
Audit West

Internal Audit Report

Confidential

Avon Pension Fund i-Connect Project

June 2020

Executive Summary

Audit Opinion:

Assurance Rating	Opinion
Level 5	The systems of internal control are excellent with a number of strengths and reasonable assurance can be provided over all the areas detailed in the Assurance Summary
Level 4	The systems of internal control are good and reasonable assurance can be provided. Only minor weaknesses have been identified over the areas detailed in the Assurance Summary
Level 3	The systems of internal control are satisfactory and reasonable assurance can be provided. However, there are a number of areas detailed in the Assurance Summary which require improvement and specific recommendations are detailed in the Action Plan
Level 2	The systems of internal controls are weak and reasonable assurance could not be provided over a number of areas detailed in the Assurance Summary. Prompt action is necessary to improve the current situation and reduce the risk exposure
Level 1	The systems of internal controls are poor and there are fundamental weaknesses in the areas detailed in the Assurance Summary. Urgent action is necessary to reduce the high levels of risk exposure and the issues will be escalated to your Director and the Audit Committee

Assurance Summary:

Assessment	Area Reviewed
Good	Project governance arrangements
Satisfactory	Project Planning, including allocation of resources and completion of tasks to agreed timescales
Good	Adequacy of training and support provided to employer bodies
Satisfactory	Issues management – e.g. identification and resolution of data quality issues
Good	Counter Fraud – review of risks and controls (prevent / detect)
Good	i-Connect system security
Good	i-Connect system resilience

Detailed Report

Opinion

We have assessed the framework of internal control to be at 'Level 4 - Good'. A total of 6 audit recommendations are detailed in the Action Plan section of this report.

Scope and Objectives

The audit is intended to provide management with independent assurance that risks associated with the I-Connect project have been and are currently being managed effectively.

The scope of our audit was set out in the Audit Brief and a summary of our opinion against each of the specific areas reviewed has been detailed in the Assurance Summary section above.

Background

Avon Pension Fund is responsible for administering pensions in respect of 28,815 active members, working for 403 employers. The number of employers joining the fund in recent years has increased significantly and this in turn has led to very labour-intensive processes for the collection and upload of member data to Altair. This combined with a need to comply with The Pension Regulator (TPR) requirements around data quality have acted as drivers for the current i-Connect project.

The use of i-Connect by pension funds as the primary means of submitting member data is currently quite low. This means that APF have been unable to rely on lessons learned elsewhere and are in a very real sense leaders in seeking to fully adopt and utilise this relatively untested platform.

Context & Audit Comment

The review forms part of the 2019-20 risk based Internal Audit Plan.

To arrive at our conclusions, we have engaged with officers from APF Employer Services Teams, as well as seeking input from other areas such as BANES IT where relevant. These discussions have enabled us to gain an understanding of the project, its ongoing implementation and the underlying i-Connect system itself. Supporting evidence such as service plans and meeting minutes have been used to inform our assurance on project management, whilst walkthroughs, records of data input along with sample testing have been used to inform our assurance on system effectiveness and data quality.

Our results show that overall, management of the i-Connect and the operation of the system itself are deemed to be a good standard. Whilst setbacks have been encountered this is not unusual for such projects and although the project is now on hold temporarily, the majority of member data is now submitted using i-Connect.

A small number of recommendations have been made for areas where we have deemed further improvement to be possible.

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No findings were deemed to constitute a high-risk level. Medium risk findings are set out later in this report. Low risk findings, for example where controls had generally been effective but an isolated lapse with limited impact was found, have not been reproduced within this report but have been discussed and agreed separately with the Pensions Manager.

Project Management

The i-Connect project is one of a number of workstreams outlined in the most recent APF Service Plan, covering the period 2019-22. The plan itself was drafted by Senior Management within APF and was presented to the Pensions Committee on 22 March 2019 by the Head of Business Finance and Pensions, at which time it was formally approved. The project can thus be seen to be endorsed and driven by management at the most senior levels.

We reviewed subsequent minutes and reports from the Pensions Committee meetings and from these were able to confirm that progress updates on the project were being reported and noted.

Whilst the above demonstrates a good degree of oversight by Senior Management, we noted that the project itself is not delivered using a prescribed methodology such as Prince2, with its adopted project manager/board structure, defined stages, project documentation and so forth. The application of a scaled down version of such methodologies for future projects may be worth considering.

Performance Measures

We sought to confirm whether performance in relation to i-Connect was monitored. From a review of recent Committee Reports it was noted that there are two relevant indicators. These relate to the % of employers who submit data electronically and % of active membership who are included. Whilst these figures are not exclusive to i-Connect, i.e. some of the % will relate to employer self-service, they do nonetheless provide a good indication of how well the project is proceeding in achieving agreed outcomes / objectives. As at the December Committee meeting, we noted that 66% of employers were now signed up, which covers a total of 96% of active members, with 86% of members data coming through i-Connect. These figures indicate that good progress has been made in the project so far, but that there is still some way to go before the project achieves its goal of fully migrating all employers to iConnect

In terms of the reporting functionality within i-Connect and how well it supports the generation of performance information and other statistics, this is an area of development. Current processes for consolidating the necessary information require greater manual input than would be case if the software included an effective reporting system. Heywood are understood to have approved a budget for the development of this area and are keen for APF to be involved.

Team Capacity

The project has suffered from capacity issues. One impact of this has been backlogs in resolving queries that arise during the validation process for CSV files. Although additional resources have now been approved in the form of a new i-Connect team within the Pensions Administration Section, it is likely to be some time before these backlogs are fully cleared. Although there are fewer employers uploading CSV files as compared with online returns (both are part of i-Connect) the number of members whose data is included within the CSV uploads far exceeds that of online returns.

Project Timescales

Work to improve the take up of electronic data submission has been underway since 2018 and can be seen as one of the tasks within an earlier APF Service Plan covering the period 2018-21. It was initially planned that all employers would be migrated to i-Connect and using either online returns or CSV uploads by March 2020. A data breach in 2019 and its subsequent impact on how CSV files are to be validated have caused the project to be put on hold and this is likely to remain so for several months ahead.

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On a positive note however the project has already had a great deal of success, as can be seen by the figures quoted in the performance section above.

Training and Support

To assist employers in transitioning to i-Connect (known as 'onboarding'), APF were able to demonstrate that suitable support was in place and being made available. Detailed, step by step guidance documents, written by the software vendor, are issued to employers as reference material. These documents are suitably tailored to the method of data submission which the employer is planning to use, whether that be online returns or CSV file uploads.

Online returns are generally considered to be a straightforward method of data submission and as such there is introductory training available, but this is on request rather than being a mandatory requirement. Day to day telephone and email support are also provided.

For employers opting to submit data via a CSV file, introductory training has been a mandatory part of the induction process. This was necessary due to the more technical nature of the process which requires the employer's payroll system to generate a CSV file in a precise defined format which includes all necessary data fields.

Evidence of the training and support was seen in the form of correspondence and in a separate log of training and support which the Employer Services Team maintains.

Data Submission – Online Returns

We conducted a walkthrough of the process used by employers and found it to be generally effective and user friendly. Each monthly submission is based on data submitted during the previous period, which is then manually adjusted by the user to take account of changes that have occurred during the period. Both financial and non-financial data for each employee can be amended by working through the various screens.

Whilst the system helpfully applies some automated validation during the process; the extent of this validation is somewhat limited and there is scope for this to be improved going forward. We understand that APF have provided feedback to the vendor in relation to this.

In the event that a record within the online return is detected by the software as being problematic (classified as a failure, error or suppression), these are clearly indicated on the summary page and processed by APF during their monitoring.

Data Monitoring – Online Returns

APF have processes in place for monitoring the submission of online returns. The monitoring process includes the identification of late returns, which the officer is then able to follow up with the employer. As well as return dates, the monitoring officer also checks the summary page of the most recent submission for red flags that may indicate potential issues. These are recorded within a separate log and followed up with the employer until resolved. The issues log could be improved further to more clearly record cases where there are multiple queries ongoing.

Data Submission – CSV Submission

We conducted a walkthrough of the process used to upload CSV files. It is noted that, since October 2019, the process has changed, and employers are no longer allowed to directly upload data files to i-Connect but must instead submit the file to APF for validation checks. This has arisen due to issues with the quality of data submitted by employers and will remain in effect for the foreseeable future.

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Submission of member data via a CSV file is relevant to larger employers, generally those with more than 50 employees. It is more technical in nature to setup and requires employers to have a compatible payroll system as the data extract has to be produced to precise requirements. A template CSV file was viewed and found to include a full range of relevant data fields which included both financial and non-financial information.

Data received by APF is run through a validation checker and if the file fails this process it is returned to the employer along with any necessary details. Once validation has been passed, APF upload the data file to i-Connect, at which point the summary details are again validated using a second set of checks which are then independently reviewed. Only at this point will the monthly data go through its final submission within i-Connect.

Data Monitoring – CSV Submission

The validation and upload process undertaken by APF and referred to above ensures that data is being thoroughly checked.

As with online returns, employers who submit CSV files should upload them to APF by the 22nd of each month, however this is not something that is actively monitored and so delays in submissions may go undetected for some time.

A further problem with the CSV validation is that it can be quite labour intensive for APF and this has led to backlogs in clearing queries and resolving the various errors that can arise during validation. The recently established i-Connect team should in the coming months allow these backlogs to be cleared.

Reconciliation – Altair to Employers Payroll System

Ensuring that the correct member data is held is essential for effective pensions administration. As such a reconciliation between the data held by APF and that held by employers is a very useful tool. For employers using i-Connect, part of the process of uploading data is to compare it against data already held by APF on Altair from prior submissions. For online returns this comparison is done visually, on a line by line basis by the employer. For CSV uploads this is done by the system and presented as summarised information to the uploader. This in effect is a process of reconciliation between the two systems and helps ensure that data issues arising from mismatches are highlighted and resolved.

In our walkthroughs of online returns and CSV uploads we confirmed that this reconciliation process was working as intended.

Reconciliation – Altair to General Ledger

Employers submit an 'LGPS50' return each month notifying APF of the gross amount of contributions to be paid in that period. This LGPS50 is reconciled to amounts received into the bank account and amounts subsequently posted to the general ledger. This is an established process that works well. The value of member contributions uploaded to Altair however is by a completely separate process and a long standing difficulty has been the development of a reliable process to reconcile the Altair data to the LGPS50. We discussed ongoing developments with the Finance Manager and confirmed that a relatively new process is now in place which should, in time, result in an effective solution to this problem. Further work on this is necessary to embed and refine the process however initial indications on the potential for success are favourable.

Data Security and Resilience - i-Connect

We reviewed the current contract between APF and Heywood for the use of the i-Connect system to determine whether suitable clauses had been included to cover data security. On the whole we found that such clauses had been included, such as a commitment to comply with article 32 of the General Data Protection Regulation, which specifies that

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appropriate technical and organisational measures appropriate to the risk must be applied in respect of data security. We also note that the supplier creates a short-term backup of the data as a contingency against data loss and has stated any data breaches will be notified to APF within 48 hours. Further clauses were relevant, but in some cases nonspecific, which may create problems in the event of dispute. For example, the vendor states that they will address system breakdowns promptly and restore services as soon as reasonably practicable, but do not go so far as to guarantee system uptime of say 95%. In some ways such non-committal assurances are unsurprising given that the service also relies to an extent on wider communications infrastructure that is outside of its control. In section 8 of the contract, we find the vendor setting out all the limitations to its liability in the event of a contractual breach. This includes a limit of financial liability up to a maximum of 125% of the annual fee. Whilst this may be applicable in terms of restitution payable to the customer, the vendor would no doubt find itself liable to much higher penalties in the event of a significant data breach, where this was due to a lack of control by the vendor.

In terms of actual system resilience, we discussed this with officers who regularly use i-Connect and were informed that at the current time there are no issues caused by the system being unavailable. This has improved since the system was first introduced, at which time there were regular system outages during peak times of the month. Trend patterns on these outages was collected by the Data Control team and communicated to the vendor who were then able to implement a fix.

Password policy settings for the i-Connect system were generally satisfactory. Passwords must be complex but also relatively short and do not expire. A potential issue that requires further investigation is around the use of shared login details. We understand these were quite common when the system was first introduced and that although all new users have unique login credentials there may still be a small number who do not.

Other aspects of security that could benefit from improvement include quality checks when a new employer is setup as a user and greater flexibility in the level of access which is granted to APF staff, who currently all have administrator privileges.

Data Security – Globalscape

Globalscape is a separate system to i-Connect, however we wished to include it in our considerations as it is a key tool used to exchange information between APF and employers. This includes query sheets and copies of the CSV files that are subsequently uploaded to i-Connect. As such the system needs to be well managed with strong access controls to protect the personal data being exchanged.

Unfortunately, despite making enquiries with BANES officers, we were unable to obtain any information such as a copy of the current contract or information on security and user management. Based purely on information published on the Globalscape website, the system would appear to be a large provider of file transfer solutions across all business sectors and that encryption is utilised.

Audit Summary Findings

We identified the following strengths:

- The project is fully endorsed and driven by senior management
- Updates on progress have been periodically reported to the Pension Committee
- The majority of members now have their data submitted using i-Connect
- Detailed user guides and day to day support are available to employers

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- i-Connect allows both financial and non-financial member information to be updated automatically
- Regular monitoring of online returns allows late submissions to be promptly identified and chased
- i-Connect includes automated data quality control checks including mandatory fields, validation and tolerance checks
- Each upload to i-Connect acts as a reconciliation between the employer payroll system and Altair
- Data security requirements have been established within the contract for services between APF and Heywood
- System resilience is good at the present time and is understood to have improved since first implementation

We identified the following weaknesses:

- Project delays have caused the original delivery timeframe to be exceeded
- The Project has generated additional and unexpected workloads which in turn have caused the project delivery costs to increase
- Due to delays, planned outcomes such as a streamlining of the process for updating Altair and reductions in workload at the Pension Fund's end may not be realised in the short to medium term
- The reporting functionality within i-Connect is underdeveloped, leading to inefficiency when preparing management information
- The process for reconciling Altair to the LGPS50 is in development but requires further work and more time to become embedded
- User management could be improved by confirming there are no shared logins in use and by increasing the options for tailoring user access permissions (this links with the separate October 2019 Altair Application IT User ID & Authentication Audit report planned for 'Follow- up' during Summer of 2020.)

Audit & Risk Personnel:

Lead Auditor: Gary Spratley

Acknowledgements:

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ACTION PLAN

MEDIUM RISK EXPOSURE				
	Weakness Found	Implication or Potential Risk	Recommendation(s)	Responsible Officer Management Comments Implementation Date
M1	<p><u>Reporting Functionality</u></p> <p>Reporting functionality within i-Connect is considered to be underdeveloped and does not allow management and performance information to be easily produced.</p> <p>This means that greater time and manual input are required when producing this data than would otherwise be necessary.</p>	<p>Inefficient process leading to increased pressure on resources.</p>	<p>APF should continue to engage with Heywood in order to press for improved reporting functionality.</p> <p>Maintaining a log of desired system improvements which can be periodically discussed with Heywood in order to gauge progress may assist with this.</p>	<p>Ongoing engagement with Heywood.</p> <p>We now have the use of Heywood’s AHA portal for raising development requirements and ideas.</p> <p>APF are involved in the working party for the development of the submission management development working group for latest signed off developments.</p> <p>Responsible Officer: Employer Services Manager Target Date: December 2020</p>

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MEDIUM RISK EXPOSURE				
	Weakness Found	Implication or Potential Risk	Recommendation(s)	Responsible Officer Management Comments Implementation Date
M2	<p><u>Capacity Issues</u></p> <ol style="list-style-type: none"> As at the time of testing, there was no proactive identification and chasing of employers who had not uploaded their CSV file through Globalscape by the deadline of 22nd each month. For CSV files that have been received, capacity issues have also led to backlogs in resolving data issues identified during the CSV validation process. Such queries need investigating either in house by APF or fed back to the employer to resolve. <p>Management are aware of this issue and additional resources in the form of a new i-Connect team have been approved. Once established and embedded, the new team should help alleviate the capacity issues in the coming months.</p>	<p>Member data on Altair will not be up to date.</p> <p>Increased workload may also lead to more errors or shortcuts being taken during processing.</p>	<ol style="list-style-type: none"> Employers who have not submitted their CSV file on time (via Globalscape) by the due date should be identified in a timely way and chased. Reminders should be issued to relevant employers when the deadline is approaching and those who fail to submit their CSV file on time should be promptly chased. All data issues that arise from the CSV validation process should be promptly investigated and resolved, either internally by APF or by referring back to the employer. 	<ol style="list-style-type: none"> Monitoring of employer submissions received on time has always been in place but was not a main priority for the project. This also lapsed in Oct-Dec 2019, when we took the data loading inhouse, however this is now back up and in place and being further developed from April 2020 onwards. Central logs are now in place to log and monitor employer submissions and performance. Target Date: April 2020 Data output/ validation queries are now reviewed and processed on a monthly and monitored on a central spreadsheet. This is now in place following the recruitment of the i-Connect team. Target date: Complete <p>Responsible Officer: i-Connect Technical Lead</p>

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MEDIUM RISK EXPOSURE				
	Weakness Found	Implication or Potential Risk	Recommendation(s)	Responsible Officer Management Comments Implementation Date
M3	<p><u>Project Completion</u></p> <p>The iConnect project has not been delivered on time.</p> <p>The project has also required additional resources in the form of an i-Connect Team to be approved and as such has not been delivered within the scope of the original service plan budget that was approved by the Pensions Committee on 22 March 2019.</p>	<p>Benefits from the project's completion may be delayed.</p>	<p>APF should ensure that a lesson's learned exercise is undertaken so that the causes of any overruns/overspends can be properly understood and future projects can benefit from this.</p>	<p>This is not an issue as budget was not set for the i-Connect team. I-Connect team was a separate restructure within the business to respond to business needs and was approved by Committee.</p> <p>A project plan was in place for the period of the initial i-Connect project which ended January 2019. Further development and progress of i-Connect will now be incorporated into the overall work plan for Employer Services.</p> <p>Responsible Officer: Employer Services Manager Target Date: December 2020</p>

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MEDIUM RISK EXPOSURE				
	Weakness Found	Implication or Potential Risk	Recommendation(s)	Responsible Officer Management Comments Implementation Date
M4	<p><u>Automated Data Quality Checks</u></p> <p>Although systems are in place which automatically validate and compare member data uploaded through iConnect, these could be improved further to ensure that data quality is maintained.</p> <p>With regard to online returns for instance, validation of national insurance numbers works to some degree but failed to identify a temporary NI number that was in an incorrect format. Screens such as that for pay and contributions also do not contain basic arithmetical checks to ensure figures in each row are balanced.</p> <p>With regard to CSV file processing, the format checker and process log spreadsheets are very useful in highlighting potential issues, however during discussion it was indicated that further development is necessary to ensure the output from these is optimised.</p>	<p>Without optimised and automated data quality checks, the potential for errors is increased.</p>	<p>APF should work with the vendor and with officers internally to further develop and improve systems for the automated validation and quality checking of member data.</p> <p>Maintaining a log of desired system improvements which can periodically be discussed with Heywood or with officers internally may assist with this.</p>	<p>APF are working with Heywood on developments but are restricted by the CLASS development process. CLASS have signed off a new IC development to develop reporting and a dashboard to monitor employer returns. APF are on the development working party. Target Date: December 2020</p> <p>APF now have access to AHA, Heywood development ideas portal.</p> <p>APF have developed validation and checking processes to verify the employer data in advance of file upload. This will be fully implemented by May 2020. Target Date: June 2020</p> <p>Responsible Officer: Employer Services Manager</p>

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MEDIUM RISK EXPOSURE				
	Weakness Found	Implication or Potential Risk	Recommendation(s)	Responsible Officer Management Comments Implementation Date
M5	<p><u>Reconciliation of Member Contributions</u></p> <p>Members contribution data within Altair is not fully reconciled to amounts received from employers and reported in their LGPS50 returns.</p> <p>Work has been underway to develop a method for this and has progressed to the stage where a summary of variances can be produced and passed across to the Data Control Team for investigation, however further work is needed to resolve technical difficulties in the process, and further time is necessary to be able to demonstrate that the new process is working effectively with all variances cleared promptly.</p> <p>We also note that the process being developed is restricted to member data uploaded to Altair via iConnect so does not include member data that is updated via different methods such as end of year upload.</p> <p>At present there was also no formal process for the reconciliation to be independently signed off once complete.</p>	<p>Without a reliable reconciliation process, incorrect payments from employers due to error or fraud may go undetected.</p>	<p>Planned work on this process should continue and a body of evidence over time should be developed to demonstrate that the process is both effective and embedded.</p> <p>The process should also include independent sign off by a Senior Officer such as the Finance Manager, once the final process is in place.</p>	<p>Work will be undertaken with the fund accountant to tie up the reconciliation of contributions of monthly data upload.</p> <p>Software development with Heywood (ERM) is required to support this and we have identified the following areas for improvement in reporting:</p> <ul style="list-style-type: none"> • No in month adjustments are shown on I-connect • No deficits are shown on I-connect or they are included within employer contributions, so difficult to identify. • No ARCS are shown on I-connect • AVC's also not shown on I-connect • Maintained Schools have separate employer codes on Altair but not on 50's <p>Target Date: December 2020 Responsible Officers: Finance & Systems Manager, Pensions and Projects Accountant and Employer Services Manager</p>

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MEDIUM RISK EXPOSURE				
	Weakness Found	Implication or Potential Risk	Recommendation(s)	Responsible Officer Management Comments Implementation Date
M6	<p><u>System User Checks</u></p> <p>There are no quality control checks to ensure that when a new employer is setup on the i-Connect system, they have been given the correct access. If a new user is associated in error with a different employer, this could lead to a data breach whereby the user may have access to detailed employment records from another employer. This is especially the case with the online return method.</p>	<p>Unauthorised access to personal data.</p>	<p>A system for having a second team member check that the user is setup correctly would be beneficial. This would need to occur at the point in time when the user is first setup, as the system generates automated notifications to the user as soon as this is completed.</p>	<p>Ideally this should be an automated process and we will engage with Heywood regarding improvements to this.</p> <p>In the meantime, an internal process will be developed to control user sign off.</p> <p>Responsible Officer: Employer Services Manager & I-Connect Technical Lead</p> <p>Target Date: September 2020</p>