



Buckinghamshire & Milton Keynes Fire Authority

Meeting and date: 16 March 2022

Report title: Internal Audit Report – Update on Progress of Audit Recommendations

Lead Member: Councillor David Carroll

Report sponsor: Mark Hemming – Director of Finance and Assets

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Action: Noting

Recommendations: That the progress on implementation of recommendations be noted.

Executive summary: The purpose of this paper is to update Members on the progress of the implementation of audit recommendations made as at 14 February 2022.

Any further progress against outstanding recommendations will be verbally presented to the Overview and Audit Committee on 10 November 2020.

In total there are 63 recommendations to report on the status of which are classified as follows:

Implemented – 49/63 (78%)

In-progress - 2/63 (3%)

Past Due date (In-progress) – 12/63 (19%)

Internal Audit continues to actively monitor implementation of all outstanding recommendations throughout the year.

Financial implications: The audit work is contained within the 2021/22 budget.

Risk management: There are no risk implications arising from this report.

Legal implications: There are no legal implications arising from this report.

Privacy and security implications: There are no privacy and security implications arising from this report.

Duty to collaborate: Not applicable.

Health and safety implications: There are no health and safety implications arising from this report.

Environmental implications: There are no environmental implications arising from this report.

Equality, diversity, and inclusion implications: There are no equality and diversity implications arising from this report.

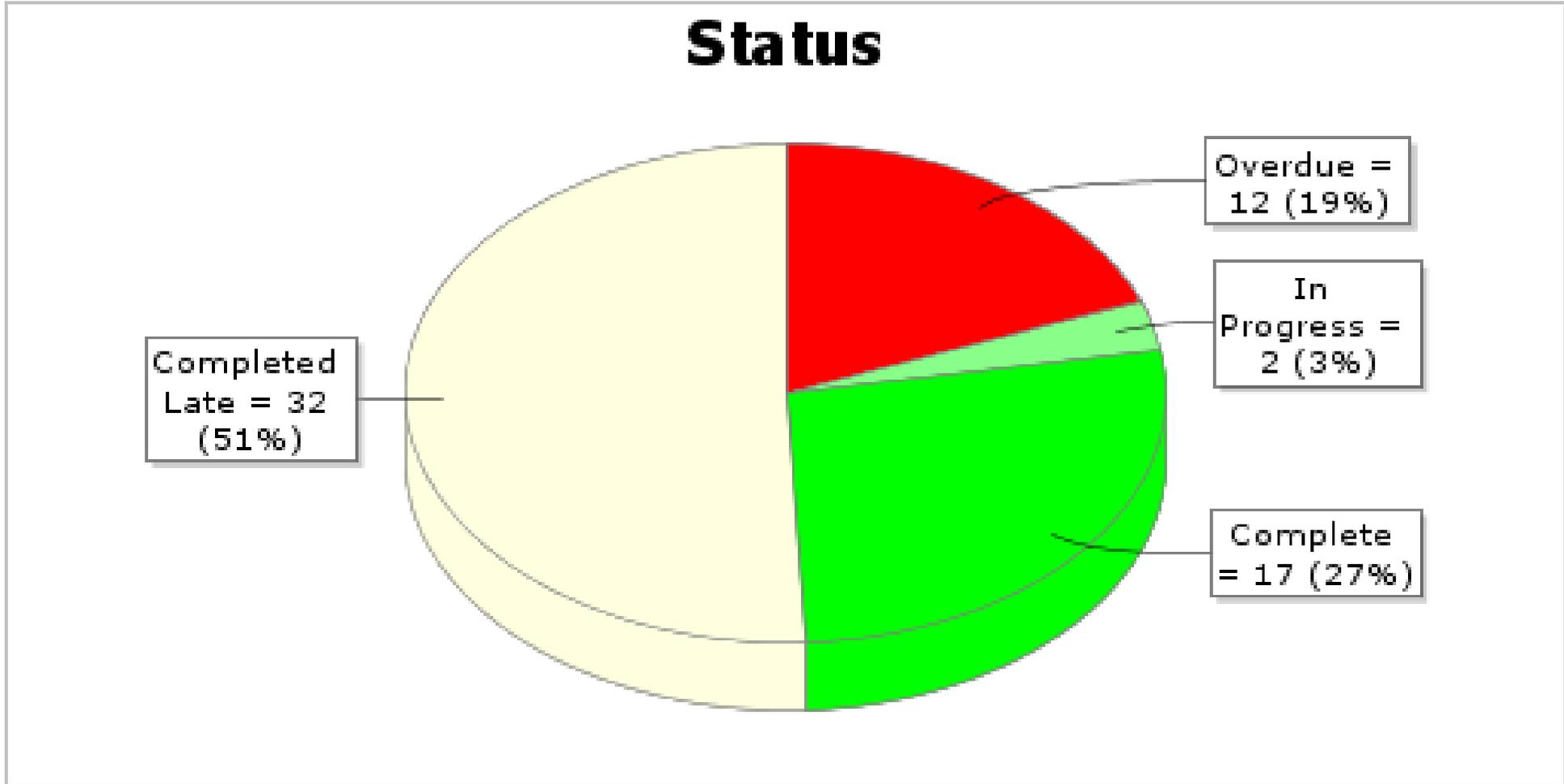
Consultation and communication: Not applicable.

Background papers:

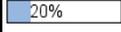
Appendix	Title	Protective Marking
A	Status of Audit Recommendations – February 2022	Not applicable

Appendix A – Status of Audit Recommendations

Generated on: 14 February 2022



BMKFA Overdue Audit Management Actions

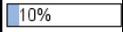
Audit Title & Management Action	Description	Due Date	Priority	Action Owner	Action Progress	Latest Note
BMKFA 2021 2110 Asset Management System (3) Asset Management Planning, Policies and Procedures – Processes not documented	<p>Finding: Up to date asset management procedures should be in place. The procedures should be compliant with Financial Regulations and Financial Instructions and help deliver the asset management plan. Many processes were found not to be documented. This included tasks carried out by the Asset Management and Equipment Manager, Asset Management Technician and in the Stores/Mezzanine area that feed into RedKite. It was apparent that there was little awareness between team members and by the Station Commander Research & Development, of what other team members do. Especially of the tasks carried out in the Mezzanine, which are mostly manual and completed outside of Redkite. The team would benefit from mapping the process end to end to better understand their processes and where improvements can be made and help build resilience. Risk: If processes are not sufficiently documented there is a risk that staff are unaware of their roles and responsibilities. This could lead to inefficient and inconsistent use of the Asset Management System and reducing the reliability of the data it holds.</p> <p>Action: We have ensured that all staff have access to the relevant user manuals. We will review the roles and responsibilities of the Asset Team and ensure that Manager, deputy and SC R&D are aware of work practices and procedures of the whole team. Create a series of flowcharts showing workflow that could be picked up by "new" staff in the event of staff leaving/prolonged sickness or secondment out of current position. This will be supported by the end-to-end process mapping within the Internal Audit Plan for 2021-22.</p>	30-Sep-2021	High Priority	Asset Management and Equipment Manager		This action is being addressed through the Asset Management Process Mapping exercise. Anticipated completion date for the process mapping is the end of March 2022 with completed flow charts and associated guidance notes completed by the end of May 2022.
BMKFA 2021 2110 Asset Management System (5) Recording of Assets – Overdue tests	<p>Finding: Fire crews must undertake regular stock checks and tests of equipment at fire stations and on appliances (vehicles). The frequency of these tests and inventory checks depends on the individual asset's testing schedule, usually dictated by the PIT number assigned to the asset. Results of tests and inventory checks should be recorded on Redkite by crews using either a handheld scanner or computer. Review of the report of tests due at Beaconsfield Fire Station run from Redkite found that 286 of the 288 tests listed had passed the due date as of 12 November, with one due date listed as being 13 February 2014 and 118 listed as having due dates of 2019 or earlier. A similarly high number of overdue tests were noted for Aylesbury Fire Station as of 3 November 2020. All 179 tests were overdue when viewed against the listed due date. Through discussion with the Station Commander, we were unable to establish whether these tests had been carried out or whether this was a system issue or data quality issue. A sample of 20 assets listed on Redkite was examined to confirm whether equipment tests and inventory checks were carried out promptly and accurately recorded on Redkite. The period covered was from November 2019 to November 2020. Of the 20 assets tested:</p> <ul style="list-style-type: none"> In 11 cases, assets were not tested in line with the frequency required by tests loaded onto Redkite. In four cases, the most recent test was not carried out within a timely manner of the previous test. In one case, no inventory checks or tests had been carried out since March 2018. In two other cases, an inventory was carried out promptly. However, no tests were carried out on the equipment since 2018 or earlier. In one 	30-Jul-2021	High Priority	Station Commander Research & Development		Update from Asset Management and Equipment Manager 09/02/2022: The testing frequencies for all current equipment is under review and testing frequencies will be brought in line with our Thames Valley collaboration partners. As new equipment is procured, and equipment manuals created, testing frequencies will be updated. Review of current equipment manuals and testing frequencies to be completed by end of March 2022. Uniform contract preparation work and the

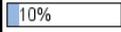
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	<p>of these cases, the most recent test was listed as being carried out in October 2014.</p> <ul style="list-style-type: none"> One asset was not found during an inventory check. <p>Risk: If tests are not carried out periodically and promptly in line with the testing schedule loaded into Redkite for the asset, there is a risk that defective or missing equipment is not detected, increasing the risk that equipment is obsolete or unsafe or that stock levels are not sufficient.</p> <p>Action: Review of testing frequencies and recording of all equipment on Red Kite. Additional training for the operational crew in the recording of tests.</p>					<p>appliance replacement programme have contributed to delays in progressing this action point</p> <p>Face to face training and auditing of crews working practices were temporarily paused during the pandemic. This action and associated activity will be reviewed in March 2022.</p>
<p>BMKFA 2021 2110 Asset Management System (6) Recording of Assets – Inaccurate records of stock</p>	<p>Finding: Stock records should enable identification of assets owned and determine those in use or not in use. The location of the asset should also be recorded accurately on the asset management system. A sample of 25 items was selected from the report of current assets generated from Redkite to check whether the assets could be found in the Stores and Workshops area. Of the 25 assets:</p> <ul style="list-style-type: none"> Sixteen assets could not be found. In one of these 16 cases, the asset had a system-assigned equipment number but no barcode number or serial number, which are the numbers used by the Authority to identify assets uniquely. If the asset was present in Stores, there would be no unique identifier in Redkite to identify the asset. Values were listed for six of the 16 items that were not located. The highest of these was £345. The total value of items not found for which the value was listed was £687.69. <p>A further sample of 25 items was selected at random from the Stores area to check whether the assets could be identified on the Asset Management System. Of the 25 assets selected:</p> <ul style="list-style-type: none"> Seven did not have a label or tag with the barcode number. Of the seven that were not marked or labelled, three had a serial number. However, the serial number could not be found in Redkite. In the 18 cases where the asset had a barcode label, nine assets could not be identified on Redkite. In the nine cases where the asset was identified on Redkite, one asset was found in Stores. However, it was listed on the system as being in Stokenchurch. <p>Further testing was carried at Beaconsfield Fire Station. A sample of ten assets was selected from the report of current assets listed on Redkite. Of the ten assets selected:</p> <ul style="list-style-type: none"> Two assets were not found at the fire station. One of these assets was a battery for a handheld radio. Discussion with the Station Commander established that these are always listed as auxiliary equipment linked to the station and are not scanned when moved to an appliance or someone takes it with them. However, during the audit visit, the fire crews searched the station appliances (vehicles) for the asset, and it could not be found. Of the eight assets found, one was not marked with a barcode label, tag or number. <p>Testing of a different sample of ten items selected at random from the Fire Station found no exceptions. All assets could be identified in the Asset Management System.</p> <p>Risk: If a complete and accurate record of assets and their location is not held on the Asset Management System, there is a risk that the value of the assets on the accounts will be misstated and that assets are not readily available to meet</p>	<p>31-Aug-2021</p>	<p>High Priority</p>	<p>Asset Management Technician</p>	<p>10%</p>	<p>Update from Asset Management and Equipment Manager 09/02/2022:</p> <p>Work has been started to ensure that all equipment within the stores / mezzanine area is suitably asset marked, accountable and audited. The is planned to be completed by the end of the first quarter 22/23.</p> <p>Additional records are being recorded against items of equipment in the form of manufactures serial numbers as well as the BFRS issued scanning label.</p> <p>All new equipment received is asset marked with a BFRS label, the manufacturers serial number is also recorded against the items on Red Kite to help alleviate the issues of lost / missing asset labels.</p>

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	<p>service requirements.</p> <p>Action: As part of the stock check of equipment within stores and on mezzanine equipment will be checked to ensure that it has an asset/barcode tag and that this is recorded against the serial number of the equipment item and recorded on Red Kite.</p>					
<p>BMKFA 1819 1947 Project Management BLH (2) The Hub Performance</p>	<p>Finding During the Audit it was confirmed that the HUB have had difficulties with technical support; which has had an impact of the timeliness of design work, changes or updates and which in turn has led to delays in providing information that is required by Kingerlee – the construction firm. The Quantity Surveyor maintains a schedule of delays caused by the HUB and the associated costs. It was confirmed that any financial implications that arise as a result of the HUB’s poor performance could potentially be recoverable. However Audit found that whilst these potentially recoverable costs are reflected in the Budget Monitoring Financial Statements, they are not separately identified as attributable to any party as this will be the subject of negotiation between all parties depending on final outcomes at the conclusion of construction. The risk of HUB poor performance has been recorded in the risk register. It was confirmed that the Director for the HUB Professional Services has been made aware of potentially recoverable costs and the issues that were causing poor performance have been addressed.</p> <p>Risk Where the impact of poor performance is not completely and accurately reflected in the budget and/or risk register, this may lead to project overspend as the budget will not be forecasting all expected costs.</p> <p>Action The necessary actions to deal with potential financial loss arising from delays on the part of HUB have already been addressed during 2018 and a significant improvement has been seen. The current delay in the construction programme (5-6 weeks) has not altered for some months. Both the HUB and Kingerlee have a responsibility to mitigate any delay as much as possible and with some 8 months of construction still to take place at the time of writing (Feb 2019) they must both maintain the opportunity to do so. Only at post construction and during the period when the final account will be negotiated and agreed, will any financial loss due to delays or failures be attributed. The Director of HUB’s parent company (Integral UK Ltd) has been in discussions with both DFA and Property Manager and he is well aware of the potential claim the Authority may have in due course. The financial statements produced by the QS do show all costs (i.e. worst case) but do not at this stage set out which potentially claimable costs are attributable to which parties. The Authority’s officers will continue to maintain dialogue with senior representatives at both the HUB and Kingerlee over any potential situation (either worsening or improving) that may lead to a claim.</p>	<p>31-Oct-2019</p>	<p>Medium Priority</p>	<p>Director of Finance and Assets</p>	<p>80%</p>	<p>Update from Mark Hemming, Director of Finance & Assets: The Service has commissioned Blake Morgan LLP to produce a scope of work in order to engage a claims specialist. The claims specialist will collate and assess the evidence required to support our claim against the professional team.</p>
<p>BMKFA 2021 2110 Asset Management System (2) System Transactions and Records – Resilience in the Asset Management Team</p>	<p>Finding: There should be a sufficient provisions and service resilience within the team to ensure business continuity should a risk event occur. The Asset Management Team established that the Asset and Equipment Manager had been absent for three months. As a result, the Asset Management Technician had picked up the majority of her responsibilities regarding the Asset Management System. Also, telephone calls still had to be made to the absent Manager in certain situations. The Technician stated that he was still learning what she used to do. Many of the processes, other than the Redkite user processes, were found not to be documented. The Manager appeared to be the only staff member trained in carrying out many of these tasks. This demonstrates a resilience issue in the team.</p> <p>Risk: If adequate measures are not in place to build resilience and mitigate single points of failure within the team, there is a risk that in the event of a prolonged team absence or a team member leaving the Fire Authority, the Asset</p>	<p>30-Jul-2021</p>	<p>Medium Priority</p>	<p>Asset Management and Equipment Manager ; Asset Management Technician</p>	<p>75%</p>	<p>Update from Asset Management and Equipment Manager 09/02/2022: Documentation has now been reviewed. The user guides on Redkite are updated each time a new Redkite feature is introduced. Any identified gaps in guidance documents will be identified and addressed as part of Asset Management Process Mapping</p>

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	<p>Management Team cannot continue business as usual operations.</p> <p>Action: There are user guides available on the Red Kite software programme and a Red Kite Asset Management user guide on the intranet. These are accessible to all staff. The Asset Management Technician has been made aware of these documents. Access rights have been checked to ensure the suitable persons have access and can download Red Kite user guides from the login screen. Documentation to be reviewed for any gaps and process notes to be updated where required.</p>					exercise currently underway.
BMKFA 2021 2119 GDPR (4) Retention and Destruction	<p>Finding: The Records Retention and Disposal Information Asset Register procedure states that information stewards are responsible for ensuring the timely archiving and/or destruction of records and advising the Information Owners where it is believed a retention timescale should be amended following legislation or business needs. The Information Governance and Compliance Manager is responsible for maintaining and reviewing records management processes. The retention schedules for departments and stations are defined within the ROPA. The Authority relies on stewards to ensure that electronic data is disposed of per the retention schedule. However, there is no mechanism in place to ensure this takes place.</p> <p>Risk: If no adequate processes are in place to ensure lawful retention schedules and/or destruction of electronic records, there is a risk of accidental and/or unlawful alteration, destruction, or authorised personal data disclosure.</p> <p>Action: Agreed. A mechanism to review data disposals inline with the retention schedules will be formalised and monitored.</p>	31-Dec-2021	Medium Priority	Director of Legal & Governance	0%	Update from Graham Britten, Director of Legal & Governance: In line with the succession plan approved by the Authority, these recommendations await securing external expertise and input.
BMKFA 2021 2120 Resource Management System (2) Joiners, Movers and Leavers Policy/Procedure	<p>Finding: The Authority does not have a formalised user access management process outlining the processes/controls when a user joins, moves or leaves the organisation and the relevant user access requirements. We noted that:</p> <ul style="list-style-type: none"> When a joiner or mover requires new access or a change in access, a ticket is raised in the Vivantio service desk. Within this ticket, a 'child ticket' is sent to the Resource Management Team (RMT) to create/amend the user's access. This ticket does not capture sufficient information for the RMT operator to provide access. Often users will be provided access and then request further access as this has not been initially provided. Therefore, access being granted is an iterative process. The lack of information on the ticket reduces the effectiveness of the audit trail. Previously, when a user left the organisation, residual access could be left on the account, this is due to there being no formal procedure when revoking access. The process has slightly changed whereby an operator will look at the user account to check what access they have before removing it. <p>Risk: Unauthorised access to company resources may lead to loss and compromise of data.</p> <p>Action: A review of the processes will be undertaken, supported by the end-to-end process mapping within the Internal Audit Plan for 2021-22.</p>	31-Dec-2021	Medium Priority	Group Commander Resourcing & Projects	98%	Update from Group Commander Resourcing & Projects: I have been the new Group Commander within resourcing since May 2021. All processes and procedures have been developed over the past year with existing staff and an array of new staff. To be marked as complete pending evidence of updates processes.
BMKFA 2021 2120 Resource Management System (3)	<p>Finding: We inspected the user account list on FSR and noted that seven generic accounts exist on the FSR application as follows:</p> <ul style="list-style-type: none"> Five of these accounts have the username 'bucks_demoffX' where X is a number between 1-5. The use and 	31-Dec-2021	Medium Priority	Group Commander Resourcing	70%	Update from Group Commander Resourcing & Projects: An internal Bucks Fire project gets

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Generic Accounts	<p>rationale of these accounts was not provided by management;</p> <ul style="list-style-type: none"> One account with the username 'rmtcrashtestdummy' which similarly, was not rationalised; One account has the username 'usardog'. It was noted that this account is created for the canine unit that the Urban Search and Rescue (USAR) team utilise. It was further noted that the 5 'demoffX' accounts had never logged into FSR, the 'crashtestdummy' account was last accessed in May 2020. <p>Risk: There could be a loss of accountability of user performed actions. Unauthorised access to company resources may lead to loss and compromise of data.</p> <p>Action: A review of user accounts to be undertaken and redundant generic accounts to be removed.</p>			& Projects		<p>underway in Jan 2022, this project will work closely with FSR reference permissions within FSR. Current and required permissions will be both reviewed and created. As part of this work redundant generic accounts will be reviewed along with a change management process. Once it's been established what user permissions we require these permissions will be reviewed as appropriate or highlighted through change control.</p> <p>Action on-going Jan/Feb 2022</p> <p>Resource Management Team (RMT) are working closely with FSR regarding additional permissions and new user accounts/role profiles. Work started in Jan 2022 and we are on target to complete by end of March 2022.</p>
BMKFA 2021 2120 Resource Management System (4) Change Management - Testing	<p>Finding: The vast majority of change controls are operated by the Vendor. Irrespective, an internal change control process exists at the Authority. Changes are to be raised through the Vivantio service desk by a change initiator and must include key information However, we noted that:</p> <ul style="list-style-type: none"> The Authority does not have access to a test environment for FSR; Changes are developed and tested by the Vendor; Functional requirements and subsequent tender review for the application highlighted a question over access to a test environment to perform user acceptance testing (UAT) when a change is being made to the application; Changes pass through over 1000 automated tests that are ran on the application to ensure that the change does not impact anything on the application, the change then has specific testing to ensure it is performing the functionality as per the design. The Authority does not obtain any assurance from the vendor surrounding the change management process and is thus wholly reliant on the vendor for this. <p>Risk: There is a risk that implementation of changes which are not aligned with business requirements and/or impact on the continued operation of the production application. Implementation of developments containing bugs or not matching</p>	31-Dec-2021	Medium Priority	Group Commander Resourcing & Projects	99%	<p>Update from Group Commander Resourcing & Projects:</p> <p>This is constantly evolving due to the flexible approach to all crewing within BFRS. The service has a Managing Business Change procedure which has to be adhered to.</p> <p>Action to be closed following receipt of Managing Business Change procedure.</p>

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	<p>the business' requirements.</p> <p>Action: Change management process to be reviewed and fully documented (see also Finding 5).</p>					
BMKFA 2021 2120 Resource Management System (5) Change Management – Internal Tracking and Assessment	<p>Finding: All changes are required to pass through the change management process with a request for change (RFC) document completed for each change. The Authority was unable to provide any documentation around the selected changes for inspection. Therefore, we were unable to determine if the change management process had been followed for the selected changes. This included cost benefit analysis and CAB minutes of discussion.</p> <p>Risk: There is a risk of implementation of changes that contain bugs, misaligned with business requirements or impact on the continued operation of the production application. Development changes are misclassified, create unforeseen cost and/or are not assessed for business need and risk.</p> <p>Action: Change management process to be reviewed and fully documented (see also Finding 6).</p>	31-Dec-2021	Medium Priority	Group Commander Resourcing & Projects		Due to a change of personnel the revised date for this action is now December 2021.
BMKFA 2021 2120 Resource Management System (6) Backups – Disaster Recovery Testing	<p>Finding: Backups and the associated disaster recovery procedures are controlled and operated by the Vendor. Although it was determined that backups are being conducted on the FSR application and that the Vendor are trained to conduct disaster recovery tests, no evidence was available to inspect to demonstrate a disaster recovery test had been performed. We recognise that this is often an annual exercise and FSR has only been in effect at the Authority since April 2020.</p> <p>Risk: There is a risk of partial or complete loss of data. Unavailability of systems and lack of business continuity.</p> <p>Action: A disaster recovery will be undertaken to test business continuity in this area.</p>	31-Dec-2021	Medium Priority	Group Commander Resourcing & Projects		<p>Update from Group Commander Resourcing & Projects:</p> <p>At any time there should be a minimum of 2 team members from FSR trained and authorised to perform a catastrophic infrastructure failure recovery. The qualified and trained team members must test emergency contact procedures.</p> <p>FSR monitor several critical application metrics 24/7. These include, but are not limited to:</p> <ol style="list-style-type: none"> 1. Requests per seconds 2. Available database connections 3. Error rate 4. Background worker queues 5. Integrations with third party systems (e.g. Control room management software) <p>Whenever one of these metrics goes outside the acceptable range, on-call engineers are automatically alerted. A post mortem is created after every incident, with a root cause analysis, lessons learnt, and improvement actions. Checklists</p>

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						<p>and runbooks are updated accordingly to improve the mitigation and response to future incidents.</p> <p>Database Backups: FSR perform two types of database backups:</p> <ol style="list-style-type: none"> 1. Snapshot backups. This type of backup is performed every 12 hours. During this backup, the entire database is stored as a single file. This file is then encrypted and saved to an Amazon S3 EU data centre. We keep 30 days of these backup files. Backups are protected against deletion using S3 Version Management. 2. Streaming backups. This type of backup is performed continuously. Data is stored at an Amazon S3 EU data centre in encrypted format. In case of a catastrophic failure, these backups are at most a few minutes behind. <p>Action to be closed following receipt of evidence of a recent disaster recovery test.</p>
BMKFA 2021 2120 Resource Management System (7) User Access Reviews	<p>Finding: We noted that periodic user access reviews are not undertaken by the Resource Management Team at the authority when managing users access. Although a review of user access was completed in July 2020, there are no plans for this to continue.</p> <p>Risk: There is a risk of inappropriate access to the Authority's resources.</p> <p>Action: User access to be reviewed every six months.</p>	31-Dec-2021	Low Priority	Group Commander Resourcing & Projects		<p>User access is to be reviewed once the permissions / role profile project has been completed – March 2022. I don't require all user access to be reviewed every 6 months, only when/if a staff member changes their role within the service which may include additional or less access.</p> <p>Due to be completed in April 2022.</p>