertaken by resources who fundamentally understand the policy outcomes.
Risk Management Project risk and issue management appears to be effective at this stage. Al key risks are being effectively managed, and issues escalated as appropriate.	Nil.

Key Finding(s)	Recommendation(s)
Data Migration Data cleansing work has commenced and planning for data migration is underway. This is typically a high risk activity. We plan to focus on this at the next Assurance Review.	Nil.
Benefits Realisation A Benefits Realisation Plan is being drafted for the project. This document will be key to ensuring that the original policy intent and reasons for conducting this project are not lost, or diluted over time. It will be important to ensure that the Policy team, headed by ███████████ is actively involved in the development of this plan.	14. Finalise the Benefits Realisation Plan with input and ownership from the Policy team ideally by February/March 2016 (three months out from implementation).

We trust that the above findings and recommendations are useful to you and the project team. Please let me know if you have any queries.

Yours sincerely,

███████████

███████

Director

███████████

PROJECTS
ASSURED

DEPARTMENT OF EDUCATION & TRAINING

AUSTRALIAN APPRENTICESHIPS MANAGEMENT SYSTEMS PROJECT

REPORT

FOR

SENIOR SPONSORING OFFICER

ASSURANCE REVIEW #3

24 March 2016
Version 0.2 DRAFT

1 Background

The Department of Education and Training (the Department) Australian Apprenticeship Management System (AAMS) will support the operation of the Australian Apprenticeship Support Network (AASN) by delivering a system to automate many of the current manual and paper based processes involved in Australian Apprenticeships. AAMS will replace the existing Training and Youth Internet Management System (TYIMS) and provide a platform for these functions and services and facilitate the electronic storage of employer, apprentice, and service provider information, and make Commonwealth payments.

Key capabilities of the new system include:

- Client and contact management - enabling a single platform for customer information, online sign-up of apprenticeships and online management and filing of records and contracts;
- Determining eligibility for payments – calculating if Apprentices, employers and service providers are eligible to receive payments under the Australian Apprenticeships Incentives Programme, Australian Apprenticeships Support Network and Trade Support Loan programme based on a business rules engine; and
- Payments – including automatic monitoring and calculation when payments should be made to Apprentices, employers and service providers who are eligible for payments with online claims submission and authorisation.

AAMS is scheduled to be fully implemented and available by 1 July 2016.

PROJECTS ASSURED has been engaged to provide direct assurance and objective advice to the Senior Sponsoring Officer (SSO), ▮▮▮▮▮▮▮ Deputy Secretary Skills and Training. Assurance will be provided on the overall implementation, timeframes, risks and the associated mitigations strategies.

2 Review Approach

This Assurance Review is the third in a series of four reviews to be conducted on the AAMS Project leading up to the time of implementation on 1 July 2016. This third Assurance Review was conducted during late February and mid March 2016 by ▮▮▮▮▮▮▮▮▮▮▮▮ from PROJECTS ASSURED.

During the course of the review, the reviewers examined project documentation and conduct interviews with key stakeholders. This report was produced at the conclusion of the review, detailing a series of key findings and recommendations. This report also provides the basis for a recommended regular communiqué from the Senior Sponsoring Officer to the Programme Team and other selected stakeholders following-on from the Assurance Review.

The series of Assurance Reviews shall be conducted in accordance with the Australian Government's Assurance Review (Gateway) Process. More information on this process can be found at: http://www.finance.gov.au/gateway/review-process.html.

Key findings and recommendations arising from this second AAMS Assurance Review are detailed below.

3   Key Findings and Recommendations

The key findings and recommendations arising from this third Assurance Review are as follows:

Key Finding(s)	Recommendation(s)
Schedule As was identified in the previous two Assurance Reviews, the AAMS Project is one of the largest and most complex ICT-enabled business transformations the Department has ever undertaken. The Department has limited experience in ICT-enabled transformations of this size, scale and delivery model and thus internal capability and capacity will be stretched. The date for delivery (or 'go-live') of early July 2016 set at the commencement of the project remains non-negotiable. While internal and external stakeholders interviewed appear confident of meeting the delivery deadline, we maintain the view that schedule is **HIGH** risk – in that there is limited schedule contingency (float) and many things will need to continue to go right for the project to deliver its full scope/quality on time and to budget. The high-level schedule provided to the review team during the week commencing 22 February 2016 was dated October 2015 - some 4-5 months out of date. When the review team queried this, the high-level schedule was then updated and provided as at 4 March 2016. Given the schedule was months out of date and only updated when requested, it would appear the schedule for the project is not being tracked nor used as a management tool which is critical for successful delivery. Inter-dependencies in the schedule are not clear, nor is the critical path. Further, it is not clear what the actual status of the project is. The project would benefit from a detailed review of the integrated schedule, identifying all activities within the programme, with a focus on defining the critical path and interdependencies, followed a presentation to the Programme Sponsoring Group. The Contingency Plan developed for the project appears to be robust and comprehensive, which is positive. Progress on testing activities, as it impacts schedule, is covered in the Testing section of our report below.	1. Undertake a detailed review of the project schedule as soon as possible with a focus on defining the critical path, interdependencies and actual status, followed by a formal presentation of the schedule to the Programme Sponsoring Group. Thereafter implement a regime of regular schedule tracking and reporting. *NOTE: We would be happy to draw on our experience in this area to assist the project team to undertake this detailed review the project schedule. Please let us know and we will make time for this ASAP.*

Key Finding(s)	Recommendation(s)
Stakeholders & Business Change Management Stakeholders and project team members interviewed maintain a strong desire for the AAMS project to succeed. This was portrayed by Departmental staff and contractors, and the ICT vendor NEC. As was the case at the previous review in October 2015, NEC remains confident it will deliver the required ICT solution and 'trained trainers' by 1 July 2016. The Department and NEC have established a sound working relationship but it was noted during this review that the relationship is now under increased tension and strain. This is not unusual at this stage in a project, some 3-4 months out from 'go-live', but both parties will need to work hard to maintain a positive working relationship during this critical time. At the time of the first Assurance Review in July 2015, Departmental SES staff interviewed were cautiously optimistic, while staff at EL2 level and below, and other contractors, were less optimistic about achieving successful delivery of the AAMS project prior to 1 July 2016. Optimism at all levels had improved at the time of the last review in October 2015, as visible progress was being made. During this review staff at all levels remain optimistic about meeting the deadline, but concerns over the quality of the solution have begun to be raised. External stakeholder views were sought from STAs and Network Providers during this review. Without exception, all external stakeholders interviewed were enthused about, and appreciative of, the universal engagement undertaken by the project team to date. This is very positive and the project team should be congratulated on their efforts to date. External stakeholders did however state that they are keen to receive more targeted engagement (specific to their needs) over the coming months to ensure they are ready for the new solution and able to realise the benefits promised.	2. Reinforce the importance of maintaining strong relationships at all of the governance layers of NEC and the Department. 3. Ensure external stakeholder engagement (with STAs and Network Providers) is more targeted to the individual needs of stakeholders in the lead-up to 'go-live'.

Key Finding(s)	Recommendation(s)
Programme Management Office Support and Ongoing Assurance The Programme Management Office (PMO) established by Deloitte was effective. Deloitte's contract was extended from December 2015 to February 2016, but Deloitte no longer has any involvement on the project. As such, the valuable ongoing assurance role that was provided in particular by the Deloitte Partner (███████████) is now lacking.	4. Consider engaging the Deloitte Partner, ████████████ in an ongoing assurance role for 0.5-1.0 day per week for the next 6 months to provide ongoing assurance to the Programme Sponsoring Group.
Sandbox Experience The project recently stood-up and deployed a Sandbox environment in order to provide early visibility of some elements of the new capability to external stakeholders. While stakeholders we complimentary of the Department providing this Sandbox capability, all external stakeholders interviewed during the review indicated that they had prolonged technical difficulty accessing and then using the Sandbox environment. The review team investigated this further and found that NEC had only designed the Sandbox environment for up to 50 users whereas 180+ users were provided with access, thus overloading the system. This experience has adversely impacted stakeholder confidence and work is required to restore their confidence in the ICT solution as soon as possible.	5. As a matter of priority, work proactively with stakeholders to restore their confidence in the ICT solution.
Governance Governance continues to be adequate at this stage of the project, but could be enhanced by implementing the recommendation regarding ongoing assurance by the Deloitte Partner. Again, as stated in the previous review, informal and formal NEC involvement in the governance framework will be critical to success.	6. Maintain active informal/formal peer governance arrangements with NEC executives.

Key Finding(s)	Recommendation(s)
NEC Team Office Accommodation We were advised that the office accommodation provided by the Department for NEC is not adequate. NEC staff are not as productive as they could be, with 5-6 NEC staff 'crammed' into a single office with small screen laptops rather than using desktop computers with dual monitors (which is common practice). At this critical stage of the project, ease of access to key NEC and Departmental staff and regular communication between all of those involved – via co-location on a single floor - will improve the 'go-live' result.	7. Resolve NEC accommodation issues. 8. Collocate key Departmental and NEC staff on a single floor.

Key Finding(s)	Recommendation(s)
Testing The review team was provided with the Master Test Plan for the project. This document is considered to be of good quality. Evidently some 'pre-testing activities' which shed early light on the quality of NEC's solution have been undertaken by the project team, but these are not activities identified in the Test Strategy/Plan. A test status report (AAMS QA Report) dated 22 February 2016 was provided to the review team. This test status report indicated that apart from the Test Strategy and High Level Test Schedule which were complete, many testing activities were delayed. Only one activity (Systems Integration Testing) had commenced and it was only 2% complete. The review team noted on the Project Schedules provided (both the previous schedule dated 24 September 2015 ("previous schedule") and the recently revised schedule dated 4 March 2015 ("current schedule")) that several testing activities were to have commenced or be significantly progressed by now. Specifically: • Non Functional Testing (NFT) was to commence in early September 2015 and was programmed to be complete by 18 March 2016. The AAMS QA Report dated 22 February 2016 recorded the status of the 'NFT Start milestone' as 0% complete – some six months late. • System and System Integration Testing was scheduled to commence on 9 November 2015. Little progress has been made, with the AAMS QA Report dated 22 February 2016 showing it at only 2% complete. This is estimated to be several months behind schedule. • UAT completion milestones do not correlate between the AAMS QA Report dated 22 February 2016 and the current schedule (20 May 2016 vs 26 June 2016 respectively). The first two above points in particular are serious 'red flags' and require immediate investigation. We query at this stage whether sufficient time remains before 1 July 2016 to complete the required testing, thus potentially impacting quality.	9. As part of the recommended schedule review, investigate and ascertain the true status of all testing activities and determine if sufficient time remans before 1 July 2016 to complete them.

Key Finding(s)	Recommendation(s)
Risk Management Project risk and issue management appears to be effective at this stage, with the exception of the risks to schedule and quality arising from delays to testing, which needs focussed immediate attention. Other recommendations refer.	Nil. Other recommendations address this risk management finding.
Benefits Realisation A Benefits Realisation Plan has been drafted. This document is 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 the benefits associated with reducing time and administrative burden on Network Providers and STAs. Work is also required to enhance the benefits communication component of the plan.	10. Continue to enhance the Benefits Realisation Plan with a focus on the ownership and tracking of the benefits.

We trust that the above findings and recommendations are useful to you and the project team. Please let me know if you have any queries.

Yours sincerely,

Ph:

PROJECTS ASSURED

DEPARTMENT OF EDUCATION & TRAINING

AUSTRALIAN APPRENTICESHIPS MANAGEMENT SYSTEM PROJECT

ASSURANCE REVIEW

REPORT
FOR
SENIOR SPONSORING OFFICER

31 July 2016
Version 1.00

1 Background

The Department of Education and Training (the Department) Australian Apprenticeship Management System (AAMS) will support the operation of the Australian Apprenticeship Support Network (AASN) by delivering a system to automate many of the current manual and paper based processes involved in Australian Apprenticeships. AAMS will replace the existing Training and Youth Internet Management System (TYIMS) and provide a platform for these functions and services and facilitate the electronic storage of employer, apprentice, and service provider information, and make Commonwealth payments.

Key capabilities of the new system include:

- Client and contact management - enabling a single platform for customer information, online sign-up of apprenticeships and online management and filing of records and contracts;
- Determining eligibility for payments – calculating if Apprentices, employers and service providers are eligible to receive payments under the Australian Apprenticeships Incentives Programme, Australian Apprenticeships Support Network and Trade Support Loan programme based on a business rules engine; and
- Payments – including automatic monitoring and calculation when payments should be made to Apprentices, employers and service providers who are eligible for payments with online claims submission and authorisation.

PROJECTS ASSURED has been engaged to provide direct assurance and objective advice to the Senior Sponsoring Officer (SSO), ███████████ Deputy Secretary Skills and Training. Assurance will be provided on the overall implementation, timeframes, risks and the associated mitigations strategies.

2 Review Approach

This Assurance Review is the fourth in a series of reviews to be conducted on the AAMS Project leading up to the original time of implementation on 1 July 2016[1]. This fourth Assurance Review was conducted by ████████████████ from PROJECTS ASSURED in the last week of June and into the first week of July 2016.

During the course of the review, the reviewers examined project documentation and conducted interviews with key stakeholders. This report was produced at the conclusion of the review, detailing a series of key findings and recommendations. This report also provides the basis for a recommended regular communiqué from the Senior Sponsoring Officer to the Programme Team and other selected stakeholders following-on from the Assurance Review.

The series of Assurance Reviews were conducted in accordance with the Australian Government's Assurance Review (Gateway) Process. More information on this process can be found at: http://www.finance.gov.au/gateway/review-process.html.

Key findings and recommendations arising from this second AAMS Assurance Review are detailed below.

---

[1] The third (previous) review was conducted in March 2016.

3   Key Findings and Recommendations

The key findings and recommendations arising from this fourth Assurance Review are as follows:

Key Finding(s)	Recommendation(s)

Schedule
 	
As was identified in the previous Assurance Reviews, the AAMS Project is one of the largest and most complex ICT-enabled business transformations the Department has undertaken. The Department has limited experience in ICT-enabled transformations of this size, scale and delivery model and thus internal capability and capacity has been and will continue to be stretched.
 	
The date for delivery (or 'go-live') up until this review was set for early July 2016. This date was set at the commencement of the project and was considered non-negotiable. Since the previous review (in March 2016) the scheduled date for delivery (or 'go-live') had been re-base lined to early October 2016. This date was agreed in consultation with the Network providers and the Minster.
 	
During the previous review it was evident that a consolidated master schedule was not being maintained. Projects Assured agreed to 'workshop' the formation of the master schedule with the project team with the purpose of creating a master schedule covering all aspects of the project with a strong focus on ensuring sufficient and realistic time is allocated for testing and defect resolution in the lead up to 'go live'.
 	
Since that schedule was agreed and a new 'go live' date was established (October 2016), NEC have sought additional time to complete some of the core build components. This has resulted in an acute lack of confidence by the Department in NEC's ability to plan and resolve a number of major defects in core components of the build.
 	
The review team also noted that there was a lack of agreement and clarity around the inclusion, or not, of some of the critical approved change requests and disaster recovery capability.
	1. Once the outcome of the technical review (see later in this report) is complete, determine the most appropriate re-baselined delivery (or 'go-live') date giving consideration to:
	   a. The effort and time required to complete the build, including all pending and approved change requests;
	   b. The ability of the STAs and the Network Providers to transition to AAMS as seamlessly as possible;
	   c. A timeframe that reflects the variety of contractual obligations held by all parties (e.g. Network Provider existing software contracts being annual);
	   d. Development of an appropriately targeted communications strategy regarding the delays, with emphasis placed on the impact and the rationale of the revised date; and
	   e. Maintenance of quality as the overriding factor in the delivery of the system.

Key Finding(s)	Recommendation(s)

Technical Assurance
 	
From the interviews conducted and the test results presented, it is not clear to the review team, nor the Department, exactly where the NEC solution build is up to, or whether the architecture and/or implementation approach will yield the desired result.
	2. Engage Microsoft technical support to provide technical assurance on the build to date. This should include:
	   a. A review of the technical approach, including the toolsets chosen;
	   b. A review of the implementation methodology used by NEC and its compliance with that recommended by Microsoft;
	   c. An estimate of the remaining effort to complete the solution build; and
	   d. An estimate of the remaining effort to complete all pending and approved change requests.
	
	Where appropriate this review should also include examination of other third party product vendors included in the solution, such as Oracle and Intelledox.

Testing & Quality
 	
Progress with executing the test plan continues to be delayed.
 	
A test status report (AAMS QA Report) was provided to the review team. This test status report indicated that apart from the Test Strategy and High Level Test Schedule, which were complete, many testing activities were significantly delayed with a large proportion of the system functionality not yet tested.
 	
The review team also noted that a traditional approach to UAT was not being undertaken, with the system being opened-up to a large user base. Traditionally UAT involves a small subset of users within a controlled environment with user specific documentation to support the desired user testing outcome.
	3. Review the Test Strategy and Test Plan in line with the revised schedule to include:
	   a. Adequate resources, time and detailed planning across all test activities; and
	   b. A more traditional approach to the conduct of UAT.

Stakeholders & Business Change Management

As was the case in previous reviews, stakeholders and the project team members interviewed maintain a strong desire for the AAMS project to succeed. This was again portrayed by Departmental staff and contractors, and the ICT vendor NEC as well as external stakeholder from STAs and Network Providers.

Despite delays in build completion and testing, the NEC Account Lead remained confident in NEC's ability to deliver the required ICT solution. In our opinion, this level of confidence lacked supporting evidence, in that a number of core pieces of functionality are not completed and tested, as well as critical and approved changes requests not fully scoped nor commenced.

During the course of this review, the review team noticed a significant deterioration in the relationship between the parties. This was most evident between the NEC Account Lead, ████████████████████. Whist it is not unusual for the relationship between the vendor and departmental teams to be under increased tension and strain at this stage in a project, our view is that this is having, and will continue to have, a significant impact on successful delivery if left unchecked.

At the time of the first Assurance Review in July 2015, Departmental SES staff interviewed were cautiously optimistic, while staff at EL2 level and below, and other contractors, were less optimistic about achieving successful delivery of the AAMS project prior to 1 July 2016.

Optimism at all levels had improved during the past reviews in October 2015 and March 2016, as visible progress was being made. However, during this review staff at all levels expressed little confidence in meeting the revised deadline, with significant concerns over the quality of the solution being expressed.

External stakeholder views were sought from STAs and Network Providers during the review. Without exception, all external stakeholders interviewed were enthused about, and appreciative of, the universal engagement undertaken by the project team to date. This is very positive and the project team should be congratulated on their efforts to date in this regard.

External stakeholders did again state frustration with continued revised UAT timeframes and the lack of communication on progress. They also expressed concern over the impacts of further delays with respect to their other contractual obligations with other software vendor providers – many current software contracts are on an annual basis.

4. Engage with NEC Senior Management to determine a realistic achievable build and test schedule including all required functional and non-functional requirements as well as all required change requests.

5. Review the project team structure and personnel to ensure effective working relationships with a focus on jointly achieving a successful delivery.

6. Ensure external stakeholder engagement (with STAs and Network Providers) is targeted and consistent.

7. Proactively set-about re-building the confidence of STAs and Network Providers in the Department's ability to deliver a quality product that achieves the policy objectives.

Key Finding(s)	Recommendation(s)
Governance Governance continues to be adequate at this stage of the project Again, as stated in the previous review, informal and formal NEC involvement in the governance framework will be critical to success.	8. Request an urgent meeting with NEC Senior Management to express serious concerns over delivery with the view of agreeing a shared solution. 9. Maintain active informal and formal peer governance arrangements with NEC executives (as per the details in our initial review in July 2015).
Risk Management Project risk and issue management appears to be effective at this stage, with the exception of the risks to schedule and quality arising from delays to testing, which needs focussed immediate attention. Other recommendations refer.	Nil. Other recommendations address this risk management finding.
Benefits Realisation A Benefits Realisation Plan has been drafted. This document is 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 the benefits associated with reducing time and administrative burden on Network Providers and STAs. Work is also required to enhance the benefits communication component of the plan.	10. Continue to enhance the Benefits Realisation Plan to ensure policy outcomes are achieved.

We trust that the above findings and recommendations are useful to you and the project team. Please let me know if you have any queries.
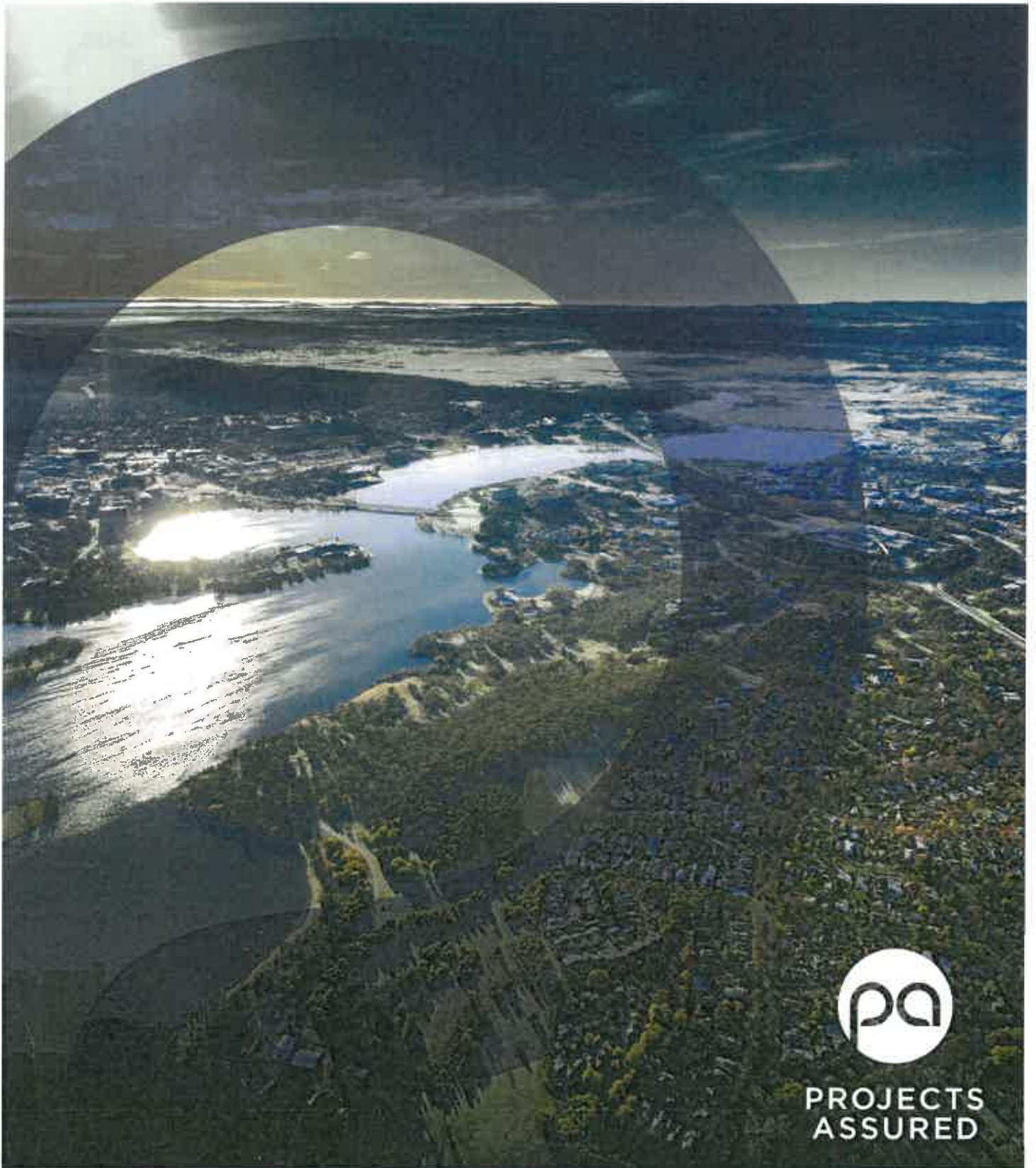
Yours sincerely,

Director

AUSTRALIAN APPRENTICESHIPS MANAGEMENT SYSTEM PROJECT – ASSURANCE REVIEW REPORT

DEPARTMENT OF EDUCATION & TRAINING

10/01/2017

Document Author and Owner

ROLE	NAME	TITLE
Authors	▅▅▅▅▅▅▅	Executive Management Consultants
Owner	▅▅▅▅▅▅▅	Director

Revision History

VERSION	UPDATE DATE	UPDATED BY	CHANGE
0.1	21 December 2016	▅▅▅▅▅▅	Initial draft
0.2	23 December 2016	▅▅▅▅▅▅	QA revised draft
1.0		▅▅▅▅▅▅	Final version incorporating client feedback (if any)

Document Sign-off

This document has been formally accepted by:

NAME, TITLE, ORGANISATION	DATE	SIGNATURE
▅▅▅▅▅ Deputy Secretary Skills and Training, Department of Education and Training		

CONTENTS

1. BACKGROUND

The Department of Education and Training (the Department) Australian Apprenticeship Management System (AAMS) will support the operation of the Australian Apprenticeship Support Network (AASN) by delivering a system to automate many of the current manual and paper based processes involved in Australian Apprenticeships. AAMS will replace the existing Training and Youth Internet Management System (TYIMS) and provide a platform for these functions and services and facilitate the electronic storage of employer, apprentice, and service provider information, and make Commonwealth payments.

Key capabilities of the new system include:

- Client and contact management - enabling a single platform for customer information, online sign-up of apprenticeships and online management and filing of records and contracts;
- Determining eligibility for payments – calculating if Apprentices, employers and service providers are eligible to receive payments under the Australian Apprenticeships Incentives Programme, Australian Apprenticeships Support Network and Trade Support Loan programme based on a business rules engine; and
- Payments – including automatic monitoring and calculation when payments should be made to Apprentices, employers and service providers who are eligible for payments with online claims submission and authorisation.

PROJECTS ASSURED has been engaged to provide direct assurance and objective advice to the Senior Sponsoring Officer (SSO), ▇▇▇▇▇▇▇▇ Deputy Secretary Skills and Training. Assurance will be provided on the overall implementation, timeframes, risks and the associated mitigations strategies.

Since the last Assurance Review the project has been re-baselined, with a new go-live date in early July 2017.

2. REVIEW APPROACH

This Assurance Review is the fifth in a series of reviews to be conducted on the AAMS Project leading up to the revised implementation date of July 2017[1]. This Assurance Review was conducted by ▇▇▇▇ ▇▇▇▇▇ and ▇▇▇▇ from PROJECTS ASSURED in December 2016.

During the review, the reviewers examined project documentation and conducted interviews with key stakeholders. This report was produced after the review, detailing a series of key findings and recommendations. This report also provides the basis for a recommended regular communiqué from

---

[1] The (previous) review was conducted in June/July 2016.

the Senior Sponsoring Officer to the Programme Team and other selected stakeholders following-on from the Assurance Review.

The series of Assurance Reviews were conducted in accordance with the Australian Government's Assurance Review (Gateway) Process. More information on this process can be found at: http://www.finance.gov.au/gateway/review-process.html.

A summary and key findings and recommendations arising from this AAMS Assurance Review are detailed below.

3. SUMMARY OF KEY POINTS

During the review, we found improvements against several of the key findings identified in previous reviews, as follows:

- NEC's acknowledgement that they had underestimated the complexity of the AAMS system and that they had significantly under resourced the technical development.
- NEC's recognition of the inexperience and inadequacy of their leadership team on the project.
- Assurances through the NEC Executives of their commitment to delivering the successful outcomes for the Department, regardless of any commercial losses sustained.
- Significant improvement in relationships at the working level between NEC's project management team and the Department's project management team.
- A significant increase in the quantity of NEC technical resources deployed to the project.

Overall the review team found positive 'inputs' as a solid foundation to support a successful delivery, and whilst several interim milestones are being met and many pre-existing defects are being resolved, there is still a significant amount of the system that has not been built.

The time to complete all activities, with a focus on quality remains very tight and has limited to no contingency around major components of the build and the likely increase in defects expected to arise from external UAT. Several CRs are still being assessed by NEC and the corresponding effort is not currently in the schedule – posing additional risk to timely delivery.UAT is likely to result in an increase in the total number of defects within the system and potentially several critical change requests from the provider network specifically at the time of external UAT. Therefore, there is still a significant level of "trust me" with NEC as substantial material evidence of successful delivery and increase in quality of the build will not materialise until March 2017.

More work needs to be done to develop and maintain a detailed schedule on all the testing activities including the total number of test cases that will need to be run, modelled arithmetically on realistic defect rates and resolution time frames (with explicit assumptions).

The Department needs to ensure that there are sufficient testing recourses available internally and externally to complete all testing activities, making sure that NEC cannot claim at any stage that they are being delayed by the Department.

The project team needs to provide in more detail the defect resolution rate, expected defect numbers during the up-coming testing phases, and defect resolution time - as a basis for executive discussion at the PSG meeting in Jan 2017.

The PSG needs to move its focus on matters of strategic importance, as follows:

- Is the business case still valid, i.e. is 'what' the department is seeking to achieve through AAMS still valid? Not focusing on the 'how' and the "who", but the "what". This discussion will help frame any future decisions around the delivery if and when further issues materialise.
- What benefits will be derived, by whom and by when?
- What is the contingency around a Minimal Viable Product MVP and schedule?
- What is the contingency around potentially discontinuing with NEC?
- What is the communications strategy will all key stakeholders, and when (particularly in the context of activating any contingency plans above)?
- How will we deal with the anticipated volume of "defects / CR's" that will be raised during external UAT?

4. KEY FINDINGS & RECOMMENDATIONS

The key findings and recommendations arising from this Assurance Review are as follows:

Key Finding(s)	Recommendation(s)

Key Finding(s)	Recommendation(s)
Schedule The AAMS Project remains one of the largest and most complex ICT-enabled business transformations the Department has undertaken. The Department has limited experience in ICT-enabled transformations of this size, scale and delivery model and thus internal capability and capacity has been and will continue to be stretched. Since our last review in July 2016, the project has been re-baselined with a revised date for delivery ('go-live') being now scheduled for July 2017. A consolidated master schedule has been established and maintained. The master schedule covers most of the key components of the system. There are a number of pending and approved CR's that do not appear to be in the master schedule. At the time of the review, this inclusion had been requested by us. The review team also noted that more detail is required around testing activities with a strong focus on ensuring sufficient time is allocated for end to end testing and defect resolution in the lead up to 'go live'. The review team again note that quality should remain the primary focus. NEC remain committed to their ability to deliver on the schedule, however there remains some inconsistency regarding the scope of the key 31 March 2017 deliverable. The review team also note there is still a significant amount of work to complete within the revised timeframe and time remaining to deliver remains tight. Network providers and STAs have not received comprehensive communication regarding the status and expected progress of the delivery. They expressed a low level of confidence that they will have a fully functioning product that will deliver on the expected savings by July 2017. The review team were also advised that a Change Request (CR) had been raised regarding disaster recovery capability, however it had not yet been approved nor reviewed for Information Security Manual (ISM) compliance.	1. Immediately update the master schedule to include all the pending and approved Change Requests and detailed end to end testing activities. 2. Continue to maintain, monitor and report on the progress against the revised master schedule. 3. Immediately escalate any potential risk to schedule to the Senior Sponsoring Officer (SSO). 4. Ensure that disaster recovery capability meets prescribed information security standards. 5. Ensure that an impact assessment is completed on all proposed Change Requests. 6. Develop and execute a targeted communications strategy with the STAs and network providers. 7. Maintain quality as the overriding factor in the delivery of the system.

Key Finding(s)	Recommendation(s)
Testing & Quality Quality of build and testing capacity and capability remain of significant concern to the review team with a large proportion of the system functionality not yet built or tested. Previous reviews have highlighted significant issues with quality of the build and testing timeframes allocated within the schedule. The review team found some early indications that NEC have implemented more robust QA processes and increased the numbers of developer and testing recourses. The review team also found some indicative evidence that the defect rate on the "new build" was decreasing and represented a more reasonable level of defects (in the range of 10-20%), noting these are early indications only. The review team also noted that the Department is still undertaking business process mapping activities with providers, which is very late in the project lifecycle. This late analysis combined with late external UAT creates a high probability that a large number of user defects / Change Requests will be identified late in the testing schedule and close to the time of deployment. The review team noted that a better practice approach to UAT is planned, learning the lessons from previous testing activities on the project - with the system being tested by a small subset of users within a controlled environment with user specific documentation to support the desired user testing outcome. The review team where not provided with the documentation to support this revised approach, but we are pleased to hear that this better practice approach is planned to be adopted. UAT is likely to result in an increased number of defects and potentially critical CRs. The review team noted that the project team acknowledges the high likelihood of this, however found little evidence that any contingency planning has been undertaken in this regard.	8. The project team (NEC 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, for executive review and discussion at the PSG meeting in January 2017. 9. Develop and maintain a more detailed schedule on all the testing activities including the total number of test cases that will need to be run, and assumptions on number of defect rates and resolution time frames. 10. Ensure that there are sufficient testing recourses available internally and externally to complete all testing activities. 11. Develop contingency plans around the likely outcomes of UAT. 12. Provide adequate resources, time and detailed planning across all test activities. 13. Adopt and maintain the planned better practice approach to the conduct of UAT.

Key Finding(s)	Recommendation(s)
Technical Support & Assurance Since our last review, the Department has sought guidance from Microsoft in relation to its Customer Relationship Management (CRM) implementation for AAMS. The primary purpose of the review was to assess if the CRM implementation was aligned to recommended Microsoft practices and whether it is an appropriate platform to meet the business requirements. This review has been completed and several recommendations were made and agreed.	14. Continue to engage with software providers including Microsoft, Oracle and Intelledox technical support to provide technical assurance on the build. 15. Ensure that the recommendations from the Microsoft review are implemented and monitored as appropriate.

Key Finding(s)	Recommendation(s)
Stakeholders & Business Change Management As was the case in previous reviews, stakeholders and the project team members interviewed maintain a strong desire for the AAMS project to succeed. This was again portrayed by Departmental staff and contractors, and the ICT vendor NEC management and Executive as well as external stakeholders from STAs and Network Providers. However, during this review the team found a consistent theme of uncertainty around producing a successful outcome by the revised due date by Departmental staff and contractors, and at the SES level. NEC's new Account Lead and NEC's executive team: • acknowledged that they had underestimated the complexity of the AAMS system and that they had significantly under resourced the technical development. • recognised the inexperience and adequacy of their previous leadership team on the project. • Provided assurances through the NEC Executives of their commitment to delivering the successful outcomes for the Department, regardless of any commercial losses sustained. • Acknowledged the significant improvement in relationship at the working level between NEC's project management team and the Department's project management team. • Acknowledged a significant increase in the quantity of technical resources deployed to the project; and • Remained confident in NEC's ability to deliver the required ICT solution. Again, whilst NEC's acknowledgment of the above is important it still is our opinion that this level of confidence lacked supporting evidence. A significant number of core pieces of functionality are not yet completed or tested, defect numbers remain high and in our opinion defects will continue to increase **until test coverage across all system functionality is complete. There also remains critical and approved and unapproved changes requests CR's not fully scoped scheduled nor commenced. Therefore, there is still a significant level of "trust me" with NEC as substantial material evidence of successful delivery and increase in quality of the build will not materialise until at least March 2017.** During this review, the review team noticed a significant improvement in relationships at the working level between NEC's project management team and the Department's project management team. Whilst this certainly is a positive input, on its own will not guarantee a successful outcome.	16. All staff including Senior Executives should maintain a positive attitude towards the success of the project whilst performing their governance role. 17. Continually monitor the project team's structure and personnel to ensure effective working relationships, with a focus on jointly achieving a successful delivery outcome. 18. Ensure external stakeholder engagement (with STAs and Network Providers) is targeted and consistent. 19. Continue to focus re-building the confidence of STAs and Network Providers in the Department's to deliver a quality product that achieves the policy objectives.

External stakeholder reviews were again sought from STAs and Network Providers during the review.
It has become clear that expectations on what AAMS will deliver for them and their dependence on third party software (e.g. Job Ready) are materially different. Many are/were of the

Key Finding(s)	Recommendation(s)

The Focus of PSG
 	
Governance continues to be adequate at this stage of the project with teams meeting on a regular basis and PSG providing sound oversight.
 	
Again, as stated in the previous review, informal and formal NEC involvement in the governance framework will be critical to success, and should be maintained.
 	
The PSG has been actively involved in monitoring delivery and defect resolution. Whilst a reduction in the original number of defects is a good indicator, on its own it does not provide enough detail to monitor progress (see recommendation 8).
	20. In conjunction with monitoring schedule, budget, risks and issues, the PSG needs to focus some attention on matters of strategic importance, including:
	
	  a. Is the business case still valid, i.e. is 'what' the department is seeking to achieve through AAMS still valid? Not focusing on the 'how' and the "who", but the "what". This discussion will help frame any future decisions around the delivery if and when further issues materialize.
	  b. What benefits will be derived, by whom and by when?
	  c. What is the contingency around a Minimal Viable Product MVP and schedule?
	  d. What is the contingency around potentially discontinuing with NEC?
	  e. What is the communications strategy will all key stakeholders, and when (particularly in the context of activating any contingency plans above)? How will we deal with the anticipated volume of "defects / Change Requests" that will be raised during external UAT?
	
	21. Maintain active informal and formal peer governance arrangements with NEC executives (as per the details in our initial review in July 2015).

Risk Management Project risk and issue management appears to be effective at this stage, except for the risks to schedule and quality – potentially arising from delays to testing and the high likelihood of receiving significant quantities of user generated Change Requests and defects from UAT - which needs focussed immediate attention. Other recommendations refer.	Nil. Other recommendations address this risk management finding.

Key Finding(s)	Recommendation(s)
Benefits Realisation A Benefits Realisation 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 the benefits associated with reducing time and administrative burden on Network Providers and STAs. Work is also required to enhance the benefits communication component of the plan.	22. PSG to review the current artefacts on Benefits Realisation. 23. Continue to enhance the Benefits Realisation Plan in partnership with the policy areas to ensure policy outcomes are achieved.

We trust that the above findings and recommendations are useful to you and the project team. Please let me know if you have any queries.

Yours sincerely,

Director
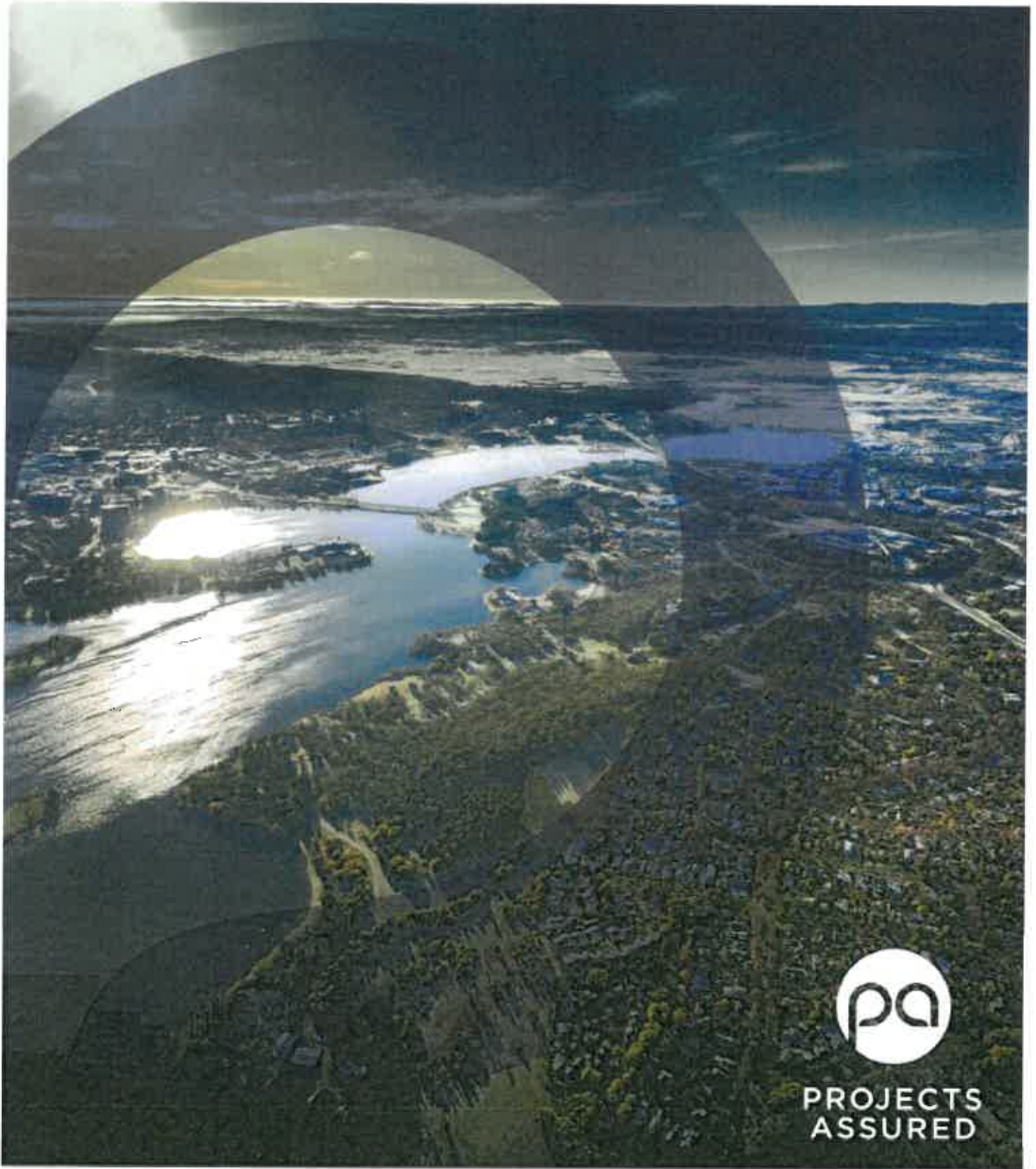
PROJECTS
ASSURED

AUSTRALIAN APPRENTICESHIPS MANAGEMENT SYSTEM
PROJECT- ASSURANCE REVIEW REPORT

DEPARTMENT OF EDUCATION & TRAINING   8/05/2017

Document Author and Owner

ROLE	NAME	TITLE
Authors	▮▮▮▮▮▮▮▮▮▮ ▮▮▮▮▮▮▮▮▮▮	Executive Management Consultants
Owner	▮▮▮▮▮▮▮▮▮▮	Director

Revision History

VERSION	UPDATE DATE	UPDATED BY	CHANGE
0.1		▮▮▮▮▮▮▮▮	Initial draft
0.2	8 May 2017	▮▮▮▮▮▮▮▮	QA revised draft
1.0		▮▮▮▮▮▮▮▮	Final version incorporating client feedback (if any)

Document Sign-off

This document has been formally accepted by:

NAME, TITLE, ORGANISATION	DATE	SIGNATURE
▮▮▮▮▮▮ Deputy Secretary Skills and Training, Department of Education and Training		

PROJECTS ASSURED

CONTENTS

1. BACKGROUND

The Department of Education and Training (the Department) Australian Apprenticeship Management System (AAMS) will support the operation of the Australian Apprenticeship Support Network (AASN) by delivering a system to automate many of the current manual and paper based processes involved in Australian Apprenticeships. AAMS will replace the existing Training and Youth Internet Management System (TYIMS) and provide a platform for these functions and services and facilitate the electronic storage of employer, apprentice, and service provider information, and make Commonwealth payments.

Key capabilities of the new system include:

- Client and contact management - enabling a single platform for customer information, online sign-up of apprenticeships and online management and filing of records and contracts;
- Determining eligibility for payments – calculating if Apprentices, employers and service providers are eligible to receive payments under the Australian Apprenticeships Incentives Programme, Australian Apprenticeships Support Network and Trade Support Loan programme based on a business rules engine; and
- Payments – including automatic monitoring and calculation when payments should be made to Apprentices, employers and service providers who are eligible for payments with online claims submission and authorisation.

PROJECTS ASSURED has been engaged to provide direct assurance and objective advice to the Senior Sponsoring Officer (SSO), ▮▮▮▮▮▮▮▮, Deputy Secretary Skills and Training. Assurance will be provided on the overall implementation, timeframes, risks and the associated mitigations strategies.

Since the last Assurance Review the project has been re-baselined, with a new go-live date of 6 November 2017.

2. REVIEW APPROACH

This Assurance Review is the sixth in a series of reviews to be conducted on the AAMS Project leading up to the revised implementation date of 6 November 2017[1]. This Assurance Review was conducted by ▮▮▮▮▮▮▮ and ▮▮▮▮▮ from PROJECTS ASSURED in April 2017.

During the review, the reviewers examined project documentation and conducted interviews with key stakeholders. This report was produced after the review, detailing a series of key findings and recommendations. This report also provides the basis for a recommended regular communiqué from

---

[1] The (previous) review was conducted in December 2016.

the Senior Sponsoring Officer to the Project team and other selected stakeholders following-on from the Assurance Review.

The series of Assurance Reviews were conducted in accordance with the Australian Government's Assurance Review (Gateway) Process. More information on this process can be found at: http://www.finance.gov.au/gateway/review-process.html.

A summary and key findings and recommendations arising from this AAMS Assurance Review are detailed below.

3. SUMMARY OF KEY POINTS

1.1.1 Revised Go-live Date

Since the last review in December 2016 the timeframe for the roll-out of the Australian Apprenticeships Management System (AAMS) has again been extended, with AAMS scheduled for 'Go-Live' on Monday 6 November 2017. This revised date was communicated to STAs and Network Providers on 27 February 2017.

1.1.2 Continued Improvements

During this review, we again found improvements against several of the key findings identified in previous reviews, as follows:

- NEC continues to acknowledge that they had underestimated the complexity of the AAMS system and that they had significantly under resourced the technical development.
- The collective project team has a more comprehensive understanding of the scope of what is being delivered within the AAMS Project.
- Higher levels of confidence in the experience and competence of the NEC on ground leadership team.
- Continued assurances through the NEC Executives of their commitment to delivering the successful outcomes for the Department, regardless of any commercial losses sustained.
- Continued improvement in relationships at the working level between NEC's project management team and the Department's project management team.
- A sustained increase in NEC technical resources deployed to the project.

Again, at the operational level, the review team found many positive 'inputs' as solid foundations to support successful delivery.

1.1.3 Significant Amount of Work Remaining, with Limited Contingency

The first agreed (30 April 2017) 'gateway' milestone deliverables where achieved however there is still a significant amount of the system that has not yet been built or tested.

Whilst the time frame has again been extended, the time to complete all activities, with a focus on quality remains very tight, with limited contingency around major components of the build and external UAT.

As identified in the previous review, external UAT by its very nature is likely to result in an increase in:

- the total number of defects within the system; and
- several critical change requests from the provider network.

1.1.4 Stakeholder Confidence Remains Low

Confidence levels of the Network Provider and STAs remain low for several reasons, as follows:

- Continued delays and movement in go-live dates;
- Limited communication regarding progress since Feb 2017;
- Limited or no visibility of the functionality of the system; and
- Past deployment and UAT experience (e.g. forms).

1.1.5 Variation in Responses to Questions on Project Status

During this review, we posed several key questions to NEC and Departmental project team members, as follows:

- How much of the system has been built?
- How much of what has been built been tested?
- What is the trend in defect resolution (quality)?
- How much is yet to be built?
- How many test cases are still to be developed?
- How many test cases to be executed?

The responses to these questions varied considerably, which indicates a lack of a shared understanding about the true status of the project.

1.1.6 Improved Testing Reporting

With NEC delivering core components of functionality between now and June 2017, a focus on testing activities including the total number of test cases that will need to be run, modelled arithmetically on realistic defect rates and resolution time frames (with explicit assumptions) will be required.

1.1.7 Test Management Expertise and Resourcing

The Department needs to ensure that there is strong testing expertise leading the test team and sufficient resources provided internally and externally to complete all testing activities – while making sure that NEC cannot claim at any stage that they are being delayed by the Department.

1.1.8   Validity of the Business Case

During this review, we developed heightened concerns regarding the ongoing viability of the Business Case - with significant doubt being cast over the extent of benefits to be realised and whether the envisaged policy outcomes can be achieved.

This is the most significant finding of this review and as noted in recommendations, a specific body of work should be commissioned to determine how viable the Business Case is for this project.

1.1.9   Need for Ongoing Strategic Focus

As identified in the previous review, the PSG (Executive) needs to move its focus on matters of strategic importance, as follows:

- Is the business case still valid, i.e. is 'what' the department is seeking to achieve through AAMS still valid?
- What benefits will be derived, by whom and by when?
- What is the contingency around a Minimal Viable Product MVP and schedule?What is the communications strategy will all key stakeholders, and when (particularly in the context of activating any contingency plans)?
- How will we deal with the anticipated volume of "defects / CR's" that will be raised during external UAT?
- What is the contingency around potentially discontinuing with NEC?

4. KEY FINDINGS & RECOMMENDATIONS

The key findings and recommendations arising from this Assurance Review are as follows:

Key Finding(s)	Recommendation(s)
Schedule As stated in all previous reviews, the AAMS Project remains one of the largest and most complex ICT-enabled business transformations the Department has undertaken. The Department has limited experience in ICT-enabled transformations of this size, scale and delivery model and thus internal capability and capacity has been and will continue to be stretched. Since the last review in December 2016, the timeframe for the roll-out of the Australian Apprenticeships Management System (AAMS) has again been extended with AAMS scheduled for 'Go-Live' on Monday 6 November 2017. This revised date was communicated to STAs and Network Providers on 27 February 2017. The review team again note there is still a significant amount of work to complete despite the extended timeframe. As was the case in the previous review, Network providers and STAs have not received comprehensive communication regarding the status and expected progress of the delivery. They continued to express a low level of confidence that they will have a fully functioning product that will deliver on the expected savings by the revised date. The review team also noted that at the time of the review the variation to the contract with NEC had not been executed.	1. Continue to maintain, monitor and report on the progress against the revised master schedule, with a keen focus on how much of the system is built / not yet built, and how much has been tested / yet to be tested. 2. Develop and execute a targeted communications strategy with the STAs and network providers (as recommended in the previous review). 3. Maintain quality as the overriding factor in the delivery of the system (as recommended in the previous review). 4. Execute the variation to the contract with NEC as soon as possible.

Key Finding(s)	Recommendation(s)
Testing & Quality Quality of build and testing capacity and capability remain of significant concern to the review team with a large proportion of the system functionality not yet built or tested. All reviews to date have highlighted significant issues with quality of the build and testing timeframes allocated within the schedule. The test plan should ensure sufficient time is allocated for end to end testing and defect resolution in the lead up to 'go live'. The review team again note that quality should remain the primary focus. The review team noted a change in the appointed Test Manager. Given that achievement of high quality outcome is of prime focus, the management of, and timely reporting against, the test plan are fundamentally important. The Executive needs to ensure that the Test Manager has the required experience, assigned resources and support at this critical time in the project lifecycle. The review team again found some indications that NEC have implemented more robust QA processes and increased the numbers of developer and testing recourses. The review team also found some further evidence that the defect rate on the "new build" was decreasing and represented a more reasonable level of defects (in the range of 10-20%), noting that there is still a large percentage of the testing not yet commenced. The review team also noted that the Department is still undertaking business process mapping activities with providers, which is very late in the project lifecycle. This late analysis combined with late external UAT creates a high probability that a large number of user defects / Change Requests will be identified late in the testing schedule and close to the time of deployment. Furthermore, this business process mapping exercise is identifying some gaps in fundamental assumptions regarding the Business Case and the extent to which Network Providers will benefit from AAMS. It is also revealing that Network Providers have become increasingly reliant on third party software (i.e. 'Job Ready' in most cases).	5. The project team (NEC to lead) as a matter of priority, and ongoing provide in more detail the defect resolution rate, expected defect numbers during the up-coming testing phases, and expected defect resolution time (as recommended in the previous review). 6. Develop and maintain a more detailed schedule on all the testing activities including the total number of test cases that will need to be run, and assumptions on number of defect rates and resolution time frames (as recommended in the previous review). 7. The Executive ensure that the Test Manager has the required experience, assigned resources and support. 8. Develop contingency plans around the likely outcomes of UAT (as recommended in the previous review).

Key Finding(s)	Recommendation(s)
Technical Support & Assurance Since our last review, the Department had again sought guidance from Microsoft in relation to its Customer Relationship Management (CRM) implementation for AAMS.	9. Continue, as required, to engage with software providers including Microsoft, Oracle and Intelledox technical support to provide technical assurance on the build (as recommended in the previous review). 10. Ensure that the recommendations from the Microsoft review are implemented and monitored as appropriate (as recommended in the previous review).

Key Finding(s)	Recommendation(s)
Stakeholders & Business Change Management Stakeholders and the project team members interviewed continue to maintain a strong desire for the AAMS project to succeed. This was again portrayed by Departmental staff and contractors, and the ICT vendor NEC management and Executive as well as external stakeholders from STAs and Network Providers. However, during this review the team found a consistent theme of uncertainty around producing a successful policy outcome that meets the expectations of both the Department, STAs and Network Providers. During this review, we again noted continued and sustained improvement in relationships at the working level between NEC's project management team and the Department's project management team. Whilst this certainly is a positive input, on its own will not guarantee success. External stakeholder views were again sought from STAs and Network Providers during this review. Their confidence levels remain low for a number of reasons, as follows: • Continued delays and movement in go-live dates; • Limited communication regarding progress since Feb 2017; • Limited or no visibility of the functionality of the system; and • Past deployment and UAT experience (e.g. forms). In addition, correspondence from National Australian Apprenticeship Association in February 2017 raises significant concerns regarding timeliness, efficiencies, and the potential to place providers at significant disadvantage with the introduction of AAMS. The Association was quoted as follows: *"Currently providers have a lack of confidence in AAMS, especially in regard to it not being able to deliver the expected efficiencies and not provide a financial advantage to AASN providers".* It has become clear that expectations on what AAMS will deliver for Network providers and their dependence on third party software (e.g. Job Ready) is materially different to the Business Case. Many are/were of the belief that AAMS would replace the need for third party software, though it has become evident during this review that this is unlikely to be the case.	11. Continually monitor the project team's structure and personnel to ensure effective working relationships, with a focus on jointly achieving a successful delivery outcome (as recommended in the previous review). 12. Ensure external stakeholder engagement with STAs and Network Providers is targeted and consistent (as recommended in the previous review). 13. Continue to focus on building the confidence of STAs and Network Providers, through targeting their specific concerns.

Key Finding(s)	Recommendation(s)

The Focus of PSG
 	
During this review, we developed heightened concerns regarding the ongoing validity of the Business Case - with significant doubt being cast over the extent of benefits to be realised and whether the envisaged policy outcomes can be achieved.
 	
Governance of the AAMS Project continues to be adequate at this stage - with project teams meeting on a regular basis and PSG providing suitable oversight.
 	
Again, as stated in the previous review, informal and formal NEC involvement in the governance framework will be critical to success, and should be maintained.
	14. Commission a specific body of work to determine how viable the Business Case really is.
	
	15. As per the previous review, in conjunction with monitoring schedule, budget, risks and issues, the PSG focus some attention on matters of strategic importance, including:
	
	  a. Is the business case still valid, i.e. is 'what' the department is seeking to achieve through AAMS still valid?
	  b. What benefits will be derived, by whom and by when?
	  c. What is the contingency around a Minimal Viable Product MVP and schedule?
	  d. What is the communications strategy will all key stakeholders, and when (particularly in the context of activating any contingency plans above)?
	  e. How will we deal with the anticipated volume of "defects / Change Requests" that will be raised during external UAT?
	  f. What is the contingency around potentially discontinuing with NEC?
	
	16. Continue to maintain active informal and formal peer governance arrangements with NEC executives (as recommended in the previous review).

Risk Management As identified in the previous review, project risk and issue management appears to be effective at this stage, except for the risks to schedule and quality – potentially arising from delays to testing and the high likelihood of receiving significant quantities of user generated Change Requests and defects from UAT - which needs focussed immediate attention. Other recommendations refer.	Nil. Other recommendations address this risk management finding.

Key Finding(s)	Recommendation(s)
Benefits Realisation A Benefits Realisation 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. As stated in the previous review, further work is required to enhance this plan to include a focus on the benefits associated with reducing time and administrative burden on Network Providers and STAs. Work is also required to enhance the benefits communication component of the plan.	17. PSG to review the current artefacts on Benefits Realisation (as recommended in the previous review). 18. Continue to enhance the Benefits Realisation Plan in partnership with the policy areas to ensure policy outcomes are achieved (as recommended in the previous review).

We trust that the above findings and recommendations are useful to you and the project team. Please let me know if you have any queries.

Yours sincerely,

Director

Microsoft

Project Schedule Review & Recommendations

Australian Apprenticeships Management System (AAMS) - Master Schedule

Prepared for

Department of Education and Training

3/29/2017

Version 3 Final

Prepared by

Microsoft

ii

Project Schedule Review & Recommendations, Version 3, Final
Department of Education and Training - Project Schedule Review and Recom....docx

Revision and Signoff Sheet

Change Record

Date	Author	Version	Change Reference
06 Mar 2017	██████████	0.1	Initial draft for review/discussion
08 Mar 2017	██████████	1.0	Walkthrough with DET on initial draft
09 Mar 2017	██████████	2.0	Updates to document
21 Mar 2017	██████████	2.1	Inclusion of customer feedback
21 Mar 2017	██████████	2.2	Updates to document
28 Mar 2017	██████████	3.0	Final Version provided

Reviewers

Name	Version Approved	Position	Date
██████████	2.0	Service Delivery Manager	9 Mar 2017

Table of Contents

1   Executive Summary

Microsoft Corporation, through its Microsoft Enterprise Services division, have been engaged to assist Department of Education and Training with an independent review of the AAMS project schedule as part of Work Order 7-MPPQ4FLGK.

1.1   Overview of the AAMS Project Schedule

The AAMS Project Schedule (dated 3 March 2017 in a Microsoft Project format - .mpp), is a list of project activities that are required to be completed for the Project Go Live.

Overall, the list of tasks required in the AAMS project schedule to deliver the desired outcome appear to be complete. It is recognised that this is a complex and challenging project and needs to be delivered in a relatively short timeframe.

A summary of key findings has been listed in subsequent section (Section 1.1) and these findings are based on good project management practices based on using Microsoft Project as the prime project management tool for managing the project activities.
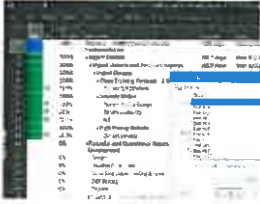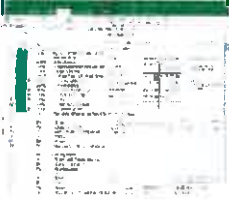
The management of the AAMS project schedule will require a strong governance, with a dedicated delivery team to deliver their work on time, on budget, with the right level of quality and within a framework that enforces the rigor required for these types of engagements.
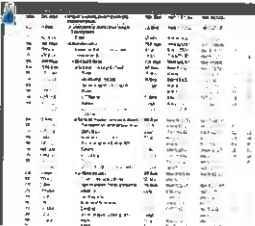
Some key points in this regard to focus on are:

- Ensure that accountabilities and responsibilities are clear within the delivery team
- Establish transparent processes and structures to guide the completion of project activities
- Improve the mechanisms to highlight project dependencies and interdependencies (using Microsoft Project as an example or via another means).
- Establish and enforce strong project planning and tracking, coordination and ensuring high quality of delivery.

Microsoft

1.2 Summary of Key Findings and Actions Required

Below is a summary of key findings, risks, issues and recommendations. It is expected that the Department of Education and Training (DET) is the owner for all recommendations and their associated actions.

#	References	Areas	Findings, Risks, Issues & Possible Impacts	Recommendations / Comments
1.		Baselining	Microsoft identified the schedule was not baselined in the version provided. However, it was noted that the Department of Education advised this was due to an agreement with the Department's delivery Partner (NEC), that a new baseline has been agreed.	Microsoft recommends the baselining of the new project schedule so that future variances from the original baseline plan can be tracked and addressed.
2.		Calendar Working Days	The project plan only has only identified 3 days as an exception to the normal working days. The ACT public holidays have not been listed and this could impact the project schedule timelines	To ensure that the setup of the base calendar includes all the ACT holidays and scheduled time off as required by DET
3.		Resource Allocation	It was noted that there are many resources who have weekly efforts exceeding 40 hours per week. This could lead to an unrealistic schedule from a project tracking perspective.	It is recommended that allocation of resources in the project plan are reviewed and managed to ensure an accurate reflection of project progress and tracking.
			Microsoft have been informed that NEC and DET are managing resourcing data in a separate document.	Microsoft recommends that resource allocations to tasks are updated to reflect the new resourcing model.
			It was also noted that NEC were onboarding additional 20 resources to address the overallocation of current resources for the project.	In MS Project, it is advisable not to assign resources to summary tasks as it may show overallocation of resources.
4.		Dependency Management	There are a lack of dependencies (Predecessors and Successors) reflected in the project schedule and there is a potential risk in being unable to ascertain the project's critical path leading	Project dependency management is critical to a good project schedule, and all tasks should be linked with predecessors and successors. If tasks are unlinked, then this could lead to having an

#	References	Areas	Findings, Risks, Issues & Possible Impacts	Recommendations / Comments
			up to go-live/project completion	inaccurate critical path.
5.		Project Tracking – Rescheduling of Incomplete Tasks	In the AAMS project schedule, the project tracking and rescheduling of the Status Date (MS Project – Project tab) is not addressed.	Ensure that the Status Date is as of the current date of when the updates are done and to ensure that the rescheduling of late tasks are undertaken.
6.		Critical Path Analysis	It is difficult to determine the Critical Path as there are unrealistic slack[1] numbers against the project tasks. This inhibits the ability to determine which tasks/tracks need to be addressed or actioned upon before they start impacting the overall schedule.	Managing Critical Path on the project schedule will ensure DET will have a clear view of the project end date. In MS Project, it is advisable to format the critical path in red (using the Wizard) so that it is visible to team members when viewing the schedule.
7.		Activity Work Effort Estimates	There are currently many tasks with Zero Effort; as there are no Resources assigned to them. This hinders the ability to determine the percentage (%) completion of tasks. It also prevents the ability to determine resource dependencies between tasks. Microsoft note the advice that NEC and DET are managing resourcing data in a separate document.	Microsoft recommends that resource allocations to tasks are updated to reflect the new resourcing model. Percentage complete information should be updated to enable accurate tracking of work complete and assessment of remaining effort.
8.		Lack of Resource Allocation for Completed Activities	Completed tasks have no resources assigned to them and this raises a risk as to determining the completion percentage (%) of those tasks.	Ensure that all tasks have named resources as per the resource loading plan to mitigate this risk.
9.		Negative Slack	There is a lack of rigor in tracking negative slack; resulting in not being able to determine overall slippage on the schedule. Slack is the amount of time a task within a project can be delayed without endangering the project deadline. This is often represented as a positive or negative number representing the number of days	It is recommended that tasks under the Critical Path are closely managed to ensure timely completion of tasks as per the schedule.

---

[1] The significance of slack is the number of days a task can be delayed before it starts to impact the overall schedule.

#	References	Areas	Findings, Risks, Issues & Possible Impacts	Recommendations / Comments
			of delay.	
			Negative slack is the amount of time beyond a project's scheduled completion that a task within the project requires.	
			Essentially, negative slack is the amount of time that must be saved to bring the project to completion on time.	
10.	AAMS – High Level Review	Establish Fit-Gap analysis	A specific deliverable "Fit-Gap analysis" was not identified in the version of the schedule that was reviewed.	Completed
			Microsoft have been advised that DET and NEC have superseded this requirement with other technical documentation.	
11.	AAMS – High Level Review	Requirements Traceability	Done	Completed recommendations made in the AAMS – High Level Review
12.		Project Schedule Structure – Project Methodology	The AAMS project schedule is currently based on lists of concurrent activities that must be completed for Go Live. The risk to this is that missed activities are not captured as part of this schedule and could impact the Go Live date.	It is prudent to ensure that the project schedule aligns to some form methodology i.e. Microsoft's Sure Step Evolved to ensure that no critical tasks are overlooked.

Page 8

Project Schedule Review & Recommendations, Version 3, Final
Department of Education and Training - Project Schedule Review and Recom...docx

2 Project Schedule Review

This review was conducted as a Project Schedule Review at the request of a DET Work Order on Microsoft. This review was conducted between 06 March 2017 and 09 March 2017.

2.1 Focus of Review

This review focused on the following key areas of quality:

1) Australian Apprenticeships Management System – Master Schedule (03 March 2017)
2) Validation that the Recommendations as part of the Australian Apprenticeship Management System – High Level Review conducted by Microsoft were addressed as part of the current AAMS Master Schedule
   a. Recommendations
      i. Establish Fit-Gap analysis
      ii. Requirements traceability for the delivery.

2.2 Materials Used for the Review

The following materials were provided:

- Australian Apprenticeships Management System – Master Schedule dated 03 March 2017 & 24 March 2017 (in Microsoft Project)

- Australian Apprenticeship Management System – High Level Review (DET-AAMS-ReviewV1.5 in Microsoft Word)

2.3 Review Interviewees

During the review the following project team and customer personnel were interviewed and provided the background to the project and the project schedule including challenges and issues faced by the project to date :

Name	Title	Project Role
	Project Director	DET Project Director
	Senior Project Manager	NEC Senior Project Manager

3 Appendix

3.1 Larger Diagrams from Section 1.1

3.1.1 Diagram 1 - Re-baselining

3.1.2 Diagram 2 – Calendar Working Days

3.1.3 Diagram 3 – Resource Over Allocation
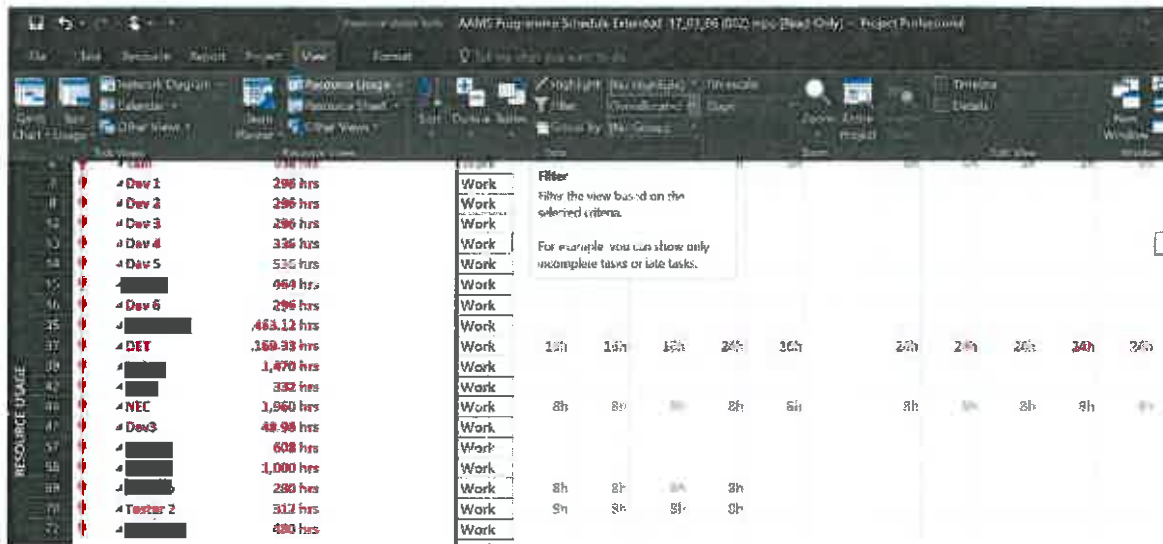
3.1.4 Diagram 4 – Dependency Management
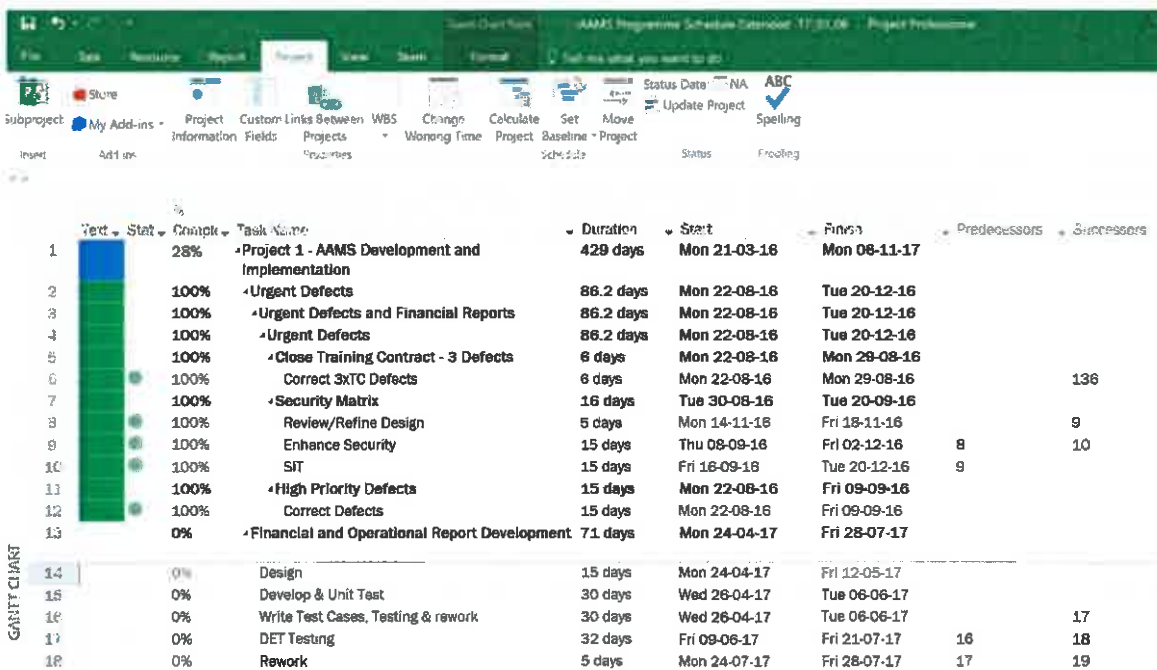
3.1.5 Diagram 5 – Project Tracking – Rescheduling of Incomplete Tasks
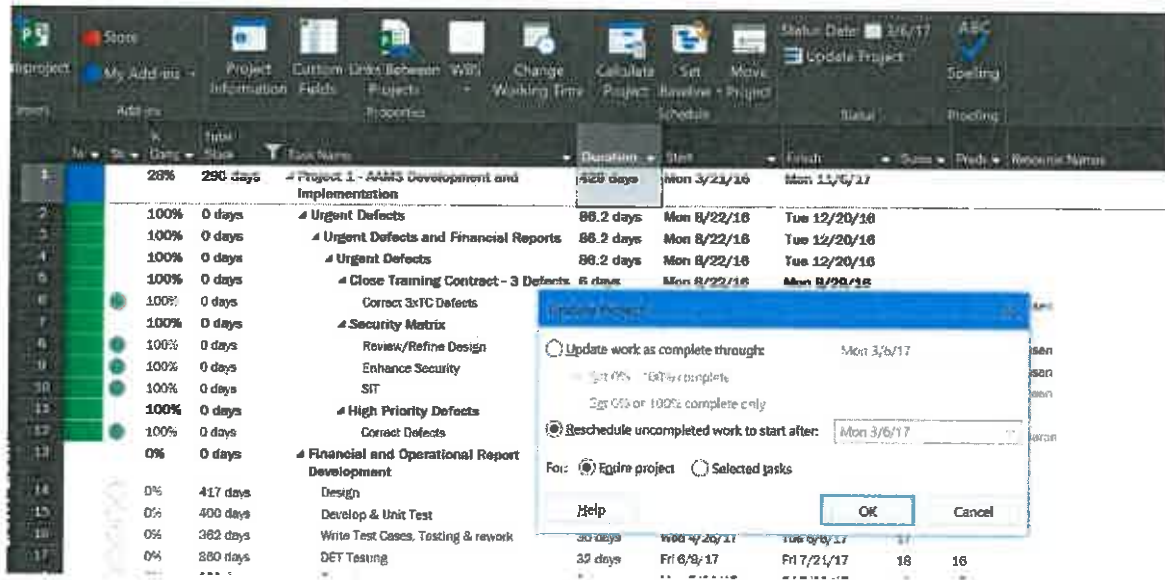
3.1.6 Diagram 6 – Critical Path Analysis

Ta	St	% Comp	Total Slack	Task Name	Duration	Start	Finish	Succ	Pred
		28%	290 days	▲ Project 1 - AAMS Development and Implementation	429 days	Mon 3/21/16	Mon 11/6/17		
		0%	0 days	▲ Financial and Operational Report Development	71 days	Mon 4/24/17	Fri 7/28/17		
		0%	417 days	Design	15 days	Mon 4/24/17	Fri 5/12/17		
		1%	360 days	▲ Security matrix	111 days	Wed 3/1/17	Mon 7/31/17		
		0%	426 days	Review and Refine current deisgn	8 days	Mon 4/10/17	Wed 4/19/17	22	
		0%	426 days	Development & Unit Test	8 days	Thu 4/20/17	Mon 5/1/17		21
		1%	360 days	▲ 12 Found items	111 days	Wed 3/1/17	Mon 7/31/17		
		0%	-126 days	▲ Transfer Training Contracts.	97 days	Mon 3/20/17	Fri 7/28/17		
		0%	-137 days	Design	15 days	Mon 4/3/17	Fri 4/21/17	33	31
		0%	-137 days	Develop and Unit Test	30 days	Mon 4/24/17	Fri 6/2/17		32
		0%	-178 days	System Integration Testing (SIT)	11 days	Mon 6/5/17	Fri 6/16/17	36	34
		0%	-178 days	Rework	5 days	Mon 6/19/17	Fri 6/23/17	37	35
		0%	-178 days	DET Testing	20 days	Mon 6/26/17	Fri 7/21/17	38	36
		0%	-178 days	Rework	5 days	Mon 7/24/17	Fri 7/28/17	39	37
		0%	-178 days	Milestone-Transfer Training Contracts	0 days	Fri 7/28/17	Fri 7/28/17		38
		0%	0 days	▲ Network Provider communication tem	26 days	Mon 4/10/17	Mon 5/15/17		
		0%	416 days	Test custom email template solution	3 days	Mon 4/10/17	Wed 4/12/17	51	
		0%	416 days	Demo to DET	1 day	Thu 4/13/17	Thu 4/13/17	52	50
		0%	416 days	Implement the solution	1 day	Fri 4/14/17	Fri 4/14/17	53	51
		0%	416 days	System Integration Testing (SIT)	2 days	Mon 4/17/17	Tue 4/18/17	54	52
		0%	416 days	Rework	1 day	Wed 4/19/17	Wed 4/19/17	55	53
		0%	416 days	DET Testing	15 days	Thu 4/20/17	Wed 5/10/17	56	54
		0%	416 days	Rework	3 days	Thu 5/11/17	Mon 5/15/17	57	55
		0%	416 days	Milestone- NP Comms Templates	0 days	Mon 5/15/17	Mon 5/15/17		56
		0%	0 days	▲ 5. Add new user.	32 days	Mon 4/17/17	Tue 5/30/17		
		0%	427 days	Design, Develop & Unit Test	10 days	Mon 4/17/17	Fri 4/28/17		
		0%	1 day	▲ Forgot password / reset password.	16 days	Mon 5/1/17	Mon 5/22/17		
		0%	419 days	Research	1 day	Mon 5/1/17	Mon 5/1/17	76	
		0%	419 days	Test the product	2 days	Tue 5/2/17	Wed 5/3/17	77	75
		0%	419 days	Implement the product	1 day	Thu 5/4/17	Thu 5/4/17	78	76
		0%	419 days	Branding	2 days	Fri 5/5/17	Mon 5/8/17	79	77
		0%	419 days	System Integration Testing (SIT)	2 days	Tue 5/9/17	Wed 5/10/17		78
		0%	411 days	Rework	1 day	Wed 5/10/17	Wed 5/10/17	81	
		0%	...	DET T...	5 d...	Th... 5/11/17	W... 5/17/17	82	80

3.1.7 Diagram 7 – Activity Work Effort Estimates

	Stat	% Compl	WBS	Work	Task Name	Duration	Start	Finish	Predecessors	Successors	Resource N
1		28%	1	14,396.72 hrs	Project 1 - AAMS Development and Implementation	429 days	Mon 21-03-16	Mon 06-11-17			
2		100%	1.1	448 hrs	Urgent Defects	86.2 days	Mon 22-08-16	Tue 20-12-16			
3		100%	1.1.1	448 hrs	Urgent Defects and Financial Reports	86.2 days	Mon 22-08-16	Tue 20-12-16			
4		100%	1.1.1.1	448 hrs	Urgent Defects	86.2 days	Mon 22-08-16	Tue 20-12-16			
5		100%	1.1.1.1.1	48 hrs	Close Training Contract - 3 Defects	6 days	Mon 22-08-16	Mon 29-08-16			
6		100%	1.1.1.1.1.1	48 hrs	Correct 3xTC Defects	6 days	Mon 22-08-16	Mon 29-08-16		135	
7		100%	1.1.1.1.2	280 hrs	Security Matrix	16 days	Tue 30-08-16	Tue 20-09-16			
8		100%	1.1.1.1.2.1	40 hrs	Review/Refine Design	5 days	Mon 14-11-16	Fri 18-11-16		9	
9		100%	1.1.1.1.2.2	120 hrs	Enhance Security	15 days	Thu 08-09-16	Fri 02-12-16	8	10	
10		100%	1.1.1.1.2.3	120 hrs	SIT	15 days	Fri 16-09-16	Tue 20-12-16	9		
11		100%	1.1.1.1.3	120 hrs	High Priority Defects	15 days	Mon 22-08-16	Fri 09-09-16			
12		100%	1.1.1.1.3.1	120 hrs	Correct Defects	15 days	Mon 22-08-16	Fri 09-09-16			
13		0%	1.2	0 hrs	Financial and Operational Report Development	71 days	Mon 24-04-17	Fri 28-07-17			
14		0%	1.2.1	0 hrs	Design	15 days	Mon 24-04-17	Fri 12-05-17			
15		0%	1.2.2	0 hrs	Develop & Unit Test	30 days	Wed 26-04-17	Tue 06-06-17			
16		0%	1.2.3	0 hrs	Write Test Cases, Testing & rework	30 days	Wed 26-04-17	Tue 06-06-17		17	
17		0%	1.2.4	0 hrs	OET Testing	32 days	Fri 09-06-17	Fri 21-07-17	16	18	
18		0%	1.2.5	0 hrs	Rework	5 days	Mon 24-07-17	Fri 28-07-17	17	19	
19		0%	1.3	0 hrs	Milestone 1.1 - All financial reports enough	0 days	Fri 28-07-17	Fri 28-07-17	18		
20		1%	1.4	0 hrs	Security matrix	111 days	Wed 01-03-17	Mon 31-07-17			
21		0%	1.4.1	0 hrs	Review and Refine current design	8 days	Mon 10-04-17	Wed 19-04-17		22	
22		0%	1.4.2	0 hrs	Development & Unit Test	8 days	Thu 20-04-17	Mon 01-05-17	21		
23		0%	1.4.3	0 hrs	Write Test cases	8 days	Thu 20-04-17	Mon 01-05-17		24	

3.1.8 Diagram 8 – Lack of Resource Allocation for Completed Activities

Resource Name	Work		Details	M	T	W	T	F			M	T	W	T	F			M
Unassigned	0 hrs		Work															
Dev 1	296 hrs		Work	0h	0h	0h	0h	0h			0h	0h	8h	0h	0h			0h
Dev 2	296 hrs		Work	0h	0h	0h	0h	0h			0h	0h	0h	0h	0h			0h
Dev 3	296 hrs		Work	0h	0h	0h	0h	0h			0h	0h	0h	0h	0h			0h
Dev 4	336 hrs		Work	0h	0h	0h	0h	0h			0h	0h	0h	0h	0h			0h
Dev 5	536 hrs		Work	0h	0h	0h	0h	0h			0h	0h	0h	0h	0h			0h
Dev 6	296 hrs		Work	0h	0h	0h	0h	0h			0h	0h	0h	0h	0h			0h
Dev5	0 hrs		Work															
OET	102.35 hrs		Work	0h	0h	0h	0h	0h			8h	8h	8h	8h	8h			13h
Dev3	48.95 hrs		Work															
Dev4	0 hrs		Work															

Page 15

Project Schedule Review & Recommendations, Version 3, Final
Department of Education and Training - Project Schedule Review and Recom....docx

3.1.9 Diagram 9 – Negative Slack

	-126 days	⊿ Transfer Training Contracts	87 days	0 hrs	0 hrs	0 hrs	Mon 3/20/17	Fri 7/28/17		
0~	0 days	RA Work	10 days	0 hrs	0 hrs	0 hrs	Mon 3/20/17	Fri 3/31/17	32	
0~	-137 days	Design	15 days	0 hrs	0 hrs	0 hrs	Mon 4/3/17	Fri 4/21/17	33	31
0~	-137 days	Develop and Unit Test	30 days	0 hrs	0 hrs	0 hrs	Mon 4/24/17	Fri 6/2/17		32
0~	0 days	Write Test Cases	10 days	0 hrs	0 hrs	0 hrs	Mon 5/22/17	Fri 6/2/17	35	
0~	-178 days	Sonior Integration Testing "SIT"	11 days	0 hrs	0 hrs	0 hrs	Mon 6/5/17	Fri 6/16/17	36	34
0~	-178 days	Rework	5 days	0 hrs	0 hrs	0 hrs	Mon 6/19/17	Fri 6/23/17	37	35
0~	-173 days	UES Testing	20 days	0 hrs	0 hrs	0 hrs	Mon 6/26/17	Fri 7/21/17	38	36
0~	-178 days	Rework	5 days	0 hrs	0 hrs	0 hrs	Mon 7/24/17	Fri 7/28/17	39	37
0~	178 days	Milestone-Transfer Training Contracts.	0 days	0 hrs	0 hrs	0 hrs	Fri 7/28/17	Fri 7/28/17		38

3.1.10 Diagram 12 – Microsoft Sure Step Evolved Methodology

Page 16

Project Schedule Review & Recommendations, Version 3, Final
Department of Education and Training - Project Schedule Review and Recom...docx

Department of Education and Training

Australian Apprenticeship Management System – High Level Review

Prepared for

Department of Education and Training

Version 1.8 Draft

Prepared by

Architect – Dynamics Global Domain

ii

Department of Education and Training, AAMS – Review, Version 1.8 Draft
Prepared by
"DET-AAMS-ReviewV1.8Final (2).docx" last modified on 19 Mar. 18, Rev 2

Microsoft

Revision and Signoff Sheet

Change Record

Date	Author	Version	Change Reference
1st Aug 2016	▮▮▮▮▮▮▮	1.0	Start working on the Draft state
8th Aug 2016	▮▮▮▮▮▮▮	1.0	1st draft submitted for Microsoft Internal review
9th Aug 2016	▮▮▮▮▮▮▮	1.1	Document updated with internal review and comments
11th Aug 2016	▮▮▮▮▮▮▮	1.2	Updated the document after draft discussions with Deb, Chris and Dean.
13th Aug 2016	▮▮▮▮▮▮▮	1.3	Update the document after internal review.
15TH Aug 2016	▮▮▮▮▮▮▮	1.4	Update the document after internal review
15th Aug 2016	▮▮▮▮▮▮▮	1.5	More updates and finalization of the document.
18th Aug 2016	▮▮▮▮▮▮▮	1.6	Updates and finalization of content, following final updates from Deb.
18th Aug 2016	▮▮▮▮▮▮▮	1.7	Updates following comments from Deb.
19th Aug 2016	▮▮▮▮▮▮▮	1.8	Added the Microsoft Warranty and Compliance page, which apparently got removed during the review and update process. The warranty and complicance page did exist in the 1st draft released.

Reviewers

Department of Education and Training, AAMS - Review, Version 1.8 Draft
Prepared by ▮▮▮▮▮▮▮
"DET-AAMS-ReviewV1.8Final (2).docx" last modified on 19 Mar. 18, Rev 2

Name	Version Reviewed	Position	Date
▓▓▓▓▓	V1.7	AAMS, Project Director	18 Aug 2016
▓▓▓▓▓	V1.6	AAMS, Project Director	18 Aug 2016
▓▓▓▓▓	V1.5	AAMS, Project Director	16 Aug 2016
▓▓▓▓▓	V1.4	Service Delivery Manager	15 Aug 2016
▓▓▓▓▓	V1.2	AAMS, Project Director	11 Aug 2016
▓▓▓▓▓	V1.2	AAMS, Project Manager	11 Aug 2016

iv

Department of Education and Training, AAMS - Review, Version 1.8 Draft
Prepared by ▓▓▓▓
"DET-AAMS-ReviewV1.8Final (2).docx" last modified on 19 Mar. 18, Rev 2

Table of Contents

Department of Education and Training, AAMS - Review, Version 1.8 Draft
Prepared by ▮▮▮▮▮▮▮▮
"DET-AAMS-ReviewV1.8Final (2).docx" last modified on 19 Mar. 18, Rev 2

v

List of Tables

List of Figures

1 Executive Summary

The Department of Education and Training (DET) sought guidance from Microsoft in relation to its Customer Relationship Management (CRM) implementation for the Australian Apprenticeship Management System (AAMS).

The purpose of the review was to assess if the CRM implementation was aligned to recommended Microsoft practices and an appropriate platform for the business requirement.

The review was undertaken using a combination of assessment approaches including document review, stakeholder interviews and workshops and a review of the solution itself.

As a result of reviewing the architecture of the solution, and despite a number of the components still being work in progress, CRM would seem to be fit for purpose for AAMS. The solution components and integration points meet recommended practices for configuration and customisation.

Microsoft has provided recommendations on the types of roles and responsibilities that are better placed to complete the recommended activities. Based on discussions with the Department, the following framework was used as the basis and assumption to identify responsibilities:

Table 1 Roles and responsibilities

Roles	Identified Responsibility
Project Manager **Architect** **Technology consultants** **Business analyst** **Application developers**	**Vendor / IT contractor / NEC**
Project Manager **Business users** **Business SME's** **User Acceptance Testers**	**Client - DET**

It is recommended that the Department should ask the IT contractor, NEC - to complete a business fit assessment, which aims to review at a detailed level how the business requirements will be implemented using CRM functionality. This is an important activity to identify when to configure versus customise. This analysis also provides input into determining the scheduling, estimate and resourcing requirements. Additionally, as the infrastructure was not in scope for the review, it is also recommended this is assessed to identify if the infrastructure can support the application and meet expectations in relation to matters such as performance, scalability and availability.

The following document outlines the scope, approach, findings and recommended next steps. In addition, some guidance has been provided in relation to typical resourcing models and delivery approaches.

1.1 Summary of Findings

To summarise, Dynamics CRM is a right fit solution for the AAMS functional requirements, the implementation of Dynamics CRM components is/are compliant with the Microsoft recommended configuration and customisation practices.

It should be noted that all modules are still work in progress and therefore the assessment is based on a point in time review and the information available at the time. The following is a summary of the findings are summarised as below.

1.1.1 CRM Solution components:

- At a high level, the **configurations are in line with Microsoft recommendations**.
- Recommend that the NEC delivery team maintains the consistency in development standards (for configurations as well as customisations).
- An appropriate **Fit-Gap analysis and the "Requirements traceability" matrix needs to be established by the NEC delivery team**. The aim of the Fit-Gap analysis is to validate and understand the degree of fit of Microsoft Dynamics to business and IT requirements and identify where configuration or customisation is required to address the requirements.

1.1.2 AAMS Integration points

- The methods undertaken and delivered for the **integration points are in line with the recommended practices**.

Department of Education and Training, AAMS - Review. Version 1.8 Draft
Prepared by
"DET-AAMS-ReviewV1.8Final (2).docx" last modified on 19 Mar.   Rev 2

- The Claims module and its integration with OPA is a challenging delivery and should be focused on as part of the revised analysis.
- An appropriate **Fit-Gap analysis and the "Requirements traceability" needs to be established by the NEC delivery team**.
- External users are provided with direct access to Dynamics CRM application. An **analysis should be undertaken for providing direct access to external users** to the CRM modules and applications Vs developing a "Portal" access to the required CRM data and information.

1.1.3 AAMS Delivery process and Application life cycle management

The AAMS Delivery process needs alignment with the recommended practices, especially around:

- Fit Gap Analysis – Fit gap analysis is under performed.
- Documentation is work in progress – There is a gap in the overall documentation, compared to the recommended practices. There is a known gap in **Requirements Vs** Solution Delivered Vs Technical / Design Documentation on hand. This is acknowledged by the NEC delivery team. As the delivery is still work in progress, the documents are likely to be living documents – to be revised as the project progresses.
    - o **Earned value** management not known for the project as of now – A revised delivery project plan should be a high priority action, it should include revised effort to completion, revised timelines and milestones.
    - o **Resourcing model** for the Enterprise level implementation – Based on the revised project plans a new and appropriate resourcing model should be developed for successful and timely delivery of the outcomes.

1.2 Recommended next steps

Having conducted the high level review, Microsoft recommends the following activities as next steps:

Table 2 Recommended next steps

Recommendation	Remarks	Recommended responsibility	Timeframe
Establish Fit-Gap analysis and "Requirements traceability" for the	The delivery process includes review of the business requirements compared to CRM capabilities and	NEC delivery team	As soon as possible to inform the revised schedule

ix

Department of Education and Training, AAMS - Review, Version 1.8 Draft
Prepared by
"DET-AAMS-ReviewV1.8Final (2).docx" last modified on 19 Mar. 18, Rev 2

delivery.	identifies any gaps and how to approach this.		
Establish a revised Project delivery plan	Leveraging the requirements traceability to determine estimate to complete (ETC) and covering a revised WBS (CRM solution and integration points), timelines, milestones and resource model.	NEC delivery team with input from the DET project team.	In conjunction with the development of the revised schedule.
Recommend to have a review as part of the UAT / production readiness process	Review and ensure the objectives are outlined in each of the recommended delivery phases are covered and achieved in the revised plan.	Microsoft/DET/NEC.	As part of the revision of the Project delivery plan.
Recommend to have Infrastructure and Performance reviews	These reviews are aimed at ensuring the infrastructure will support the non-functional business requirements such as system performance, availability, concurrency of users.	Microsoft/DET/NEC.	To be determined.
JavaScripts web resources contains references to older Web Service Endpoint	The JavaScript web resources in the system contain a reference to the older Microsoft Dynamics CRM Web service endpoint. The older endpoints will not be supported in the future releases.	NEC delivery team.	As soon as possible to inform the revised schedule and Project delivery plan.

Department of Education and Training, AAMS - Review, Version 1.8 Draft
Prepared by ▮▮▮▮▮
"DET-AAMS-ReviewV1.8Final (2).docx" last modified on 19 Mar. 18, Rev 2

x

2 Engagement Context

2.1 Background and approach

The Department of Education and Training (DET) sought guidance in relation to its Customer Relationship Management (CRM) implementation for the Australian Apprenticeship Management System (AAMS). Microsoft was engaged to undertake a high level architectural assessment, owing to timeframes the assessment excluded a detailed analysis of the solution implementation and requirement / functional assessment., The following approach was adopted to deliver the high level review and assessment outcomes:

- Met with DET stakeholders to confirm engagement scope and outcome expectations.
- Conducted multiple workshops regarding the solution and delivery approach with the DET and NEC's broader delivery teams.
- Collected the project artefacts as outlined in the section 5 "Artefacts reviewed".
- Reviewed the artefacts as defined within the scope.
- Agreed to the content and sections of the high level review / assessment report.
- Drafted the report and conducted a walkthrough with the DET team, followed by subsequent updates to the report.
- Finalised and delivered the report.

2.2 Expectations

The Department's expectation was for Microsoft to leverage its recommended practices for Dynamics CRM application, development guidelines and standard practices for delivering Dynamics CRM engagements and assist with a review of the current state AAMS architecture. The review was intended to provide a level of assurance and answer the following questions (at a high level):

- Is CRM an appropriate platform for the solution required by the business?
- Does implementation follow CRM components recommended practices?
- Are the Integration points implemented as per recommended practices?
- Are recommended Dynamics CRM Implementation methodology appropriately followed?

xi

Department of Education and Training, AAMS - Review, Version 1.8 Draft
Prepared by
"DET-AAMS-ReviewV1.8Final (2).docx" last modified on 19 Mar. 18, Rev 2

2.3 In scope

Microsoft was contracted to provide a resource to supplement the project team and provide assistance as directed by the designated project manager. This was further refined to include the following scope:

The following was agreed to as in scope and covered as part of the high level review:

- CRM Solution
  - o Configuration
  - o Customisation
- Integration points
- Implementation methodology

2.4 Out of Scope

As the whole exercise needs to be carried out in a limited timeframe, the following is deemed and agreed as out of scope components, (from review perspective)

- Detailed analysis of the solution implementation and requirement / functional assessment
- Fit for purpose i.e. delivered solutions capability to meet the business requirements
- Infrastructure components
- Other Non-Microsoft Components / products / ISV's
- Understanding and alignment with "Pride" NEC's delivery methodology
- Completeness of solution on hand
- Detailed code / solution review
- Assessment on non-Microsoft products

3 Solution Review and Recommendations

The following sub sections provide the findings and recommendations based on the following sections:

- AAMS CRM Solution components,
- AAMS CRM application (module), and
- AAMS Integration points.

3.1 AAMS CRM Solution components

The following section outlines a high level review of the AAMS CRM Solution components, noting that Microsoft was not engaged to conduct a detailed code review.

Table 3 AAMS CRM solution components

Component	Review comments	Recommendations
Configurations	At a high level, the configurations are in line with the recommendations. This is still work in progress.	The completeness of the configurations can only be validated and verified during and as part of the UAT process. Recommend to have a full review as part of the UAT / production readiness process.
Custom entities (100)	At a high level, the configurations for the custom entities are in line with the recommendations. This is still work in progress.	The completeness of the configurations can only be validated and verified during and as part of the UAT process. Recommend to have a full review as part of the UAT / production readiness process. Recommend that the NEC delivery team maintains the consistency in development standards.
Out of Box entities (106)	At a high level, the configurations for the out of box entities are in line with the recommendations. This is	The completeness of the configurations can only be validated and verified during and as part of the UAT process. Recommend to have

	still work in progress.	a full review as part of the UAT / production readiness process. Recommend that the NEC delivery team maintains the consistency in development standards.
Workflow (74)	At a high level, the configurations for the workflows are in line with the recommendations. This is still work in progress.	The completeness of the configurations can only be validated and verified during and as part of the UAT process. Recommend to have a full review as part of the UAT / production readiness process. Recommend that the NEC delivery team maintains the consistency in development standards.
Dialog (1)	At a high level, the configurations for the Dialog is in line with the recommendations. This is still work in progress.	The completeness of the configurations can only be validated and verified during and as part of the UAT process. Recommend to have a full review as part of the UAT / production readiness process. Recommend that the NEC delivery team maintains the consistency in development standards.
BusinessProcessFlow (10)	At a high level, the configurations for the Business Process Flows are in line with the recommendations. This is still work in progress.	The completeness of the configurations can only be validated and verified during and as part of the UAT process. Recommend to have a full review as part of the UAT / production readiness process. Recommend that the NEC delivery team maintains the consistency in development standards.

Action (2)	At a high level, the configurations for the Actions are in line with the recommendations. This is still work in progress.	The completeness of the configurations can only be validated and verified during and as part of the UAT process. Recommend to have a full review as part of the UAT / production readiness process.
		Recommend that the NEC delivery team maintains the consistency in development standards.
BusinessRule (187)	At a high level, the configurations for the Business rules are in line with the recommendations. This is still work in progress.	The completeness of the configurations can only be validated and verified during and as part of the UAT process. Recommend to have a full review as part of the UAT / production readiness process.
		Recommend that the NEC delivery team maintains the consistency in development standards.
Customisations		
Java Scripts	At a high level, the Java scripts are in line with the recommendations. This is still work in progress.	The JavaScript web resources in the system contain a reference to the older Microsoft Dynamics CRM Web service endpoint. The older endpoints will not be supported in the future releases.
		The presence of legacy component(s) can create issues during the upgrade (to the newer versions). Recommend that NEC team update these asap.
Plugins	At a high level, the Plugins for the Business rules are in line with the recommendations	The completeness of the configurations can only be validated and verified during and as part of the UAT

	This is still work in progress.	process. Recommend to have a full review as part of the UAT / production readiness process.
		Recommend that the NEC delivery team maintains the consistency in development standards.

3.2 AAMS CRM Application

The section covers the review and recommendations around the CRM application modules, configurations, customisations.

Having reviewed the TFS bugs list, requirements specifications document and other artefacts outlined in the "Artefacts reviewed" section -the following diagram outlines the CRM Modules (left hand side), and the components related to configuring CRM, or customising CRM.

Overall, the Orange identifies that essentially all the components are a work in progress and not complete. During the review, information regarding the estimate to complete (ETC) including time and effort to complete development was not available.
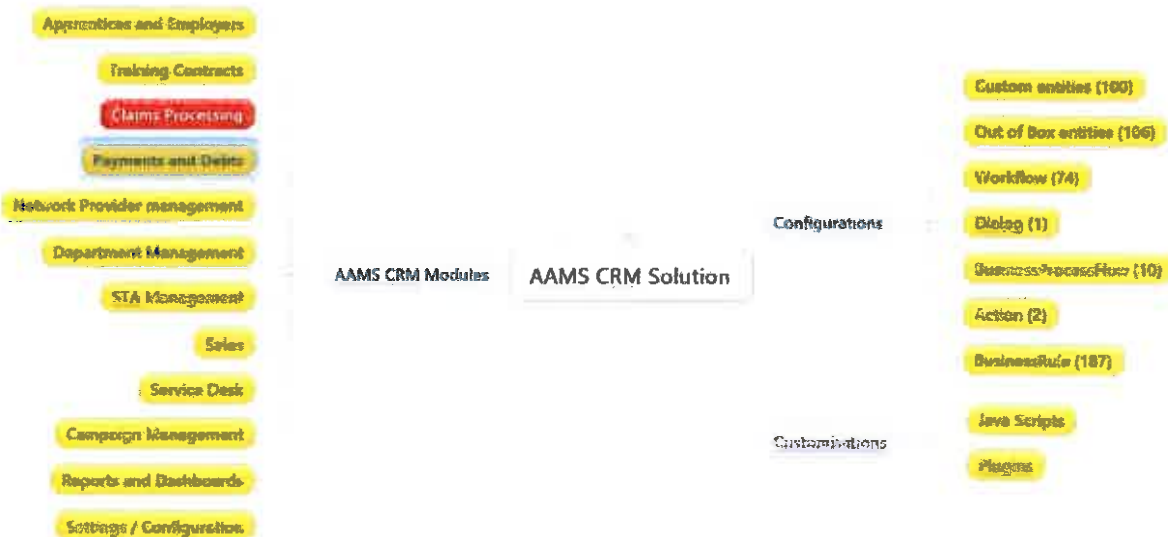

Figure 1 Current state of the AAMS CRM modules

3.2.1 CRM Application review findings

Dynamics CRM is confirmed as a "fit for purpose" in meeting the functional requirements for all the modules.

The Configurations and Customisations related the CRM modules are in line with the recommended practices as outlined with comments in section 3.1.

The AAMS CRM modules and related components are tightly integrated / inter-related. As a result, there is a complex relationship between the components. The Fit Gap analysis for each component will provide an understanding of how the requirements can be met and traceability to how CRM functionality will support the requirements.

This will be an activity throughout the development cycle which will also need to address and assess that the related components will continue to work together.

The current TFS bugs list and the outstanding defects reflect gap in the "Claims processing" module – which is highlighted as **"RED"**.

xvii

Department of Education and Training, AAMS - Review, Version 1.8 Draft
Prepared by
"DET-AAMS-ReviewV1.8Final (2).docx" last modified on 19 Mar. 18, Rev 2

3.3 AAMS Integration Points

The section covers the review and recommendations around the CRM application and its points of integration. There are several key points of integration required including integration with external entities the Reserve Bank of Australia, other Government organisations and State based training authorities, network providers, employers and apprentices. Furthermore, CRM is also being integration with 3rd party products which provide policy automation and forms capability.

Having reviewed the TFS bugs list, requirements specifications document and other artefacts outlined in the "Artefacts reviewed" section –the following diagram outlines the current state for the AAMS integration points as "Work in Progress or Orange". Similar to the application components, information regarding estimate to complete was not available.

Accounts payable related information
integration with AAMS application

Reserve Bank of Australia

AASN Claims approval

Bespoke Web page

collect and process claims approvals

XML / Web services integration

2 way information exchange

Policy Automation engine

Business Process rules engine

Payment Summary

Policy Automation

Oracle Policy automation framework

Receives parameters from AAMS CRM application

Annual payment summaries extracted
to text format and manually uploaded

Australian Taxation Office

Federal Government

Returns status / eligibility criteria on
various policy decisions

External network

personal benefits payments

Information exchange on

Centrelink (ISIS)

Desktop – Web browser

Living away from Home

Access AAMS using

Tablet – Web browser

AAMS Integration Points

Validation of data provided on the
Online Web forms / AAMS CRM
application

Network Providers

Direct access (Web form)

XML / Web services

AAMS CRM accessed through web
browser and EForms App" through
Tablet

Training.gov.au

Data Validation Services

Australian Business Register

Collect / Fill up information offline

Australia Post

Sync with AAMS – CRM Server later

USI – Universal Student identifier

Email

All states

SMS

Integration through XML / Web services / BizTalk

Web Browser

Two way communication with AAMS CRM system

State Training Authorities

Employer / Australian Apprentice / RTO

Access / Communication through

Tablet / Mobile Devices

Integration point – shared by all STA's
for Training contract approvals

Different browsers

Figure 2 AAMS Integration points current state

3.3.1 Integration points review findings

The methods undertaken and delivered for the integration points are in line with the recommended practices. It was identified there are instances of deprecated SDK calls in being used in Java Scripts. The **deprecated** definition indicates that this function may no longer be supported in a future release and should no longer be used.

The AAMS integration components are tightly integrated / inter-related with the CRM modules, and will continue to be work in progress until an appropriate Fit-Gap analysis is undertaken to establish the "Requirements traceability" as outlined in section 4.3.

The Claims module and its integration with OPA is a challenging delivery and should be focused on as part of the revised analysis.

A Return on investment "ROI" analysis should be undertaken for providing direct access to external users to the CRM modules and applications Vs developing a "Portal" access to the required CRM data and information. Direct access would potentially require more CRM licenses, compared to "Portal" access. There are advantages to providing a portal including the ability to assist with restricting access to attributes / CRM data.

4 AAMS Delivery process

During the workshops and the subsequent review of the documents and information made available, there were gaps identified in terms of knowing / identifying the current state of the project, some of the key issues were:

- Gap(s) between the Requirements Vs Solutions delivered Vs Documentation,
- Missing "Requirements Traceability" to identify what state we are with the project currently, and
- Not knowing what is the outstanding effort to completion.

4.1 Iterative methodology

Further as discussed and identified during the workshops, an iterative delivery approach was used for the project delivery. For Dynamics CRM implementations, the following diagram covers the iterative approach/methodology which is considered a recommended practice.

Page 20

Department of Education and Training, AAMS - Review, Version 1 8 Draft
Prepared by
"DET-AAMS-ReviewV1.8Final (2).docx" last modified on 19 Mar. 18, Rev 2
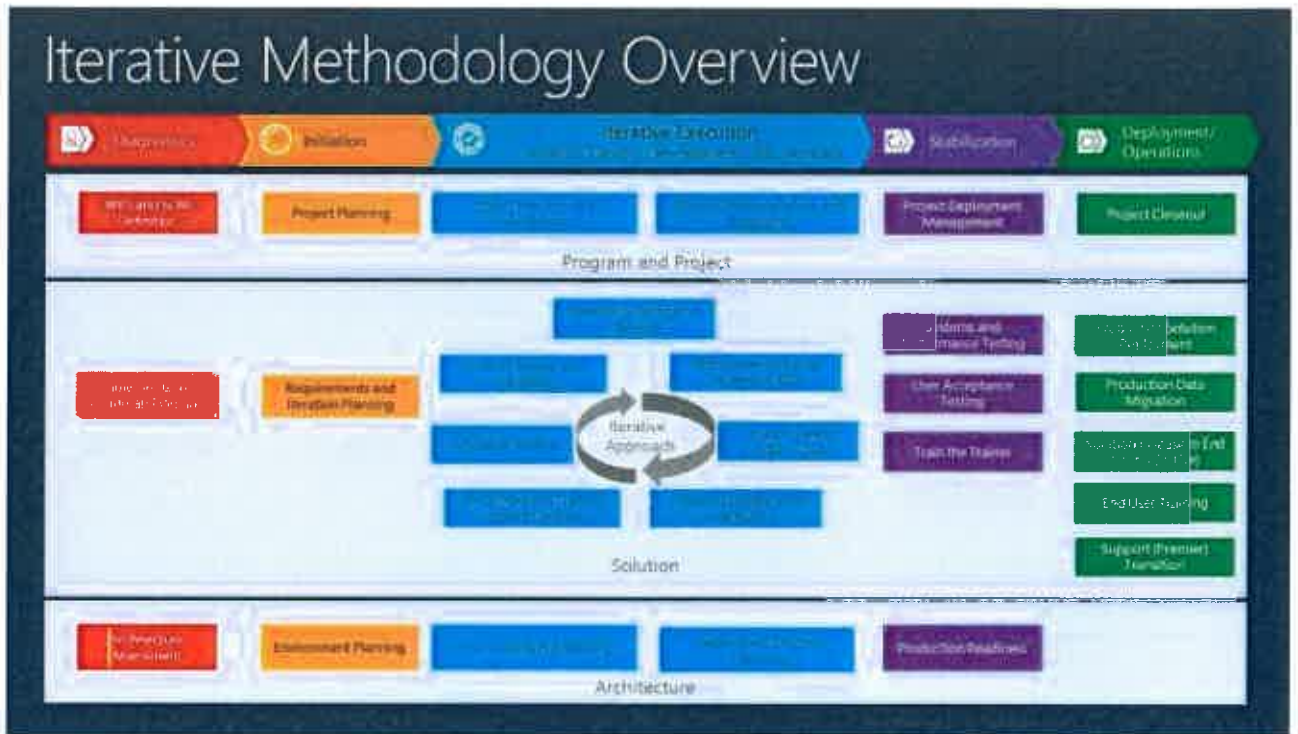
Figure 3 High level overview of the Iterative delivery approach

4.2 Example / Reference CRM Project team structure

At a very high level, considering the implementation as an Enterprise level scale, the following is a recommended project team structure. The roles and responsibilities of each of the resource / role (RACI matrix) is outlined in the next sub section.
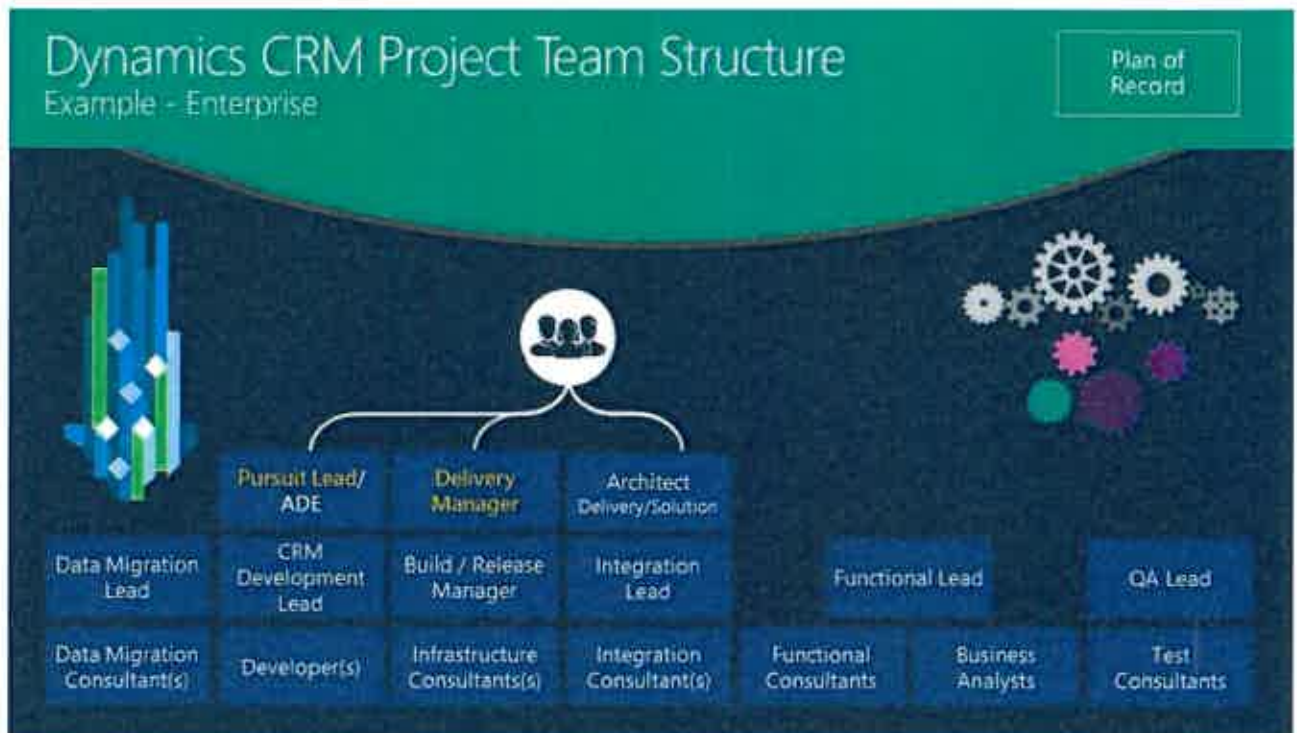

Figure 4 Example of CRM Project team structure

4.3 Requirements Traceability process

During the workshop and review process, requirements traceability was identified as a gap. Requirements traceability is considered a very important artefact in the delivery process. It is one of the key artefact through which the delivery team, the client stakeholders and anyone interested in the success of the project – can identify and take stock of the state of the project. The following diagram outlines the process of managing requirements traceability across various phases of a delivery project.
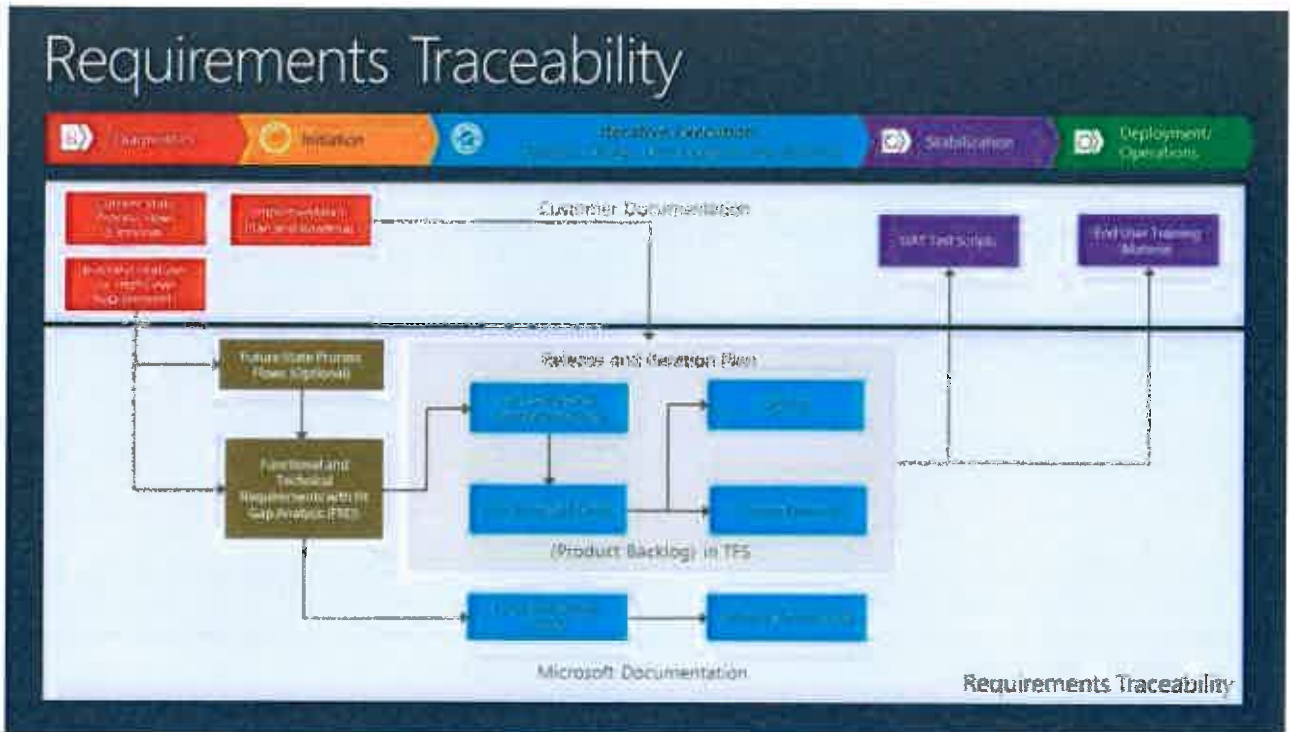
Figure 5 Requirements traceability process by project phases

xxiii

Department of Education and Training, AAMS - Review, Version 1.8 Draft
Prepared by
"DET-AAMS-ReviewV1.8Final (2).docx" last modified on 19 Mar. 18, Rev 2

5 Appendix: Table of Abbreviations

Table 4 Table of abbreviations

Abbreviation	Description
AAMS	Australian Apprenticeship Management System
ADS	Architecture design sessions
DET	Department of Education and Training
Fit-Gap analysis	An analysis performed to identify the gaps between requirement and how they will be delivered. The context for this document's purpose is reference to an analysis process for meeting and delivering requirement in a Dynamics CRM project.
ISV	Independent Software Vendor
OPA	Oracle Policy Automation
PjM	Project Manager
ROI	Return on Investment
SDK	Software Development Kit
SOW	Statement of work
TFS	Team Foundation Server
UAT	User adoption test
WBS	Work Break Down structure
WIP	Work in Progress

Page 24

Department of Education and Training, AAMS - Review, Version 1.8 Draft
Prepared by
"DET-AAMS-ReviewV1.8Final (2).docx" last modified on 19 Mar. 18, Rev 2

Microsoft

6 Appendix: Artefacts reviewed

The following documents and CRM solutions were reviewed as part of the process.

Table 5 List of documents

Document Description
AAMS Data Model & Dictionary
AAMS Enhancements Register
Changes Needed to AAMS
AAMS Functional Map
AAMS Use Cases & Activity Diagrams
AAMS Non-Functional Requirements (extracted from the Statement of Work)
AVOKA Smart Forms
AAMS User Matrix
Screen Flow with proposed designs (proposed by DET)
Solution Architecture (proposed by DET)
Reports, incl. Dashboards (proposed by DET)
External interface specifications
Australian Apprenticeships Incentives Programme Guidelines
Australian Apprenticeships Support Network Operating Guidelines
AAMS High Level Requirements
Custom Reports: Catalogue and Sample

Department of Education and Training, AAMS - Review, Version 1.8 Draft
Prepared by █████████
"DET-AAMS-ReviewV1.8Final (2).docx" last modified on 19 Mar. 18, Rev 2

XXV

6.1.1 Solution(s) and version

The following Dynamics CRM solutions were provided and reviewed:

Table 6 CRM Solutions

CRM Solution name
AAMSSolution_1_0_0_3
AAMSPlugins_1_0_0_3
AAMSWebresources_1_0_0_3

Review of scope and stakeholder perspectives regarding the AAMS implementation

July 2017

Tetra

Table of Contents

1 Executive Summary

1. The AAMS design prepared in September 2015 presented a complete end-to-end workflow and process management solution for administration of apprenticeships. This is a more comprehensive scope than functional replacement of TYIMS with some additional automation, although this narrower scope persisted in the language around the AAMS project.

2. The nature and depth of the processes and third party tools used by Network Providers was not exposed or appreciated during AAMS development, leading to design decisions that duplicated work already done by Network Providers.

3. This overlap was revealed more fully during the recent embedding exercise. It became evident that the dominant 3rd party tool, JobReady.Active, has functionality that significantly overlaps that of the AAMS design and has been incrementally optimised over an extended period to support the Provider's business – e.g. Lead Generation, Communication Management, Electronic bulk forms, Algorithmic Workflow Scheduling (by role), detailed CRM, compliance and an eligibility rules engine.

4. Factors (1), (2) and (3), combined with a lack of deeper consultation and communication about the intended scope for AAMS and its benefits, has led to divergent views regarding the impact of AAMS on Network Provider operations.

5. The original business case was built on assumptions of efficiency that appear to have been inadequately tested and may not be realised because AAMS, in its current configuration, duplicates rather than complement many Network Provider processes.

6. The impact to providers of using AAMS has only properly emerged during recent embedding exercise. The response from Providers is significantly negative, with a potential for reputational risk to DET.

7. The Network Providers are likely to experience additional rather than reduced effort in using AAMS. Consequently, they may seek a reassessment of the 10% fee reduction, given that it was associated with an anticipated efficiency benefit.

8. There are concerns, not tested by this review, regarding the broader business readiness for going live with AAMS on 6 November 2017. However, the state of the current solution design, the scale of defects an unseen functionality going into UAT and the potential for disruption is significant and it is recommended that a decision to go live is deferred.

9. These observations do not detract from the underlying value that AAMS will deliver to the Department in provider a richer base of information about the overall program that will enable better monitoring and evidence-based policy decisions. Those aspects of the system need to be preserved. But the current model needs to be refined.

10. The full functionality of AAMS will not be visible until the User Acceptance Testing exercise. The engagement with Providers during UAT should be used to conduct a collaborative process that will:

    ♦ confirm the extent of overlaps in functionality with Network Provider systems;

    ♦ understand the potential business impact of the project in its current form; and

    ♦ map out a path to resolve the end-to-end design in a way that effectively meshes with Network Provider processes and systems, delivers demonstrable efficiencies in administration as well as meets the Departments information and policy goals.

11. Given this new understanding the Department should consider enabling bi-directional data flow between AAMS and their 3rd party tools and allowing the Providers to supply mature completed work products directly into AAMS. This approach can be achieved using open APIs that enable any external system to interface. It will deliver value for both the Department and Providers by avoiding duplication and enhancing the efficiency of the apprenticeship programs.
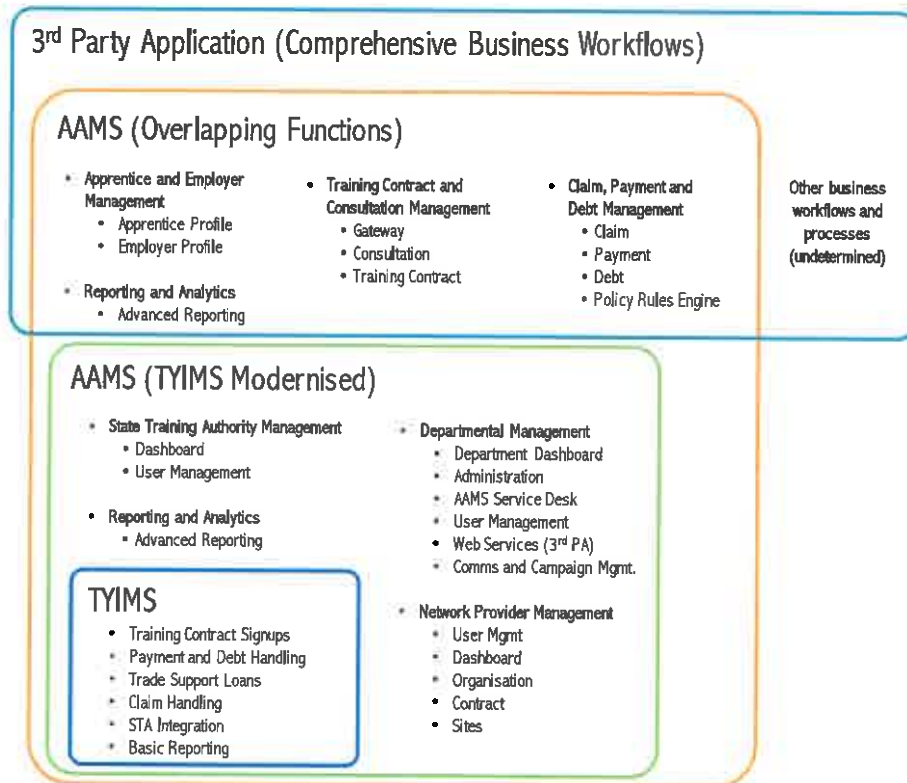
1.1 Impact summary

Aspects that impact on AAMS going into production in November include:

- It is likely to have unresolved bugs with the need for workarounds and accompanying release notes that detract from the implementation experience.

- The underlying CRM software imposes design constraints that are both cumbersome and counter intuitive.

- Network Providers processes are unlikely to be more efficient.

- Two different process workflows must be supported because it will difficult to engage mid-process. This will impose a potentially significant duplication of effort.

- Process workflows are likely to take more time and effort in AAMS.

- Critical comparisons are easily drawn with the 3rd part applications that are mature, have been enhanced over an extended period of time and are optimised to the Network Providers local business processes.

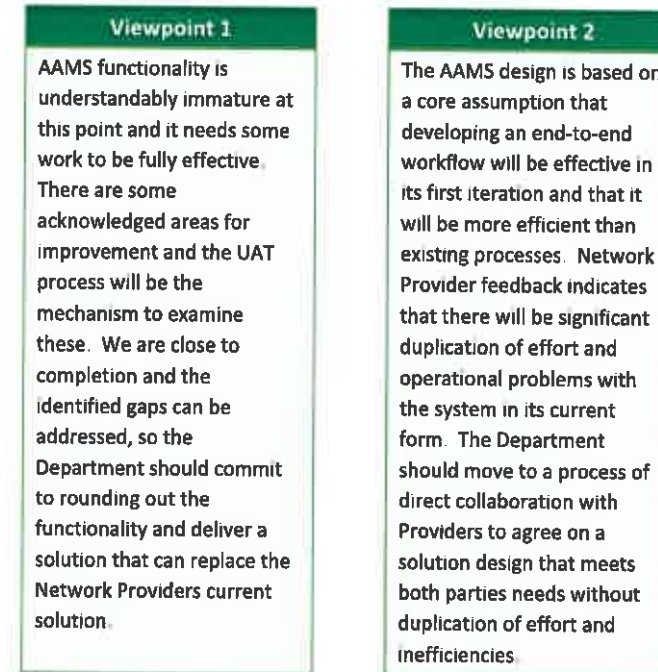## 1.2 Functionality of AAMS and Provider systems

The areas of common functionality between the AAMS and the Provider's current system are illustrated in the following diagram. Elements relating to the automation of processes and the application of business rules for determining eligibility have been part of the Providers software for some time and are in a relatively mature state.

3rd Party Application (Comprehensive Business Workflows)

AAMS (Overlapping Functions)

- Apprentice and Employer Management
  - Apprentice Profile
  - Employer Profile
- Reporting and Analytics
  - Advanced Reporting

- Training Contract and Consultation Management
  - Gateway
  - Consultation
  - Training Contract

- Claim, Payment and Debt Management
  - Claim
  - Payment
  - Debt
  - Policy Rules Engine

Other business workflows and processes (undetermined)

AAMS (TYIMS Modernised)

- State Training Authority Management
  - Dashboard
  - User Management
- Reporting and Analytics
  - Advanced Reporting

- Departmental Management
  - Department Dashboard
  - Administration
  - AAMS Service Desk
  - User Management
  - Web Services (3rd PA)
  - Comms and Campaign Mgmt.

- Network Provider Management
  - User Mgmt
  - Dashboard
  - Organisation
  - Contract
  - Sites

TYIMS

- Training Contract Signups
- Payment and Debt Handling
- Trade Support Loans
- Claim Handling
- STA Integration
- Basic Reporting

Representation of the overlap between the systems discussed in this review

1.3 Recommendations

The Department's expectation of delivering a solution that adds process automation to drive productivity gains for Providers is unlikely to be borne out through the design of AAMS in its current form. Actions from here depend on determining which of the following two viewpoints is correct:

Viewpoint 1	Viewpoint 2
AAMS functionality is understandably immature at this point and it needs some work to be fully effective. There are some acknowledged areas for improvement and the UAT process will be the mechanism to examine these. We are close to completion and the identified gaps can be addressed, so the Department should commit to rounding out the functionality and deliver a solution that can replace the Network Providers current solution.	The AAMS design is based on a core assumption that developing an end-to-end workflow will be effective in its first iteration and that it will be more efficient than existing processes. Network Provider feedback indicates that there will be significant duplication of effort and operational problems with the system in its current form. The Department should move to a process of direct collaboration with Providers to agree on a solution design that meets both parties needs without duplication of effort and inefficiencies.

Option 1: Go live as planned on 6 November 2017

A decision to go live on 6 November 2017 needs to take into account the current state of the product, the outcomes of UAT and the business readiness for transition.

Network Providers have raised serious questions about the functionality of the system and the potential to cause significant disruption to their business model and the outcomes of the apprenticeship program. **This option is not recommended.**

Option 2 – Allow 2-way information flow with AAMS

This is effectively the same as Option 1, but with a process to implement a bi-directional data exchange with the Provider's systems using an API. It carried the same operational risks as Option 1, but sets in place a process for developing a two-way information flow between the systems, eventually migrating to a solution that provides a choice for Network Providers to use their own tools, relying on work product outputs to be sent to AAMS to meet its information needs. **This option is not recommended.**

Option 3 – Adjust AAMS design to remove duplication and accept NP data

This option is based on imposing a delay of six months or more to the project, using that time to re-engineer the functionality to an agreed set of business processes that complement the functions of the Providers third party application ad to allow a bi-directional flow of information and work products to populate the AAMS system. This will eliminate the duplication of effort involved with the current AAMNS design and offer opportunities work collaboratively with the Network Providers in determining the most efficient processes that will meet the needs of the program. **Option 3 is the recommended strategy.**

REVIEW OF AAMS IMPLEMENTATION

Context and scope

2 Context and approach

The Department of education requested a brief time-boxed review be conducted of the upcoming implementation of Australian Apprenticeship Management System (AAMS) with a focus on the following:

- What was originally intended: The expectation set for AAMS through the original Business Case.
- What will be built and delivered at AAMS go-live: Delivery of what was defined and agreed within the AAMS Functional Specification plus approved Change Records.
- What was promised: The expectation set for AAMS by the Department to its stakeholders.
- What is desired by customers: The customers preferred outcome as currently understood.

In addition, it was agreed that any risks to success uncovered during this review should also be called out and that these should not be pursued to any depth at the expense of the primary focus. In accordance with this guidance all factual material supplied and statements made by stakeholders during interviews have been taken at face value.

2.1 Review Approach and Sources

This review was established to be brief in duration and tactical in nature (10 days) as the findings were urgently needed prior to the commencement of AAMS User Acceptance Testing.

The review took the form of a series of interviews with key stakeholders from a list supplied by DET and conducted on DET premises on an in-camera basis. Interviewees were drawn from DET senior management, AAMS team leadership, key suppliers (NEC) and the Network Providers represented by their national association leadership. Due to the short duration of the review, all stakeholder statements were taken at face value. No attempt was made to pursue issues raised in depth although key issue themes were raised in subsequent interviews to gain appropriate perspective and test possible resolutions. Background material supplied by the Department AAMS team was reviewed under standard non-disclosure conditions.

Name	Position	AAMS role
████████████	Deputy Secretary	Sponsor
████████████	Group Manager	Senior Responsible Officer
████████████	Branch Manager, Australian Apprenticeships Management System	Manager, AAMS implementation team
████████████	DET Project Manager	AAMS Project Manager
████████████	Manager, Industry Skills Branch	Sponsor
████████████	Director, Skills and Training Service Provision Branch	Advisor ████████
████████████	AAMS Business Analysis	AAMS Implementation team
████████████	NEC Project Manager	NEC AAMS Project Manager
████████████	NEC Applications Development Manager QLD, NSW and ACT	NEC AAMS Program Manager
████████████	NEC General Manager Smart Systems	NEC Executive Owning AAMS business
████████████	NEC Account Manager	Supporting NEC team
████████████	DET CIO	ICT Security Governance
████████████	DET ICT Digital Delivery	ICT Application Sustainment
████████████	Chief Financial Officer	Project Board Member
████████████	Chief Executive National Australian Apprenticeship Association	Network Provider and Employer representation

Context and approach

REVIEW OF AAMS IMPLEMENTATION

Observations

3   Key observations in the review

3.1   Past Reviews

A report prepared by Project Assured in April 2017 called out the importance of the Benefits Realisation Plan and raised the first questions about the need to validate the benefits associated with reducing time and administrative burden on Network Providers, State Training Authorities and Employers.

Their July report does not repeat this call, but points to resource gaps and governance. It states that "*much has to go right for the project to deliver its full scope/quality on time and to budget*".

3.2   Benefits Realisation Plan

In the AAMS Business Case the intention was to develop a robust and responsive Australian Apprenticeship system. It would improve engagement, retention, completion and satisfaction rates, help clients find the right VET pathway and reduce red tape. The defined benefits were stated as:

- Reduced red tape for employers
- Better use of DET resources
- Reduced Network Provider administrative effort
- Increased completion rate

Section 7 of the AAMS Business Case sets out methods for measuring benefits and comparing this to the performance baseline. Notional baselines and illustrative targets are shown for administrative effort, although it is not clear how the baselines or targets were established, only that they would be measured with the enhanced AAMS functionality.

Individual tables for each performance measure refer to consultations with Network Providers in November 2015 and January 2016. The nature of these consultations and the extent to which existing functionality within JobReady was discussed is not clear in the Business Case document.

Consultation with the Network Providers Association during this review suggests this engagement was brief and cursory. Equally, the basis for reduced effort under the AAMS model is unclear. Given the state of AAMS development at that time such estimates would be imprecise at best. Nonetheless the Department has used potential productivity gains projected for the TYIMS to AAMS transformation to negotiate a 10% reduction in Network Provider fees.

Administrative effort assessments in the Benefits Realisation Plan should be considered separately to the basis of consultations that were undertaken to arrive at these conclusions.

A review of the online marketing material for JobReady Active shows a depth of functionality in this tool that broadly mimics the intended functions of AAMS. No evidence was found that the AAMS Business Case had a deep understanding of the Business Process cost base of the Network Providers, meaning that assumptions about the magnitude of productivity gains and savings are untestable at the time of this review. It raises a question about how to validate that AAMS functionality would have offered a productivity advantage over a mature product offering the same functions.

3.3   A perspective regarding provider processes

During the recent testing and embedding exercise Network Providers formed a view about the state of readiness of AAMS. Providers have since provided some feedback through their association that there are material threats to the success of AAMS go-live. Although it was not the original intent of the embedding concept, these more detailed engagements for the first time revealed the current lived experience of the Network Providers with their own business processes and with their commercially acquired business process automation tools, namely JobReady Active™.

All providers use JobReady Active™, which has been highly customised over an extended period of time to match their internal business workflows, including the specific industry, geography and Government regulatory frameworks in which each provider operates. This represents a significant long term investment by JobReady and each Network Provider in business process optimisation and productivity embedding in order to lower their cost per transaction and maximise their efficient use of resources.

There has been no sustained focus by the AAMS program, nor DET business owners, to effectively understand the business value provided by JobReady Active™ to the Network Providers or its relationship to the proposed AAMS scope and specification. There was early engagement with the Network Providers. This engagement was stopped for an extended period and when restarted it appears not to have focussed on the actual functions AAMS was expect to deliver. Had this detail been suitably exposed Network Providers early in the DET engagement it is reasonable to expect that the Providers existing capabilities would have been raised, likely in terms of possible AAMS impact.

As deployed to each Network Provider, JobReady is designed to be an end-to-end Apprenticeship opportunity, establishment and lifecycle management workflow toolset. It is focused on the successful establishment of individual apprenticeships as a revenue outcome for the Network Provider. AAMS, based as it is on an off the shelf Customer Relationship Management product (that did not originally include the workflows needed for apprenticeship management), is by nature less customised to each Providers business and is a significantly less mature solution. AAMS however requires its own workflows to be conducted and completed by Network Providers in order to produce key products that are already completed in JobReady Active. This will involve duplicated effort.

JobReady includes a business rules engine to automate the determination of eligibility along with a number of other labour saving capabilities. This did not appear to be fully understood by the DET Business owners at the time of our interviews and was only recently discovered by the AAMS team and raised again during the embedding exercise. The rules engine is a key component of the origin AAMS business case and was used to support much of the perceived new value to providers, covering what was thought to be a significant shortfall in Provider capability. This supports the view that the value proposition for the Network Providers claimed in the original AAMS business case was largely untested and is, in the light of recent DET discoveries, highly unlikely to be realised.

Today JobReady Active™ takes a one-way data feed directly from the existing DET apprenticeship system, TYIMS. It is understood that the AAMS scope does not propose to change this other than replacing TYIMS with AAMS as the originating data source. A bi-directional exchange of work products does not appear to have been formally considered.

AAMS will provide a number of new capabilities to DET beyond those found in TYIMS today. These capabilities listed below include tools to support a much more effective, evidence-based approach to policy change, reporting and supplier management. To this extent AAMS is of significant value to DET.

3.4   Intended Scope of AAMS

What was originally intended: The expectation set for AAMS through the original Business Case.

Early planning for AAMS sought to develop a design that would apply automation to relieve the burden of complex manual processes that were involved with the administration of apprenticeship contracts. This was based on the expectation that:

- digitising forms;
- reducing manual transcription; and
- applying process governance and automation across the end-to end registration process

will significantly reduce the eight-week process from initial contract lodgement to approval, improve the completion rate for apprenticeships and accurately trigger Commonwealth payments[1].

AAMS Functional specification – September 2015

The intent of the system was explained with reference to a series of current pain points and the outline of project goals. The solution would reduce manual handling, address problems with usability and provide a base of data to assess trends and make business decisions about program directions and policy. The project goals confirm that the intent was to include functions and automation that deliver a complete workflow solution. The goals and requirements in Section 4 of the specification include the following:

- *"increased level of functionality to replace currently manual tasks"*

---

[1] AAMS – Functional Specification 2015, Section 4, page 27-28

- *"a CRM based management system"*
- *"on the functionality which eliminates paper and with a near real-time workflow"*
- *"a policy rules engine to simplify and de-risk the initial development and ongoing maintenance of business rules"*

The benefits list on page 29 emphasises reduced effort for providers:

- *"reduced sign-up data entry"*
- *"reduced.... claims processing effort"*

And other aspects of the requirements also support this deeper functionality:

- *"management of customer information"*
- *"online 'sign-up' of apprenticeships"*
- *"on the spot assessment of eligibility for incentives, claims and payments"*
- *"electronically submit claims online"*
- *"CRM software"*
- *"case management"*
- *"external online forms"*
- *"business automation (forms and workflow)*
- *"real time tracking of Training Contracts"*
- *"email alert and reminder capabilities"*
- *"CRM is the core business for AAMS users [providers], managing employers, apprentices, training contracts, incentives, milestones, claims, payments, debts and other key manageable entities".*

The CRM Platform Architecture diagram at Figure 1 in the AAMS Specification shows back-end integration to other applications but the scope of these other applications but this integration is not explored elsewhere.

AAMS Functional Map

Apprentice and Employer Management

The ability to capture and manage all information about Apprentices and Employers.

Training Contract & Consultation Management

The ability to capture and manage all aspects of Training Contracts (including all consultations and gateway activities) that are used within the Apprenticeships Program

Claim, Payment and Debt Management & Policy Rules Engine

The ability to capture and manage all aspects of claims, payments and debts to all parties involved including Apprentices, Employers and Network Providers. The ability of the Policy Rules Engine to automate eligibility and assessment

Reporting & Analytics

The ability to analyse and generate reports on all data within AAMS

Network Provider Management

The ability to capture and manage all aspects of Network Providers.

Departmental Management

The ability to capture and manage all aspects of Department Staff as well as maintain the functional Web Services and administrative processes of AAMS.

State Training Authority Management

The ability to capture and manage all aspects of State Training Authorities.

Legend

Electronic lodgement

The scope of AAMS functionality presents an end-to-end business process

Our current investigation confirms that, in absence of more detailed knowledge the most appropriate avenue to drive the desired efficiency was considered to be within the AAMS system. Using this approach, the solution appears to have sufficient scope and functionality to be a viable replacement for Job Ready. This was also the expectation of providers and that view was reinforced by comments made during site visits. Even a casual read of the AAMS Functional specifications would also support this view because the business functionality outlined, and the extensive range of use cases presented later in the

specification, demonstrates an intent to build an end-to-end system – not just a TYIMS replacement.

The Figure 2 diagram in the AAMS Functional Specification has no integration with Job Ready or a generic third party application for information or data exchange. This assumes that the process for administering apprenticeships under AAMS does not rely on another workflow product and can complete its tasks independently[2]. What has been defined in that diagram is a one-way data feed that provides results from AAMS into JobReady, which is equivalent to the information flow from TYIMS today.
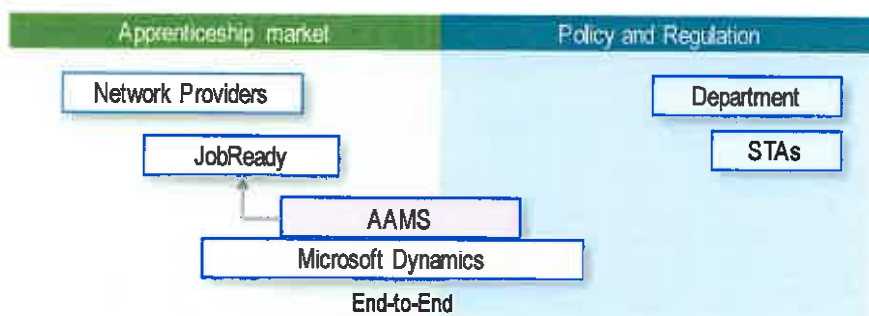
Broad concept of AAMS Functional Specification and its extension into the apprenticeship market[3]

Findings

- NEC have developed and delivered a comprehensive functional and technical specification for AAMS including a number of agreed changes to the functional scope based on DET requests. This represents the DET baseline scope.
- This scope does not appear to have been circulated outside the AAMS Project to Business Owners, key corporate governance stakeholders and customers.
- The proposed scope for AAMS presents a complete end-to-end workflow.
- The specification is required to describe the actual functional scope that is to be achieved. This understanding enables key stakeholders and customers to establish the

level of business change requirements, operational impact and benefit realisation expectations.

- The specification forms a basis for negotiated change.

impact

- The Functional Specification confirms that the intended scope of AAMS would deliver an end-to-end solution.
- The lack of a more thorough investigation of the functionality and processes of the Network Providers business systems meant that the misunderstanding about possible efficiency gains were not challenged earlier.
- **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.**

3.5 Perceptions and expectations of AAMS

What was promised: The expectation set for AAMS by the Department to its stakeholders.

This review found no conscious actions to exclude input from the network, but there was a sense of responsibility by the Department in determining the structure and content of both policy and how it would be effected on the ground. This may have been a factor in the nature of engagement with Network Providers in validating plans and approach rather than directly engaging then in working through their business model and processes.

Findings

- At a Network Provider engagement during a national planning and awareness visit the Department appears to have made open ended statements to the effect that "AAMS will replace the JobReady™" 3rd Party Application (TPA). Although not stated in any written communications, this public statement appears to have been retained by the Network Providers as the Departments intent.
- Poor ongoing engagement with the providers on the actual business functions to be delivered by AAMS, appears to have unintentionally maintained this view.

---

[2] AAMS – Functional Specification, p37

[3] Diagram concept taken from NAAA submission to the Department July 2017

Impact

- The Network Providers, faced with a prescribed fee reduction, may have forecast a reduction in the costs associated with retaining their TPAs. This misunderstanding of the intended scope of AAMS may have material financial impact on the Network Providers.

3.6 Scope of AAMS at go-live

What will be built and delivered at go-live: Delivery of what was defined and agreed within the AAMS Functional Specification plus approved Change Records.

NEC have stated that the AAMS application service will be delivered to the agreed specification by the commencement date for User Acceptance Testing, with the exception of:

- ◆ Disaster Recovery
- ◆ Application security certification
- ◆ Gateway security certification

This position appears to be the consensus view within the AAMS Implementation Team and NEC Leadership.

Successful completion of UAT with a well-contained residual defects list will deliver the functions set out in the AAMS Functional Specification. But the quality of outcome is greatly dependent on two factors:

- **Limitations that have been imposed by the choice of CRM product because actions and workflows are constrained by the inherent screen designs and constructs within the product; and**
- **design, data and process decisions that do not reflect how Network Providers work or they introduce complexities that may be counter-productive.**

For these reasons, confirmed in feedback from Network Providers, the current AAMS design and functionality will need be as effective as planned in delivering productivity improvements and may in fact be disruptive to the Department's objectives in administering apprenticeships.

Findings

- Achievement of the full specification for go-live is contingent on the management of any issues arising from UAT.
- It appears that the AAMS specification was developed without the involvement of the Network Providers.
- There has not been effective engagement amongst DET Business owners, the AAMS Project and Key external customers, on a common understanding of what business functions AAMS will deliver.

Impact

- AAMS functionality has significant errors and will have a negative impact on Network Providers operations at go-live, if proceeding in its current form.
- The current lack of a tested Business Continuity capability and an appropriately credentialed security certification for the application and key ICT infrastructure, represents an unquantified risk to approval of go-live on Nov 6, 2017.
- Significant expectation mismatch amongst stakeholders and customers will impact change readiness and sustain an elevated risk of reputational damage.

3.7 Third Part Application capabilities not covered by AAMS

During a recent testing and embedding exercise, the Network Provider community identified the following key business functions delivered by their 3rd Party Applications and not included in the proposed release of AAMS. A table outlining these functions is included in the appendix to this report.

3.8 Network Provider feedback

What is desired by customers: The customers preferred outcome.

The National Australian Apprenticeship Association collated its member feedback from the recent embedding and testing exercise into a report provided in final draft form to this review.

The NAAA report is broadly in agreement with many of the findings of this review and also highlights a number of significant shortcomings in AAMS that make its Network Provider workflows, cumbersome, inefficient and a resource impact to Provider throughput. Under their current agreement Network Providers must use the AAMS system.

The report has been provided to DET separately but some key language used includes: Critical failures of accuracy, poor functionality, hard to use, less efficient, not finished, known bugs, change management challenges and few improvements. These reflect seriously on an assessment of whether to proceed to implementation based on the software in this form.

The NAAA also highlighted both in their report and during interview, a strong willingness to collaborate with the DET and support any credible plan for success, including any further submissions for funding to complete the recommended integration enhancements.

The NAAA report also identifies a particular motivational context: *"It's fair to say that Network Providers were asked to bid to reduce their prices during the peak of inflated expectations and now find themselves in the trough of disillusionment after the embedding process"*.

This is largely referring to the engagement with DET but is at a time when there is a downward change in the national apprenticeship participation rate and also a TYIMS to AAMS provider fee reduction of 10%. This reduction makes it commercially essential for the Network Providers to make material productivity gains.

Findings

- Although AAMS has a number of additional features beyond the TYIMS system it replaces, including a Business Rules Engine for eligibility determination and some business process automation, much of this capability may already exist within the 3rd Party Applications and may not be aligned to the business workflows of the Network Providers.
- Providers are continiously pursuing ongoing reductions in their end-to-end cost of processing Apprenticeship workflows whilst looking for opportunities to significantly increase the number of apprenticeships successfully completed.

Impact

- Additional capabilities provided by AAMS to improve internal DET functions are unlikely to be of materially significant benefit to Network Providers as they duplicate existing mature Provider procesess and include many design and operational errors.
- Misalignment of AAMS operational value with customer requirements and expectations, together with an inefficient AAMS user experience, will likely lead to a continuation of the current operating model where Network Providers keep their business processes within their 3rd party applications, essentially bypassing the majority of AAMS functions.

3.9 Challenges to Success

The proposed AAMS implementation will need to address the following incomplete or unresolved issues for the implementation to be successful:

Readiness Challenges

- **Defects:** At the time of the review there were in excess of 500 AAMS defects still unresolved. Some were blocking a number of use cases, suggesting that once resolved these newly release use cases may identify further defects, as exp[ected during an initial testing process. However the defect resolution trajectiory is encouraging.
- **Readiness for transition** - elements missing, not confirmed or in doubt regarding transition preparation
    - Clear scope of impact for DET internal business processes.
    - Clear scope of impact for Network Providers business processes.
    - Agreed and planned process remediation.
    - Handling of in-flight workflows at time of transition, change freeze window.
- **Residual risk** determination and acceptance
    - Understanding the remaining risk once the proposed architecture is fully implemented, tested and accepted in advance of go-live.
    - Adopting Government and Industry best practice. Including NP endorsement of the go-live transition plan.

- **AAMS Delivery Acceptance Plan**. Confirming that the scope commissioned by DET has been built, is fit for purpose and free from defect. This is above an beyond the UAT Plan and must cover all aspects of delivery under the contract with NEC.

- **Security** certification of ICT infrastructure, application and operational processes. Including ASD certification of hosted infrastructure, application and gateway.

- **Disaster Recovery**
    - DR Capability and business continuity preparation, implementation and testing of interfaces to external systems and all other environment readiness elements.
    - Business Continuity plan for AAMS aligned to DET obligations through commercial agreements with Network Providers. The Business Continuity plan should be clear about how this process has been tested and signed off.
    - The business Continuity strategy should be cognisant of the impact on employers and the Network Providers of any extended outage. As the providers operate on a fee-for-service basis any extended outage of AAMS may have a commercial impact for Network Providers in relation to their contracted service delivery responsibilities.

- **Data Migration** plan should ensure the one-way transition of the point of business record from TYIMS to AAMS with a 100% fault evident process. i.e. no undetectable data corruption in transit. All current and historical data should be migrated in accordance with the relevant Australian Government Records Management obligations.
    - **Data Hygiene**: Where at all possible duplicate and evidently inaccurate data should be purged prior to migration or dealt with in an agreed manner. Audit trails to establish data accuracy may be problematic post-migration.
    - **Definition of acceptance** including test plan. An agreed position on what are the criteria for defining acceptance and who formally confirms acceptance based on what evidence.
    - **Nomination of the stakeholder with authority** to declare successful relocation of Point-of-Business Record (PBR).
    - **Roll-back or fail-forward** criteria, thresholds and plan. (if it is understood that TYIMS and AAMS cannot parallel run, then a retrograde migration may not be possible)

Transition Management

- Organisational Change
    - Establish change baseline: What will providers start, stop or change in their methods and obligations to with DET?
    - Training of DET users nationally – a significant undertaking across a large user base with many providers.
    - Training support for Network Providers: NPs will do their own training and need support at the boundary of their business and DET.
    - DR and business continuity preparation, implementation and testing of interfaces to external systems and all other environment readiness elements.

The acceptance of the UAT outcomes - and management of the gaps that may emerge

- Definition of Acceptance: Who approves the User Acceptance Testing outcome as sufficiently fit for go-live?
    - Acceptable defects: Definition of non-performance threshold which would prevent AAMS go-live.
    - What is the plan and criteria for final acceptance?

Mobility

- Issues with Intellidox and InfinityGo functionality that is important for WA and NT users. How will this be resolved?

Gateway accreditation

- Resolve either through acceptance of the risks with the proposed NEC gateway or seeking a different outcome. This decision alone could be the most importasnt determinant of whether the AAMS system can go live in November.

4   Recommendations

The Department is encouraged to consider the long term benefits of **Option 3** below:

Option 1 – Go-live as planned on 6 November 2017

Explanation	Possible Impacts
A lot has to go right in order to go live on 6 November 2017. Whilst the defect repair trajectory is in the right direction, some functionality is yet to be seen and there is limited time to correct issues that emerge. There is a realistic concern about the number and impact of residual defects. And there are questions about preparations such as training, data migration, security, infrastructure et.al. that have not been explored. Network Provider feedback points to: ♦ the rules engine making errors in eligibility; ♦ Training Contract Assessment workflows exceeding the 10 day KPI; ♦ inability to undertake manual assessments; ♦ employers needing to complete three claim forms where one is needed now. Some of these may have their origin in design decisions or constraints within the product. Each will be damaging, but system problems that create adverse impacts for employers will pose the greater risk that there would be a public airing of dissatisfaction with AAMS.	♦ Potential reputational damage if the additional work imposed on employers and providers by the current design is viewed as counter-productive. ♦ Negative impact on Network Providers efficiency because of the requirement to service two workflows. ♦ Erosion of the business case and a threat to promised cost savings if the efficiencies aren't realised. ♦ Unknown impact from the remediation of any defects found during the course of UAT.

Option 2 – Allow 2-way information flow with AAMS

| Explanation	Possible Impacts
This is effectively the same as Option 1, but with a process to implement a bi-directional data exchange with the Provider's systems using an API. The Department can establish the interface and specify the data elements that are required. It will not, by this action alone, resolve the duplication of processes or design issues, but it would provide an avenue for data exchange that would enable the Department to build its information base for program monitoring and policy formulation. Some functions within AAAMS may be modified if the ingest of data will be more efficient that completing a process in AAMS. Providers will also be able to feed information into their systems to facilitate their processes.	♦ Continued duplication of effort and the consequential negative impact on Network Providers efficiency because of the requirement to service two workflows. ♦ Erosion of the business case and threat to promised cost savings if the efficiencies aren't realised. ♦ Unknown impact from the remediation of any defects found during the course of UAT. ♦ Additional development cost for developing an API for AAMS to accept external completed work products.

Option 3 – *Adjust AAMS design to remove duplication and accept NP data*

Explanation	Possible Impacts
Build a remediation plan that is focused on creating a solution where the Department's objectives are met whilst supporting the value-add that the Providers deliver. The extent to which the existing workflows and processes in AAMS are preserved or allowed to be conducted in the Provider's systems should be defined through a collaborative design process. The elements of AAMS that support the Department's information gathering, program monitoring and payment processing and policy support should be preserved. The solution should aim to deliver the efficiency goals of AAMS whilst supporting the Providers in carrying out their original outsourced business process responsibilities.	♦ Delay to the implementation of AAMS, using the time allocated for UAT to assess the best way forward.
	♦ Collaboration with Network Providers on interactive modelling of AAMS in the context of the NP's existing tools and business processes. Aim to harvest efficiency from exiting Network Provider investments. Configure AAMS to accept completed work products from NPs.
Several considerations will be needed in these adjusted plans:	♦ A revised plan that deliver the optimum balance between the functionality of AAMS and the Provider's systems.
♦ A delay to the project is likely to be at least six months but the actual duration will be determined by the scope of work agreed through the collaborate design process in September.	♦ Having the Network Providers fully engaged and supporting the common goal.
	♦ Limits negative impact on Network Providers efficiency and any possible friction from the 10% fee cut.
♦ How much of the workflow and process steps in the respective systems will be retained must be decided by the joint process, but it should be focused on efficiency and the broad objectives that AAMS has set.	♦ A yet-to-be-determined cost of refactoring AAMS to align its workflows and accept external completed work products.
♦ The commercial impact on the existing contract with NEC must be considered, but the Department will need to be satisfied that additional project work is contained to only the future changes.	♦ Some redesign to address duplicate elements in AAMS.
	♦ A continued DET/NEC burn-rate for project costs to fund the proposed work on AAMS.
	♦ This approach is the most likely to be endorsed by Network Providers.

Concept view of Option 3 – working in collaboration with NP systems
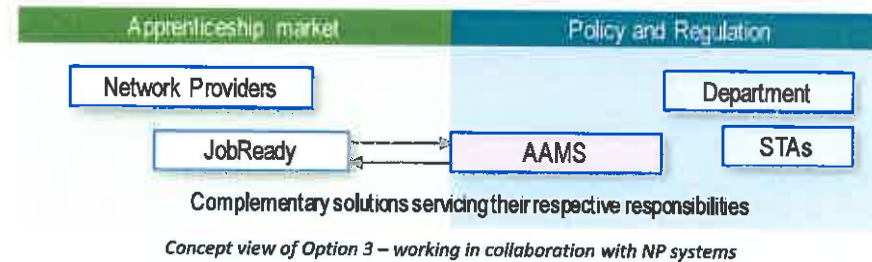
4.1 Action Plan for Success

The following timeline incorporates a recommended change in the scope and goals for the User Acceptance Testing exercise. Key to this is the introduction of collaborative co-design to define the enhancements that should facilitate the ability for AAMS NP workflows to become optional with the new capability to accept externally provided completed work products at the appropriate juncture within AAMS.

Repurpose UAT window

- Convert planned UAT to AAMS Delivery Acceptance and Opportunity search
- Validate the state of completion for AAMS so far

Collaborative Review

- Expose full scope of AAMS to NPs and DET SMEs
- Identify residual defects and proposed actions
- Identify opportunities and requirements for a complementary solution design
- Agree on specifications for receiving externally generated completed work products from NPs

Enhance / Change / Test Cycle

- Implement change list and undertake development
- Prepare testing plans
- Continuous NP engagement

Commercial Negotiation

- Develop proposal to use operational funding to design and implement 3rd party integration enhancements.
- Agree the extent of AAMS workflows to be used and how this will be framed commercially.
- Settle and commercial aspects of accepting completed external work products from Network Providers.
- AAMS sustainment planning and costing
- Participants: DET, NEC and Network Providers.

Integration Plan

- Lock down list of work products and data to be externally supplied and how the systems will interact.
- Specify bi-direction API requirements.
- Determine change plan for AAMS.

Agreed use case testing

- Go-Live assurance
- Go-live readiness acceptance
- Full scale transition planning

Aug 1, 2017

Go-live Gate

Conceptual view of activities and sequencing to execute Option 3

5   Attachment A – Functionality Gaps

	Business Function	Current TPA Function	AAMS Scope Gap
1	Auto generate a sign-up task	Ability to automatically create and assign a Sign-up Task; and capture details about the Sign-up Meeting. The standard apprenticeships business process is: Lead (Opportunity) -> Sign-up Task/Meeting -> Training Contract.	AAMS has Leads and Training Contracts but it is missing Sign-up Tasks/Meetings. Because of this, NPs must use TPA for the full business process lifecycle.
2	Eligibility Advice Letters	Ability to automatically generate and send Eligibility Advice Letters to the employer and apprentice after the Training Contract is created. Once the Training Contract is created in TPA, a business rules engine automatically calculates eligibility; formats this into a user-friendly email template; and automatically sends the email to the employer and apprentice.	Training Contracts can be created in AAMS and although the business rules engine calculates eligibility, there is no automated feature to generate and send Eligibility Advice Letters.
3	Comment templates and bulk creation	Ability to create templates for Comments and to bulk create many Comments based on these pre-defined templates. Many different Comments are stored against various entities (Training Contracts, apprentices, employers, etc.). In TPA, NPs can set up pre-defined templates for a Comment. They can then bulk add Comments to large numbers of records automatically, based on a template.	Comments can be added against entities in AAMS, however there is no feature to bulk create many Comments; nor specify templates for Comments.
4	Task templates and bulk creation	Ability to create templates for Tasks and to bulk create many Tasks based on these pre-defined templates. Many different Tasks are created and assigned to NP staff. In TPA, NPs can set up pre-defined templates for a Task. They can then bulk create and assign large numbers of Tasks to staff members.	Tasks can be created in AAMS, however there is no feature to bulk create many Tasks; nor specify templates for Tasks.
5	Workflow Roles	There are a number of standard NP staff roles that look after an employer & apprentice undertaking an apprenticeship. This includes roles such as Field Officer, Mentor and Account Manager. In TPA, NPs can automatically assign particular staff members to these roles so that entities such as Training Contract, apprentices and employers are automatically assigned to staff members in these various roles.	In AAMS, records can be assigned to staff members. But this is a generic assigning to a particular person. It does not capture the specific roles such as Field Officer or Mentor to assign work.
6	Algorithmic Workflow Role Assignment	Ability to automatically assign records to particular roles based on algorithms. For example, as soon as a Training Contract is created in TPA, the system looks at the Workplace Postcode (physical address) and automatically assigns the Training Contract record to a particular NP staff member, based on the postcodes for which that person is responsible. A dashboard notification and email are also automatically sent to the NP staff member alerting them.	AAMS has no automatic assigning of records. It also has no notifications that can be sent to users alerting them of work assigned to them.
7	Scheduled Automating Messaging	NPs are required to make regular contact with the employer and apprentice throughout the apprenticeship. In TPA, NPs have set up a schedule of automated SMSs which are sent to the employer and apprentice. NPs can customise the schedule of when SMSs are sent and customise the message of each SMS. These happen automatically with no user involvement.	AAMS does not have this function.
8	Interactive Dialogue	Ability to receive responses to email and SMS communications. In TPA, employers and apprentices can respond to emails and SMSs. These communications return to the NP to continue the conversation.	All emails and SMSs sent from AAMS are 'no-reply', meaning the NP cannot have a two-way conversation with employers and apprentices.
9	Business Workflow Status	Custom statuses for Training Contracts and claims. In TPA, NPs can customise the statuses and status flows of TCs and Claims to track them	In AAMS, only Commonwealth statuses are stored.

	Business Function	Current TPA Function	AAMS Scope Gap
		throughout their lifecycles and to manage them within their internal business processes.	Statuses needed and used by NPs are not present.
10	Tagging	Custom tags against Employer and Apprentice. In TPA, NPs can customise and add tags to employers and apprentices. They can also search and report on these tags.	AAMS does not have this function.
11	Confidential Comments	Ability to store confidential Comments against employers and apprentices, which are highly sensitive and can only be viewed by explicitly specified people.	AAMS does not have this function.
12	State Training Authority Compliance	TPA caters for State Training Authority (STA) requirements. Each STA (8 different states and territories) have their own specific jurisdictional requirements. This includes numerous forms that need to be filled out and signed by the employer and apprentice when entering into a Training Contract. TPA automatically pre-fills information into these STA forms and prints them out for NPs.	AAMS does not cater for STA forms.

6 Attachment B – List of materials reviewed

#	Document	Description	Version / Date
1	AAMS embedding Process, Network Provider Feedback	Feedback prepared by the National Australian Apprenticeship Association	26-July-2017
2	AAMS Scope	Detailed AAMS application scope provided by NEC	Dated May-2017
3	Projects Assured Review (x4)	The most recent (4 out of 5) external project assurance reviews	Latest April-2017
4	Original Request for Tender	RFT for application development	October-2014
5	Benefits Realisation Plan		17-June-2016
6	Project Management Plan	NEC Project plan	07-September-2015
7	2nd Pass Business Case	New Project Proposal funding request	22-April-2013
8	NEC contract + Deed of variation		V2.4, 28-May-2015
9	Schedule 2 – Statement of Word	SOW schedule from NEC contract	
10	Operational Acceptance Test Plan	Early draft of test plan	22-January-2016
11	Stakeholder Management Plan		11-November-2016
12	Project Schedule		Current
13	Program Sponsorship Group Minutes	Various minutes from PSG	23-May-2017
14	Program Sponsorship Group papers	Submissions and reports to PSG	26-June-2017
15	Skills and Governance Board papers		26-July-2017
16	Milestone Summary	Defect list and test case resolutions	12-July-2017

Tetra Associates

Tetra Associates

Business Outcomes | Integrity | Value

Tetra is a technology consulting company specialising in providing strategic advice on business transformational change. Tetra's proven structured approach and extensive industry expertise delivers real value in managing change in complex business and technical environments.

Tetra Associates

Capability Gap Report

Australian Apprenticeships Management System

Version 1 – 1 November 2017

Executive Summary

The purpose of this report is to identify and highlight the functionality and capability gaps that exist between systems currently used by Network Providers (NP), National Office (NO), State Training Authorities (STAs) and State Contract Managers (SCMs) and AAMS.

This report is structured in two parts

- **Part A – Identification and review of capability gaps in AAMS:** This part assesses the capability gap between current systems and AAMS. This part outlines what functionality will need to be developed to deliver a solution that will meet the needs of its users.

- **Part B - Alternative next step option to deliver an end-to-end solution:** This part assesses the viability of using JobReady to deliver the solution to meet Departmental and user requirements.

The **Part A** key findings contained within this report include:

1. To close the gap between current systems and AAMS, 70 requirements will need to be designed, built and tested. This equates to ~1440 days of development effort to address.

2. To close the gap, it will cost ~$6.18 m. This is based on a rough order of magnitude costing estimate. This includes existing change requests pending approval $1.54M, new change request assessed and validated $2.76M and DET sustainment costs $1.87M. This price does not include 11 change requests that require further clarification and assessment before they can be costed.

3. Initial estimates indicate the AAMS system including the revised scope of works can go live in Q4 2018. Further assessment is still required to understand change request interdependencies, system impacts, resourcing requirements and timings for decisions that will affect the schedule.

4. The technical assessment conducted by NEC identified only two requirements that cannot be implemented and one that could be partially implemented. This equates to 95% of assessed gaps being closed. Further assessment by NEC and the Department is still required on 11 requirements that have the potential to affect the viability of the solution.

5. The modification to the look and feel of the user-interface can only be partially implemented due to the limitation of the CRM product. This requirement was listed as very high and of critical importance by the NPs. This may affect user acceptance of the solution.

6. The primary areas of concern raised by NPs included; bulk action functionalities and workflow steps missing in AAMS.

7. AAMS was determined to be largely adequate and fit-for-purpose by SCMs and STAs. They identified no critical issues that would prevent AAMS from being implemented in its current form for their organisations.

The **Part B** key findings contained within this report include:

1. It is technically viable to integrate AAMS and JobReady, with no critical technical issues identified that would impact the implementation of this solution.

2. To integrate AAMS with JobReady three options are available that include:

    a. **Option 1** - AAMS retains the integration and connectivity to all state and federal government services, and SCM capability while Network Providers will perform all functions in JobReady/

    b. **Option 2** - AAMS retains the integration and connectivity to all state and federal government services, while Network Providers and SCM will perform all functions in JobReady

    c. **Option 3** - AAMS is discontinued and all Network Provider, SCM and National Office functions would be undertaken in JobReady.

3. Under Option 1 and 2, the NEC contract would not be discontinued. The contract would be varied to support the reduced support and maintenance scope.

4. Initial estimates indicate that JobReady can go live in Q4 2018 for Option 1. This assumes a contract can be executed in March 18 and includes 6 months for development.

Part A –Identification and review of capability gaps in AAMS

Part A - Contents

Tables

Figures

1 Purpose

The purpose of this report is to identify and highlight the functionality and capability gaps that exist between systems currently used by NPs, STAs and SCMs and AAMS.

The report addresses;

- How big the gap is between AAMS and current systems
- What inefficiencies will AAMS introduce if the gap is not closed
- How much will it cost to close the gap
- When the gap can be closed
- Will closing the gap produce a system that is fit for purpose

2 Why does a gap exist between current systems and user expectations?

NEC and the Department are building the AAMS solution based on requirements and specifications developed in 2014. The 2014 requirements are based on specifications developed and validated by the Department. Users of the system had limited involvement in the development and review of the requirements. Since 2014, 3rd party systems (JobReady) available to the apprenticeship sector have matured and have kept pace with the evolving requirements of the apprenticeship community. This has resulted in a functionality and capability gap between current systems and AAMS.

The user's expectations on AAMS are that it will deliver an end-to-end management system that minimises their use of JobReady and maximises the efficiency of their existing processes. This expectation was gained through the 2014 AASN RFT (Request for Tender), where NPs were required to quote on an AAMS and a TYIMS price. NPs would then revert to the AAMS pricing structure when it was implemented and TYIMS was decommissioned.

The description provided within the tender outlined that AAMS would be an end-to-end management system. Additionally, the AASN RFT went to market prior to the AAMS RFT going to market. It was identified during the embedding exercise in 2017 by the NP community that the Department was building a solution to replace TYIMS and the capability being built would not provide the expected and required end-to-end system.

3 How were the gaps identified?

In October 2017, the AAMS Project Team conducted a series of workshops with subject matter experts from across the NPs, NO, STAs, SCMs to identify gaps in capability between currently used systems (JobReady/TYIMS) and AAMS. The workshop structure, scope and objectives are outlined in Appendix A.

4 How is a gap defined?

A gap in capability is defined as either:

- A function that exists in JobReady/TYIMS but does not exist in AAMS; or
- A function that exists in both JobReady/TYIMS and AAMS, but the function is markedly less efficient or effective to use in AAMS compared to JobReady/TYIMS.

5 What are the AAMS key issues identified by users?

As part of the workshops, each stakeholder group were asked what their primary concerns were should AAMS be implemented in its current form. The key concerns and issues raised by each stakeholder group included;

5.1 Network Providers

Issue 1 - Bulk action functionalities not available in AAMS that will result in significant inefficiencies being introduced to business processes. These are a series of functions available in JobReady which Network Providers currently use to quickly process large volumes of data. They include:

- Bulk creation of Comments
- Bulk creation of Tasks
- Bulk creation of Appointments
- Bulk creation of Emails/SMSs
- Bulk assignment of records to officers
- Bulk editing of records
- Bulk pre-population of STA forms

These functions are used frequently by NPs and enable hundreds of records to be processed in a single action. Without these functions in AAMS, NPs would be required to process/update individual records one at a time, significantly increasing time and resources required to process data.

Issue 2 - Workflow steps are missing in AAMS that will result in NPs being unable to sufficiently manage all required business activities. Within NP business activities, there are several workflow steps which are conducted within JobReady. These include workflows for:

- Leads
- Gateway
- Training Contracts (including pre-population of STA forms)
- Eligibility assessment
- Claims.

These steps are critical in allowing NPs to comprehensively manage apprenticeships activity throughout the complete apprenticeships lifecycle.

*Issue 3 - **Usability of the user-interface*** was raised as a primary area of concern for activities including navigation, finding desired data, entering data and updating data. The user interface experience was quoted by NPs as being significantly slower in AAMS when compared to performing the same actions in JobReady/TYIMS. The user interface was identified as being a key functional issue that has the potential to introduce significant inefficiencies.

*Issue 4 - **Version control and audit history of records*** are not stored or presented in a manner easily available to users. The ability to easily analyse and review historical data in a record at any given point in time was identified as being critical to NP operations. This issue cannot be resolved due to the way AAMS has been designed.

5.2   State Training Authorities

No critical issues were identified. While several gaps have been identified for State Training Authorities, they are minor in severity. No major gaps have been identified and the functionality available to State Training Authorities through AAMS is determined to be largely adequate and fit-for-purpose.

5.3   State Contract Managers

No critical issues were identified. While several gaps have been identified for SCMs, they are minor in severity. No major gaps have been identified and the functionality available to SCM through AAMS is determined to be largely adequate and fit-for-purpose.

The SCM agreed with the findings and prioritisation of the issues, risks and requirements identified by the NPs.

6 How big is the gap between AAMS and current systems?

To close the gap between current systems and AAMS, 70 requirements will need to be designed, built and tested. This equates to ~1440 days of development effort to address.

Table 1 below provides a summary level understanding on the gap that exists between JobReady/TYIMS and AAMS. These requirements were reviewed and assessed as part of the workshops.

Category	SCM/NO	STA	NP	CRs assessed
Requirements to progress				
Very High	10		9	10
High	39	8	27	39
Low	9	1	6	9
Medium	12	2	8	12
Total	70	11	50	70
Requirements not progressing / further assessment require				
Implemented in AAMS	6	2	5	6
Not to proceed / deleted	5		5	5
On hold pending DET discussion	3	1	3	3
Total	14	3	13	14
Grand Total	**84**	**14**	**63**	**84**

Table 1 Requirements prioritisation – Workshop outcomes

*Individual requirements are applicable to one or more stakeholder groups.
SCM reviewed all change requests and agreed with the findings by the NPs and STA.

Requirements prioritisation rating key

- **Very High** - Required before go-live
- **High** - Required before go live or within 3 months after go-live
- **Medium** - Required within 6 months after go-live
- **Low** – Required within 12 months after go live

7 What inefficiencies will AAMS introduce if the gap is not closed?

Table 2 below is a sampling of selected change request items that have quantifiable data to measure the inefficiencies that will be introduced should the change request items not be implemented in AAMS. The quantifiable data is sourced from TIYMS and is based on actuals from FY16-17. For the purpose of this analysis it is assumed the volumes will remain relative when AAMS is introduced.

CR No.	CR Description	Impact	Inefficiencies introduced
63	Add functionality enabling Network Provider Users to be allocated to geographical regions (postcodes) for the purpose of work task allocation.	Without the automation of this function, Network Providers will be required to manually assign a record to an identified officer, one record at a time.	193,335 individual records will need to be manually assigned.
115	Remove the application forms and incorporate the required user-input fields from these forms into their equivalent claim forms for the following incentives: - Declared Drought Area Commencement Incentive. - Mature Aged Worker Commencement Incentive. - Australian School-based Apprenticeship Commencement Incentive. - Australian School-based Apprenticeship Retention Incentive.	These four application forms do not currently exist. Introducing these new forms in AAMS will require Network Providers, Employers and Apprentices to process more forms in order to receive claim payments.	16,330 forms will need to be manually processed.
149	Add bulk functionality for CR 119 (change of employer / change of ownership).	Without the automation of this function, Network Providers will be required to manually process each Training Contract, one record at a time.	9,721 training contracts will need to be processed individually
150	Functionality to support automatic sending of eligibility advice letters.	Without the automation of this function, Network Providers will be required to manually send out eligibility advice letters for each Training Contract, one record at a time.	193,335 - advice letters will need to be processed individually.
151	Functionality to support setting up templates for Tasks and subsequent bulk creation of Tasks based on the templates.	Without the automation of this function, Network Providers will be required to manually create and assign Tasks, one Task at a time.	225,060 tasks would need to be created and assigned
152	Allow Network Providers to create, edit and manage templates for Comments. Network Providers will use this to easily and efficiently create large numbers of Comments against particular identified records.	Without the automation of this function, Network Providers will be required to manually create Comments against identified records, one Comment at a time.	525,140 tasks would need to be created and assigned

Table 2 Identified inefficiencies

8 Can the gap be closed?

The technical assessment conducted by NEC identified that all requirements with the exception of two can be implemented and one that can be partially implemented. This equates to 95% of assessed gaps being closed. Further assessment is still required on 11 change request items.

The requirement that can be partially implemented is the modification to the usability of the user-interface. This requirement was listed as very high and of critical importance by the NPs.

Technical assessment summary outcome

Category	Volume
Further clarification on requirements needed	11
Can be partially implemented	1
Technically not feasible to implement	2
Can be implemented in full	56
Total Requirements	70

Table 3 Outcomes of technical assessment

9   How much will it cost to close the gap?

NEC, in partnership with the Department, conducted a ROM (Rough Order of Magnitude) cost assessment to determine the costs to deliver the identified requirements. The cost assessment also includes existing change requests as well as the DET sustainment costs to deliver the solution.

As the gap analysis progresses, NEC and the Department will conduct a detailed cost assessment on the requirements. The detailed cost assessment will then be used as part of the contract variation process. It is expected the cost variance will not exceed plus and/or minus 20% of the ROM figures.

Category	Cost
Existing Change Requests	
Change request 4 including gateway	1.54M
New Change Requests	
small	0.08M
medium	0.92M
large	0.61M
significant	1.15M
DET Costs	
AAMS Branch Sustainment	1.87M

Grand Total	6.18M

Table 4 Cost assessment

Costing Notes:

- *11 Change Requests require further clarification and will still need to be assessed and priced. This could potentially result in an additional cost of ~1M.*
- *DET costs include sustaining the AAMS Branch in its current form from November 2017 to September 2018. This is based on Branch costs being ~150k per month over 11 months. Additional resources may be required.*
- *NEC costs include analysis/ design, development/ rework and test writing/execution for each requirement. A 35% overhead charge has been included in NEC pricing. This is to cover project management, administrative, risk and contingency related costs.*

NEC Pricing prioritisation rating key

- **Small Effort** -Up to 5 business days - $7,253 per change request
- **Medium Effort** -Up to 20 business days -$28,431 per change request
- **Large Effort** -Up to 40 business days- $56,862 per change request
- **Significant Effort** - Up to 60 business days - $85,292 per change request

10 When can the gap be closed?

The Department, in collaboration with NEC, has developed an initial roadmap that incorporates the revised scope of work. The roadmap outlines the phased approach that will be used to implement the revised requirements.

Further assessment is still required to understand change request interdependencies, system impacts, resourcing requirements and timings for decisions that will affect the schedule. This schedule is to be used as an indication of the go live date until a detailed assessment is completed.
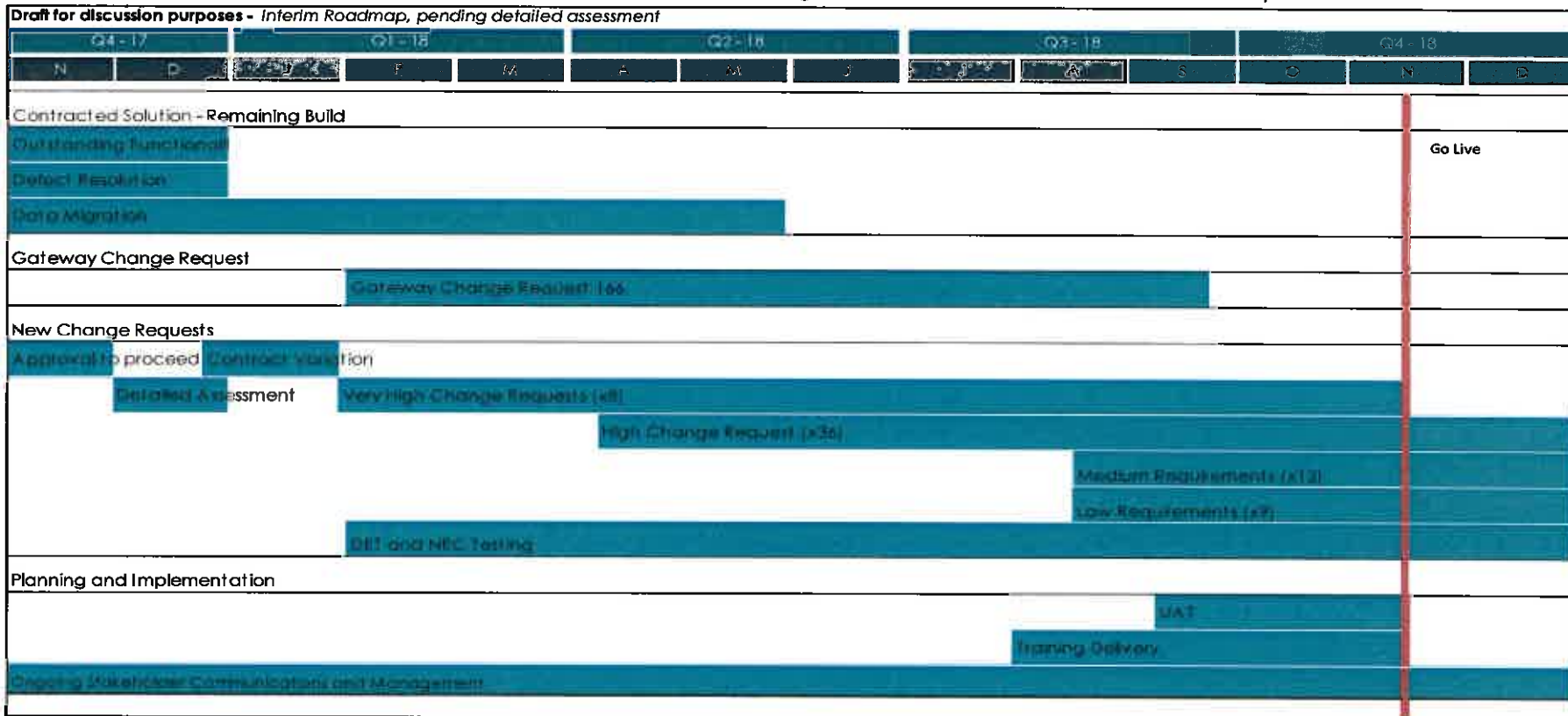

Figure 1 - Roadmap to deliver revised scope of work

11 Are there any timing Considerations for a decision?

NEC is targeting to complete their contractual scope of work in December 2017. If a decision is delayed beyond this point and NEC completes their contractual obligations, they will transition to an operational support workforce. The NEC project team will then be disbanded resulting in a loss in capability, skills and knowledge on the AAMS platform. Should a decision be made to continue with NEC and bridge the gap in capability post December, this will significantly impact the schedule. NEC will then be required to develop new capability and knowledge on AAMS to deliver the new change requests.

12 Will closing the gap produce a system that is fit for purpose?

As per NEC's analysis, the majority of change request items can be implemented in AAMS, with two change request items not being technically possible to implement and one that can be partially implemented. These three items are:

CR	Description	Status
132	Ability to add custom Tags to the Employer and Apprentice entities.	Not technically possible to implement
158	Modify the data structure of Employers from Employer -> Workplaces; to Employer -> Businesses -> Workplaces.	
170	Modify the user-interface of CRM to improve usability.	Partially possible to implement

Each of these items will lead to inefficiencies if not implemented, however the item of most concern to end-users, particularly Network Providers, is item 170. Due to the high volume of records processed daily and the time-consuming nature of data entry performed by Network Providers, the user-interface experience of AAMS is subpar compared to the user-interface of JobReady and TYIMS. Consequently, it will take more time for end-users to navigate, find records, create records and edit records in AAMS.

The technical reason why item 170 cannot be implemented is due to the Commercial-Off-The-Shelf (COTS) nature of AAMS. AAMS uses the Microsoft Dynamics CRM product, which has limitations on how much it can be customised to meet end-users' requirements. JobReady and TYIMS are not COTS products but are instead 'bespoke' products, meaning there is full flexibility in how much JobReady and TYIMS can be customised.

With the user-interface being such a critical component of the system and directly affecting how efficiently end-users can utilise the system, the inability to implement item 170 means that even if all other change request items are successfully implemented, AAMS will still be less efficient than JobReady and TYIMS.

13 Additional considerations to closing the gap in AAMS

The majority of change request items are not for the Commonwealth's needs. In other words, they are not directly required to administer the Australian Apprenticeships Incentives Programme (AAIP) and the Australian Apprenticeship Support Network (AASN). Rather, the majority of change request items are to cater for the internal business practices of Network Providers. Due to the nature of the current AASN round, there are 11 different Network Providers; which are private organisations competing with one another for market share. In future AASN rounds, the number of Network Providers may likely change and the companies selected as Network Providers may also likely change.

If these change request items are implemented in AAMS, the Commonwealth will be directly supporting the internal business practices of private companies, which may change over time. It must be noted however, that the Commonwealth is already indirectly funding the internal business practices of Network Providers, through costs paid by Network Providers to JobReady. JobReady licenses their product to Network Providers who use it to cater for their internal business practices.

Consideration should be given to whether it is appropriate and desirable for the Commonwealth to directly support the internal business practices of Network Providers, which may likely change over time especially across AASN rounds.

14 Next Steps

14.1 What are the next steps if the Department continue with NEC?

1. Seek endorsement from the user community that the proposed changes to AAMS will be acceptable and utilised as intended
2. Request a firm fixed price from NEC based on the estimates already provided
3. Prepare a budget submission for the enhanced AAMS project development and implementation
4. Prepare a contract variation between the department and NEC addressing the additional functionality, milestones, deliverables and payment structure
5. Develop a 'back from red' plan in partnership with NEC and key stakeholders that lists the strategies and methods the Project will use to get the project back on track and to remain on track.
6. Revisit and refine, if required, existing strategies covering:
   a. Change Management
   b. Testing
   c. Communications
   d. Stakeholder Engagement
   e. User Documentation
   f. Training
   g. User Acceptance Testing
   h. Data Migration
   i. Implementation
   j. Support
7. Communicate approach and timeframes to all stakeholders

15 Appendix A – Methodology used to identify and assess the gap

The Department met with each stakeholder separately to explain the process and purpose of the gap analysis. The analysis was conducted with a series of workshops in collaboration with subject matter experts from across the NPs, STAs and SCMs to identify gaps in capability between currently used systems (JobReady/TYIMS) and AAMS.

Three workshop sessions were conducted with NP, SCM/NO and one with the STAs. The workshop sessions were individually tailored to each stakeholder group and conducted separately. The sessions included an overview of the system, a change request review and a capability gap discussion.

1. **Demonstration of system functionality** - This workshop provided a tailored two-hour demonstration of AAMS functions that were specific to each stakeholder group. This provided the foundations to enable critical discussion on the capability gaps.

2. **Change Requests review** - The already known change requests compiled by the AAMS Team over the previous two years (including the issues raised at the embedding exercise) were reviewed. The reviewed change requests were specific to each stakeholder group. This enabled each change request to be prioritised and assessed.

3. **Feedback and capability gap discussion** - The purpose of this workshop was to determine where additional capability gaps exist between current system functionality provided by JobReady/TYIMS and AAMS (the requirements not yet known to the AAMS Team).

The workshops have enabled the Department to complete a capability gap assessment that clearly identifies the mandatory requirements that will enable employers, apprentices and network providers to maintain the current level of service that is provided through the existing systems.

16 Attachments

16.1 Change Request Register

This attachment provides an overview of each change request, its priority rating and assessment outcomes.

AAMS Changes
Register - OWG - Mː

Part B – Alternative next step option to deliver an end-to-end solution

Contents

1 Purpose

The purpose of Part B of this report is to assess the viability and options of integrating AAMS and JobReady. The report addresses:

- If it technically possible to integrate the systems;
- What gaps exist between AAMS/TYIMS and JobReady;
- The integration options available;
- The total costs to integrate the systems; and
- How long it will take to integrate the systems

17 Is it technically viable to integrate JobReady and AAMS?

Initial assessments conducted in partnership between JobReady and the Department indicate that it is technically viable to integrate AAMS and JobReady, with no critical technical issues identified.

Development work will be required to be undertaken in both JobReady and AAMS in order to integrate the two systems. This work can broadly be broken into two categories:

A. **Establish web service connection between JobReady and AAMS.**

   NEC is required to redesign AAMS to be able to send data to, and accept data from, JobReady. JobReady is then required to build a web service to connect to AAMS. This web service connection must be established under all of the three options outlined in this paper.

B. **Build functionality in JobReady to take over functions in AAMS.**

   JobReady is required to build new functionality as well as modify existing functionality within JobReady to cater for functions that will no longer be performed in AAMS. The following tables outline all of the functions that will be performed in JobReady; whether the function already exists in JobReady; and whether JobReady will be required to undertake any development.

18 What integration options are available?

To integrate AAMS with JobReady three options are under consideration. These include;

Option	Description	JobReady Functionality			AAMS Functionality			
Option 1 – Partial Integration	• AAMS retains the integration and connectivity to all state and federal government services including SAP, ATO, DHS and STAs. • SCM capability will be retained in AAMS. • Network Providers will perform all functions in JR.	Leads	Gateway	Training Contract	Debts	Special Claims		Training Contracts transfers
		Fee for service	Claims	Payments	Reporting			
		Reporting	CRM		SAP	ATO	STA	DHS
Option 2 Partial Integration	• AAMS retains the integration and connectivity to all state and federal government services including SAP, ATO, DHS and STAs. • SCM required capability to be provided by JobReady. • Network Providers will perform all functions in JR.	Leads Fee for service Reporting	Gateway Claims CRM	Training Contract Payments	Reporting			
		Debts	Special Claims	Training Contracts transfers	SAP	ATO	STA	DHS
Option 3 Full Integration	• AAMS is discontinued and all Network Provider, SCM and National Office functions would be undertaken in JobReady.	Leads Fee for service Reporting	Gateway Claims CRM	Training Contract Payments				
		Debts	Special Claims	Training Contracts transfers				
		SAP	ATO	STA	DHS			

	SCM Capability
	integration and connectivity to all state and federal government services

19 How much effort is required to make the necessary change to JobReady

The following table outlines the level of effort required for JobReady to integrate their application with AAMS. This table does not include NEC effort to redesign AAMS.

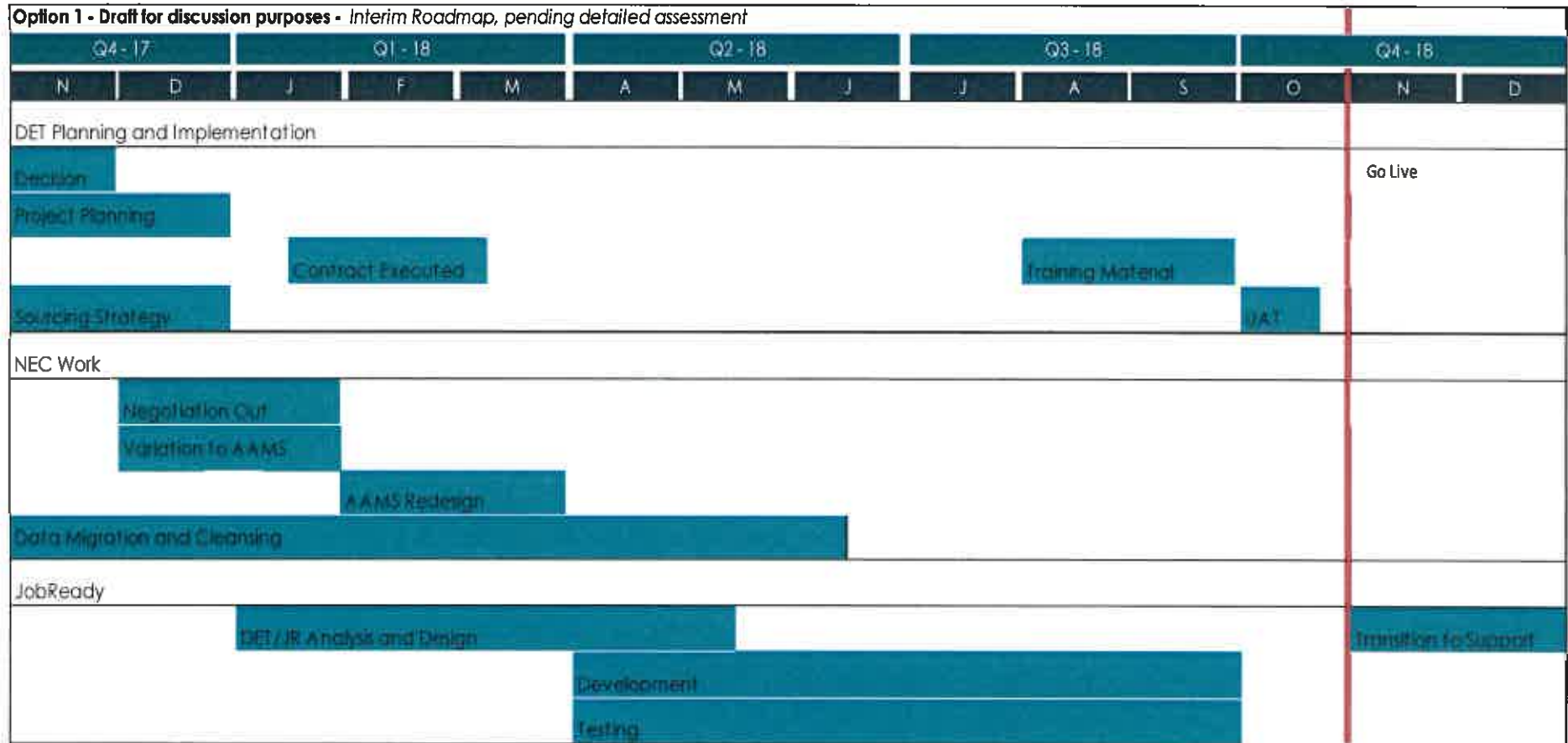| Category	Effort Duration	Option 1 (Qty)	Option 2 (Qty)	Option 3 (Qty)
Small	5 Business days			
Medium	20 Business days	2	4	6
Large	40 business days			
Significant	60 business days	7	9	9
Extra Significant	120 business days	4	4	6
Extra Significant x 2	240 business days	1	1	1
Total business days' effort Required		1180	1340	1620

20 Costing Considerations?

To understand the cost impacts, a detailed financial analysis will need to be undertaken that has input and involvement from NEC and JobReady.

As part of the financial analysis considerations will need to include:

- How the ongoing support and maintenance fees will be reduced with NEC to support the reduced system scope
- The resourcing effort required by DET to support the implementation of the revised scope
- The costing for NEC to redesign AAMS to support the flow of information between the systems.
- The pricing benefits for how a single end to end solution will reduce the fee for service charges as part of the AASN tender round in June 2019.
- The costing for JobReady to complete the development work
- The costing for JobReady to provide ongoing support and maintenance
- How existing Network Provider JobReady licensing fees will be impacted.
- The costing for NEC to implement the existing gateway change request

21 How long will it take?

The Department, in collaboration with JR, has developed an initial **roadmap** that identifies the key deliverables to implement Option 1. Further assessment is still required to understand development requirements, commercial considerations, and timings for decisions that will impact the schedule. This schedule is to be used as an indication of the go live date for Option 1 until a detailed assessment is completed.

Option 1 - Draft for discussion purposes - *Interim Roadmap, pending detailed assessment*

	Q4 - 17		Q1 - 18			Q2 - 18			Q3 - 18			Q4 - 18		
	N	D	J	F	M	A	M	J	J	A	S	O	N	D

DET Planning and Implementation

Decision

Project Planning

Contract Executed

Training Material

Sourcing Strategy · UAT

Go Live

NEC Work

Negotiation Out

Variation to AAMS

AAMS Redesign

Data Migration and Cleansing

JobReady

DET / JR Analysis and Design

Development

Testing

Transition to Support

22 What considerations are there for using JobReady?

Issue	Option 1	Option 2	Option 3
An original business requirement for AAMS was to maintain a complete version history of all data and allow searching/reporting on this data. Currently neither AAMS nor JobReady maintain a complete version history; they both maintain partial version histories (TYIMS has minimal if any version history). With a full version history, users can view precisely what the data in a record looked like at any given point in time in the past. Without full version history, this 'complete' picture of data and changes to it over time is not possible. If having a partial version history is acceptable, no work in JobReady or AAMS is required. If having a complete version history is mandatory, work in JobReady and AAMS is required. JobReady already have an existing 'module', which maintains full version history and this module would need to be applied to the JobReady product. This is a medium development effort. AAMS would require significant reengineering of the entire system and this would be a significant development effort.	X	X	X
JobReady has a mature Business Rules Engine (BRE), which has been in use by Network Providers for several years. This BRE is used to assess incentives eligibility. While this BRE performs an automated assessment, the Network Provider is still required to review, verify and if necessary amend the assessment. An original business requirement for AAMS was to have a fully automated eligibility assessment requiring no review by Network Providers. AAMS's current BRE has been designed to do this; however, it is still undergoing development and testing. If JobReady takes over the Claims function, their current BRE will be used to perform eligibility assessments, requiring Network Providers to review and verify assessments. This is not a fully automated eligibility assessment, however Network Providers are comfortable and used to working with this BRE.	X	X	X
AAMS has functionality, which sends SMSs to Employers/Apprentices/RTOs for Claims lodgement. The cost of sending these SMSs is absorbed by NEC. JobReady also has functionality allowing ad hoc SMSs to be sent (not specifically concerning Claims lodgement); however, these costs are absorbed by the Network Providers. If JobReady takes over the Claims function, SMSs for Claims lodgement as well as ad hoc SMSs will be sent from JobReady.	X	X	X

The cost of these SMSs may need to be split so that Claims lodgement SMSs are paid for by NEC and ad hoc SMSs will be paid for by Network Providers.			

23 Appendix A - What changes are required to JobReady

	Option 1	Option 2	Option 3
API			
Establish web service connection between JobReady and AAMS	Extra Significant x 2	Extra Significant x 2	Extra Significant x 2
Architecture			
Separation of Dept. and provider functionality	Extra Significant	Extra Significant	Extra Significant
Version control and user alignment	Medium	Medium	Medium
Data Migration and cleansing	Significant	Significant	Extra Significant
Function			
1. Leads			
2. Gateway	Medium	Medium	Medium
3. Training Contracts	Extra Significant	Extra Significant	Extra Significant
4. Fee-For-Service	Significant	Significant	Significant
5. Claims	Extra Significant	Extra Significant	Extra Significant
6. Payments	Extra Significant	Extra Significant	Extra Significant
6. Recommencements, Variations, Cancellations and Completions	Significant	Significant	Significant
7. Reporting			
8. CRM-based			
SCM functions			
9. Debts		Significant	Significant
10. Special Claims		Medium	Medium
11. Training Contract Transfers		Medium	Medium
12. SCM Access/Logins		Significant	Medium
Web services			
13. Web service to STAs			Extra Significant
14. Web service to SAP			Extra Significant
15. Web service to ATO			Medium
16. Web service to DHS			Medium