

# Paper **A1**

## Item 6



## Final Follow-up Report

## Somerset County Council (SCC)

### ► Follow-up: AIS (Adults Integrated Solution)

**Issued to:** Mel Lock  
*Adults and Health Operations  
Director*

James Hood  
*Group Manager – Adults & Health*

Diana Fraser  
*AIS Systems Administrator*

Darren Cole  
*Head of ICT*

Kevin Nacey  
*Director of Finance & Performance*

Martin Gerrish  
*Strategic Manager – Finance  
Governance*

Gerry Cox  
*Chief Executive, SWAP Ltd*

*Working in partnership with*



**Date of Report:** 9 January 2015

**Issued by:** Neil Roper  
*Audit Manager*

Hayley Knief  
*Lead Auditor*

**Application Review- AIS****Management Summary**

As part of the 2012-2013 audit plan an audit of the AIS application was carried out at the Council.

The audit focused primarily on the following key risks;

- Application does not meet business and Data Protection requirements
- Unauthorised access and disclosure of sensitive information
- Application availability cannot be assured.

The purpose of follow-up audits, where partial assurance has been given, is to provide some assurance to the S151 Officer, Senior Leadership Team and Audit Committee that agreed actions to mitigate risk exposure have been implemented. Partial assurance was given in the original audit due to significant corporate risks identified. These included the application not meeting business and Data Protection requirements and being unable to assure application availability.

The following risk table identifies a summary of the progress made in regards to implementing controls to mitigate the risks established.

Original Priority Score	Original No. of Recommendations	Complete	In Progress	Incomplete
Priority 3	8	1	4	3
Priority 4	4	0	1	3

**Conclusion**

▲★☆☆ Partial

As the table above demonstrates, limited progress has been made in implementing the recommendations made in our 2012-13 audit report. Our follow up audit process requires only verbal assurances and updates for priority 3 recommendations and documentary evidence for priority 4 (and 5) recommendations. In this case we have been unable to obtain documentary evidence to support the implementation of our priority 4 recommendations. Nor have we been able to establish revised implementation dates for the outstanding recommendations. Accordingly our opinion is based on the verbal assurances provided.

Limited progress has been made in implementing the recommendations from our 2012-13 audit report and AIS performance and response times can still be less than adequate for users' needs. Southwest One are

unwilling to develop a Service Level Agreement (SLA) specifically for the AIS application and our recommendation to use an SLA to underpin AIS performance and response times that are sufficient for Adult Social Care (ASC) operations is not feasible. We have been assured that a new test environment has been implemented and this aspect of our recommendation has therefore been progressed.

Poor response time has led to the disabling of enhanced audit trails/logs that would make it possible to trace and attribute user activity in the system. The latter point is worrying. The data handled is sensitive and personal and as such it must be surrounded by adequate security in accordance with Data Protection legislation. Given this concern, the data integrity issues flagged up in the original audit report as well as the Council's statutory responsibilities regarding vulnerable adults, SWAP recommend a further full audit of this application early in 2015/2016 to provide the Council with assurances about the accuracy and completeness of the sensitive data held.

## Adults Integrated Solution (AIS)

## Updated Action Plan

Finding	Recommendation	Priority Rating	Management Response	Responsible Officer	Implementation Date	Follow Up Findings
<b>Objective:</b> To ensure that the AIS application operates securely with maximum system availability to provide accurate, timely and compliant data and management information, as a key enabler for effective service delivery.						
<b>Risk 1. Application does not meet business and regulatory requirements</b>						
AIS repair reference	I recommend that the roles & responsibilities of ASC Operations, SCC Finance, SWO, ICT, the AIS Programme Board & the AIS System owner be defined to ensure effective communications and decision making. Helen Wakeling, the Caldicott guardian, has been fulfilling the role of AIS System Owner which also needs to be formalised.	4	Roles and responsibilities will be discussed at the AIS Programme Board. They will be documented and will include system ownership and the responsibility for signoffs required by ASC and SCC Finance.  <b>Update for 2<sup>nd</sup> July:</b> <ul style="list-style-type: none"> <li>• <b>Caldicott Guardian – confirmed Mel Lock to be AIS system Owner in Nov 2014</b></li> <li>• <b>A review of AIS with a view to possible replacement will be started as part of Transformation Programme in Q3 2015/16.</b></li> </ul>	AIS Programme Board, Barrie Fitzpatrick, Helen Wakeling, SCC Finance  NA  A Grigg / D Cole	31 December 2013  <b>Complete</b>  <b>Implementation is likely to start Q3 2016/17 and complete within 12 mths. Date of</b>	<b>INCOMPLETE:</b> Verbal assurances were provided that the ToR for AIS Programme Board had been reviewed and that roles & responsibilities in relation to system ownership had been clarified. However, no evidence was provided to support these assurances.  Update: As of November 2014, Helen Wakeling (AIS System Owner) has left SCC. The responsibility of AIS system ownership needs to be reassigned and formalised.

			<ul style="list-style-type: none"> <li>• AIS Review dates documented in Adults Transformation Programme Plan</li> </ul>		<p><b>implementation dependent on AIS review &amp; business requirements to incorporate the Care Act and also the review of Children’s systems.</b></p>	<p><i>No revised implementation date received.</i></p>
	<p>SWAP Ref: 21842</p>					
<p>1.2a AIS data quality is undermined by the lack of robust input validation.</p>	<p>I recommend that the AIS System Owner should require that AIS is modified to include robust validation and authentication, and should consider using a unique identifier, such as NHS or NI number, as the key. Information Management should identify potential duplicates for analysis and review by ASC Operations.</p>	<p>3</p>	<p>ASC needs the flexibility to be able to enter minimum data to ensure timely care is provided. However there is a project to validate the NHS #, if entered in AIS. A report will be requested from Information Management to identify potential duplicates for investigation and action.</p> <p><b>Update for 2<sup>nd</sup> July:</b></p> <ul style="list-style-type: none"> <li>• NHS Number matching exercise now complete – second import ran in May and will be transitioned into BAU in Q2 2015.</li> <li>• New processes in place to</li> </ul>	<p>AIS System Owner, Information Management</p> <p>A Grigg / D Cole</p> <p>A Chisholm</p>	<p>31 December 2013</p> <p>Transition to BAU Q2 2015</p> <p>Went live in BAU on 11<sup>th</sup></p>	<p><b>IN PROGRESS:</b> Verbal assurances were provided that Potential Duplicates Validation Report is produced as Business As Usual. Any potential duplicates will be emailed to the Business Systems Team mailbox where they will be investigated.</p> <p>Delays due to obtaining data sharing agreement from Health colleagues &amp; then problems with Northgate script. Testing is now being done in test database to ensure script</p>

			<p><b>improve quality of data inputting.</b></p> <ul style="list-style-type: none"> <li>• <b>Have representation on South West One user group to provide feedback on elements of the system to ensure continuous improvement taken account of.</b></li> </ul>	A Grigg / D Cole	<p><b>April 2015 for reviews and assessments.</b></p> <p><b>Ongoing</b></p>	<p>does as expected.</p> <p>The first NHS number-matching exercise completed in July 2014. Over 90% matched but some 8,000 children’s data still needs validating.</p> <p><i>No revised implementation date received.</i></p>
1.3a The interface between the AIS and Protocol applications can create duplicates.	I recommend the AIS and Protocol System Owners should consider a more appropriate and robust solution for the sharing of data between the AIS and Protocol applications.	3	<p>A PIR will be submitted proposing a joint review of the process with consideration for sharing rather than propagating data</p> <p><b>Update for 2<sup>nd</sup> July:</b></p> <ul style="list-style-type: none"> <li>• <b>NHS Numbers now allow for a total review of matching/integration but more work required as the data is not routinely collected where there is not a Client relationship.</b></li> </ul>	AIS System Owner  A Grigg / D Cole	<p>31 December 2013</p> <ul style="list-style-type: none"> <li>• <b>Need full review of integration before can confirm implementation date. Review</b></li> </ul>	<p><b>IN PROGRESS:</b></p> <p>Verbal assurances were provided that work was underway to improve functionality of Snapshot browser. This will add key fields in to identify if a child is in care or subject to a child protection plan. Delays in obtaining necessary APIs from Liquid Logic meant that this should be available from 29/08/14. Also,</p>

			<b>Dependency on Children’s for transitions.</b>		<b>of integration scheduled for Q3/4 2015/16.</b>	looking into using NHS number as the key to match records between AIS and Protocol.  <i>No revised implementation date received.</i>
	SWAP Ref: 21242					
1.3b Interface controls between AIS & SWIFT could not be assessed.	I recommend that controls that ensure the completeness, accuracy and security of AIS/SWIFT and SAP interfaces should be documented by SWO and made available for review by the AIS System Owner and SWAP. AIS/SWIFT should be modified to utilise SAP general ledger codes.	3	<p>AIS System owner will request that SWO document the controls that ensure the completeness, accuracy and security of AIS/SWIFT and SAP interfaces. Consideration will be given to the use of SAP general ledger codes in the project considering using Block Contracts, ISP and Direct payment functionality in AIS/Swift.</p> <p><b>Update for 2<sup>nd</sup> July:</b></p> <ul style="list-style-type: none"> <li>• <b>ISP Phase 2 went live in January and the final phase (phase 3, covering Direct payments) is due to go live in August 2015.</b></li> <li>• <b>The future of RPS – The</b></li> </ul>	<p>AIS System Owner</p> <p><b>A Grigg / D Cole</b></p>	<p>31 December 2013</p> <p><b>August 2015</b></p>	<p><b>IN PROGRESS:</b></p> <p>Verbal assurances were provided that a project is underway to implement ISP as a replacement for SSPI. Changes to reporting required as a result of ZBR mean that there is a need to consider using SAP codes in AIS/SWIFT. Phase 1 of ISP has been implemented, Phase 2 is about to start. However, neither phase will involve moving from CEDAR to SAP codes.</p> <p>SWO are about to start a review of Residential Projection System &amp; will give consideration as to</p>



						<p>Rationale: Managers couldn't use the DD reports, didn't 'drill down' &amp; not fit for purpose. Work is underway to improve the capacity &amp; stability of BOXI. Reports will be drawn from BOXI instead of DD.</p> <p><i>No revised implementation date received.</i></p>
1.4b Functions available in AIS are being performed in spreadsheets that may not be secure.	<p>I recommend that the AIS System Owner obtain from SWO details of the security and back-up procedures over all spreadsheets used by ASC Operations and SCC Finance. This should be evaluated and recommendations for enhancements made where required.</p> <p><i>SWAP Ref: 23449</i></p>	3	AIS System owner will request this information from SWO, evaluate and take appropriate action.	AIS System Owner	31 December 2013	<p><b>COMPLETE:</b></p> <p>All spreadsheets stored on network drives are backed up nightly. The back-up tapes are stored securely off-site by SWO. They are retained for a 6-week period before being over written. Findings confirmed by recent SWAP Corporate Back-up routine audit.</p>
1.5a. There are no reports or	I recommend the AIS System Owner requests the	4	AIS System owner will develop reporting	AIS System Owner	31 December	<p><b>INCOMPLETE:</b></p>

<p>processes, other than database monitoring that ensure the ongoing integrity of AIS data and the appropriateness of payments.</p>	<p>implementation of reporting &amp; related review processes to monitor &amp; ensure the integrity of AIS data &amp; the appropriateness of related payment transactions. Possible examples: reporting daily totals of critical values (such as total clients, total approved care package), excessive orders for services below the £1,000 approval threshold, payments in excess of the approved care plan, payments after date of death applied, reversal of date of death, &amp; an automated comparison of payments made from SAP to AIS for appropriateness etc.</p> <p style="text-align: right;"><i>SWAP Ref: 21311</i></p>		<p>requirements.</p> <p><b>Update for 2<sup>nd</sup> July:</b></p> <ul style="list-style-type: none"> <li>• <b>New assessment and review processes with Business support taking ownership for data input to improve data quality. Implemented 11<sup>th</sup> April 2015</b></li> </ul>	<p>A Chisholm / P Cannons</p>	<p>2013</p> <p><b>Implementation complete - Ongoing quality assessment</b></p>	<p>SWO had been asked to produce a monthly report identifying users that had not accessed AIS during preceding 2 months and users accessing AIS outside office hours (11pm-6am). This requires an Oracle report and SWO are trying to sort this out but has not been completed at present. Further consideration is being given to additional reporting re: payments after date of death, payments in excess of care plan etc.</p> <p><i>No revised implementation date received.</i></p>
<p><b>Risk 2. Unauthorised access and disclosure of sensitive information</b></p>						
<p>2.1a AIS security provides the potential for unauthorised</p>	<p>I recommend that the AIS System Owner discuss the AIS security capabilities with Northgate and develop their AIS</p>	<p>3</p>	<p>AIS System owner will request Security documentation from</p>	<p>AIS System Owner Northgate</p>	<p>31 December 2013</p>	<p><b>IN PROGRESS:</b> Verbal assurances that Security Group Roles</p>

<p>access &amp; update to AIS data.</p>	<p>access requirements which ensure the appropriate segregation of duties and duty of care over personal data. Additional actions required include but are not limited to implementing an annual manager review and approval of current access, monitoring user and super user access, eliminating the use of generic user ids, locking user ids that have not be utilised in a specific period of time and implementing a robust leavers process and password reset procedure.</p>		<p>Northgate, evaluate current security and develop access requirements</p> <p><b>Update for 2<sup>nd</sup> July Starters and leavers project started (led by S Payne - Business Support Officer). ASC will assist review via K Grigg.</b></p>	<p><b>Business Development (S Payne / A Parry)</b></p>	<p><b>Implementation date Q3/ 4 2015 / 16</b></p>	<p>have been reviewed &amp; are valid. View of AIS team is that an employees' access requirements are unlikely to change mid-year &amp; an annual manager review access is inappropriate. <b>Risk carried by client.</b></p> <p>User IDs that have not been used for 2 months will be locked &amp; a helpdesk call required to reinstate if access required (this relies on reports produced by SWO which are outstanding).</p> <p>Business Systems Team sent email to all users to check details were current, this is to be repeated every 6-9 months. The Corporate starters &amp; leavers processes are inadequate. HR new starter form does not notify need for AIS access. Processes are</p>
	<p style="text-align: right;"><i>SWAP Ref: 21244</i></p>					

						<p>being reviewed (led by one of the Business Support Officers). ASC will assist review.</p> <p><i>No revised implementation date received.</i></p>
<p>2.2a The AIS audit trail does not provide details of the last user access.</p>	<p>I recommend that options exercised over the audit trail and logs currently maintained in AIS should be documented by SWO in order that the AIS System Owner can assess its adequacy for routine and potential fraud related investigations.</p> <p style="text-align: right;"><small>SWAP Ref: 21251</small></p>	<p>3</p>	<p><u>ASC Response</u> We will request this information from SWO, evaluate &amp; take appropriate action when it is provided.</p> <p><u>SWO Response:</u> SWO maintains controls at the server and database levels. If the AIS System Owner has specific controls requirements for the application, SWO is willing to work with Northgate and the AIS System Owner to determine a solution.</p> <p><b>Update for 2<sup>nd</sup> July:</b></p> <ul style="list-style-type: none"> <li>• Audit trails and logs will be revisited in the light of new hardware following the V29</li> </ul>	<p>SWO &amp; AIS System Owner</p> <p><b>A Grigg / Darren Cole</b></p>	<p>31 December 2013</p> <p><b>Review will happen in Q3 2015/16.</b></p>	<p><b>INCOMPLETE:</b> ASC have used enhanced audit trails/logs before but they have had a major impact on the performance of the system and were switched off again. ASC will review their use again as part of the upgrade to v28.</p> <p>This is a finding that has been identified since the original audit and should be addressed to mitigate the risk that important audit trail information is not being captured and the potential for fraud or misuse of sensitive data.</p>



<p>3.4a Issues identified in new releases are not always addressed by Northgate</p>	<p>I recommend the AIS System Owner should require that issues are tracked to completion. If they cannot be implemented in the current release they should be tracked, reported and added to the next release or patch. The contract should be reviewed to ensure all available penalties are claimed for not fixing known documented problems.</p>	<p>3</p>	<p>We will implement a formal process with Northgate to track issues identified in testing through to completion. This will include detailed analysis of all service packs and releases to further track what changes and fixes are being implemented.</p> <p><b>Update for 2<sup>nd</sup> July:</b></p> <ul style="list-style-type: none"> <li>• <b>Bug tracker is due for release Q3 2015/16</b></li> </ul>	<p>AIS System Owner</p> <p><b>A Grigg / D Cole</b></p>	<p>30 November 2013</p> <p><b>Q3 2015 / 16</b></p>	<p><b>INCOMPLETE:</b></p> <p>The AIS contract is between Northgate &amp; SWO. SCC not privy to the contract &amp; it was not made available for audit.</p> <p>SWO has access to the Northgate call logging system &amp; can view updates via Northgate portal. All calls are chased if no response received within 28 days.</p> <p>Northgate are developing a 'bug tracker' which will show SCC/SWO all outstanding calls so they can be chased on a weekly basis and can view any updates from Northgate. Portal should be ready for use by end of 2014-2015.</p> <p><i>No revised implementation date received.</i></p>
---	---	----------	---	--	--	---

<p>3.5a Performance and response time of AIS has been a major issue since the implementation of AIS two years ago and has not been resolved to the satisfaction of ASC Operations.</p>	<p>I recommend that the AIS System Owner require the implementation of an SLA which addresses an acceptable response time e.g. 2 – 5 seconds. In addition I recommend the AIS System Owner, Head of ICT and Southwest One consider and determine the feasibility of implementing a robust testing environment which is not currently contractually required.</p>	<p>4</p>	<p>We will meet with Southwest One to discuss the development of an SLA and the feasibility of a implementing a robust testing environment.</p> <p><b>Update for 2<sup>nd</sup> July:</b></p> <ul style="list-style-type: none"> <li>• <b>New Hardware as part of the V29 upgrade will need performance monitoring following go-live but should result in increased performance.</b></li> <li>• <b>Northgate also suggest that system performance improvement is included in the code for V29 (being implemented in June 2015) and by moving to the latest version of Internet Explorer (IE11)</b></li> </ul>	<p>AIS System Owner Head of ICT</p> <p><b>A Grigg / D Cole</b></p>	<p>31 December 2013</p> <p><b>New hardware will be performance tested in Q3 2015/16</b></p>	<p><b>IN PROGRESS:</b> SWO will not agree to an SLA as they would be reliant on a similar agreement with Northgate which does not exist. Verbal assurances were provided that response times remain intermittent. They typically range from 2-5 seconds but also up to 10 seconds on occasion.</p> <p>A new test environment (UPG) has been built. This is in addition to the UAT environment &amp; ASC will be able to test new AIS releases whilst being able to test Service Packs as released. This will avoid disruption to the live database.</p> <p><i>No revised implementation date received.</i></p>
--	--	----------	---	--	---	--

