



Bedfordshire
Fire and Rescue Service

BEDFORDSHIRE FIRE AND RESCUE AUTHORITY

Asset Management Plan 2018 to 2021

Information Technology

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1 THE NEED FOR AN **INFORMATION TECHNOLOGY** ASSET MANAGEMENT PLAN (AMP)

Bedfordshire Fire and Rescue Authority is responsible for the provision of the Fire and Rescue Service within the Local Authority areas of Bedford Borough, Central Bedfordshire and Luton Borough. Its three main objectives are to:

- Respond effectively, manage risks and reduce the number of emergency incidents that we attend.
- Ensure high standards of corporate governance and continued service improvement.
- Create a safe, fair and caring workplace for our staff.

This Asset Management plan aligns to a programme of action for Information Technology over the medium-term (4 years) and shows specific actions plans for the short-term (1 year). This plan is submitted for review and approval on a yearly basis and is designed to provide visibility of work plans for the forthcoming year based on identified service priorities and tracks actions & performance from previous year. It is intended as a tool which helps to define, plan, implement and measure how the Authority:

- Makes its investment decisions.
- Maintains and improves its assets.
- Increases the cost effectiveness of its portfolio.
- Promotes innovation and development in asset management.

It is intended for a wide audience including:

- Members - to support decisions on investment priorities in the portfolio.
- Service managers - to identify changes to meet their needs.
- Information Technology staff involved in executing and prioritising deliverable work streams in the asset plan.

This plan seeks to:

- Ensure the provision of user focussed and cost effective Technology function, which will be sufficiently flexible to adapt to the Authority's long term requirements.
- Support the Authority's corporate risk management in relation to its legislative and environmental obligations.
- Deliver a cost effective and responsive service, which supports operational needs.
- Help to strategically plan Information Technology for the future.
- Contribute to the Authority's community safety initiatives through the provision of ICT infrastructure and applications.
- Provide the Authority with long-term value for money.

2 HOW THE ICT AMP INTERLINKS WITHIN THE CORPORATE STRUCTURE AND OTHER STRATEGIES

The Authority has an established Community Risk Management Plan that outlines what it aims to achieve and how during the next four years. It sets out in particular:

- Delivery of our Services
- Service Improvements
- Community Risks
- Who is at Risk
- Consultation Responses

The ICT AMP is a live document that evolves through time and reflects appropriate changes based on up to date practices.

The AMP links with and informs other strategic decisions and plans for the effective management of our Fire and Rescue Service, specifically.

- The ICT Strategy Plan
- ICT Roadmap
- Corporate financial planning cycle (capital and revenue)
- The Corporate Risk Register

3 BACKGROUND

In July 2017 the ICT Shared Service Governance Board comprising Principal Officers and Managers from both Bedfordshire Fire and Rescue Service (BFRS) and Cambridgeshire FRS undertook the five yearly review of the ICT Shared Service agreement and agreed to its continuation for a further five years. This agreement was ratified by Bedfordshire Fire Services Authority through the Corporate Services Policy and Challenge Group.

The ICT Shared Service upgrade and investment decisions for ICT assets are influenced and taken jointly to ensure economies of scale and ease of delivery are optimised in line with principles and purpose a shared service. This can result in each organisation being influenced by the others priorities and business need. One of the purposes of the Governance Board is to ensure no conflicts arise for resource scheduling, managing and developing each organisation's ICT assets.

The development and support of business applications is managed for BFRS through the Business Information Management Team (BIT), which does not form part of the Shared Service. This team develops and manages information applications/assets and ICT training function. The ongoing development, upgrade and investment decisions for information applications and assets are taken through the Corporate Management Team (CMT) with ownership of specific projects assigned to members of CMT to ensure user focused service based on priorities identified by BFRS. Investment decisions align to the Medium Term Financial Plan which is monitored through the quarterly Capital Strategy Board and progress on delivery is monitored monthly through the CMT as well as BFRS Programme Board on a quarterly basis.

This Information Technology Asset Management Plan takes advantage of the benefits that arise from joint working within the ICT Shared Service, as well as the separate Business Information Team which when seen together combine to provide a comprehensive Information Technology capability.

4 PURPOSE AND ROLE OF ICT SHARED SERVICE

The primary objective of the ICT Shared Service is the efficient, resilient and economical provision of infrastructure, communications and end user technologies in support of front line Services, support services and our partners. Users of these services are both internal (Fire and Rescue Headquarters, Area Offices, Fire Stations, Service Emergency Fire Control and the Service Training Centre) and external partner organisations.

The ICT Shared Service acts as the 'prime contractor' for all such technology services provided to users. Users, therefore, deal directly with the ICT Service Desk on all matters concerned with IT and communications; the Service Desk then in turn arranges the involvement of either internal expertise or external parties (e.g. computer vendors, software developers and user manual producers) as required.

The relationship between the ICT Shared Service and users has been formalised by the implementation of an ICT Services Catalogue with associated Service Level Agreements (SLA). This Service Catalogue enables BFRS to optimise full use of ICT assets and the shared service, including business continuity resilience arrangements to support the delivery of frontline services.

4.1 Functions Performed

The general functions performed by ICT are:

Infrastructure, support and delivery of

- Standard desktop applications
- Email
- Finance management system

- Internet
- Database Management
- Mobile data terminals
- Fire ground radio
- Telephones fixed
- Telephones mobile
- Remote access
- Service desk
- ICT security and threat management.
- Main Scheme Radio (Airwave service)
- Emergency call handling mobilising system

5. PURPOSE AND ROLE OF THE BUSINESS INFORMATION TEAM

The purpose of the Business Information Team (BIT) is to support day to day business activities and decision making through the analysis and optimisation of business processes and management of information. Working in collaboration with the ICT Shared Service, the BIT focuses on software applications, business processes and data management. Systems providing enhanced functionality will require training and application testing, products such as VDI, Windows 10 upgrade require working across both ICT Shared Service and the BIT.

As the functions of the BIT are specifically linked to the way BFRS carries out its business as opposed to operating a series of common infrastructure platforms, this function is not part of the ICT Shared Service. BFRS operates a combination of commercially off the shelf software products as well as internally developed software applications and integration services.

The BIT provides application support to end users via the ICT Shared Service Desk where calls regarding software issues are logged and managed to resolution by the BIT. The BIT in turn arranges the involvement of external parties (e.g. software developers and suppliers) as required.

5.1 Functions performed by BIT

The general functions performed by BIT are:

Line of business application development and support

- Business Process Improvement

- Applications Systems Administration Support
- Application and System Training
- Staff Induction
- Systems Integration
- Systems & Applications Development
- Information Management and Security
- Database Management
- Business Intelligence and Reporting Solutions

6 CORPORATE TECHNOLOGY FUNCTIONS SUPPORTING DELIVERY OF FRONTLINE SERVICES

- Technology Strategic direction aligned to Service vision and plans
- Contingency/disaster recovery
- Identification and maintenance of ICT risk information
- Policy documentation
- Project management

7 LEGISLATIVE REQUIREMENTS

ICT equipment is used and operated is affected by the following main legislation:

- Freedom of Information Act
- Data Protection Act
- **General Data Protection Regulation (GDPR)**
- Human Rights Act
- Regulation of Investigatory Powers Act (RIPA)
- Computer Misuse Act
- Radio Telegraphy Act
- Telecommunications Act
- Waste Electronic and Electrical Equipment Regulations

Policy documents provide guidance on how the Authority complies with the above Acts. The Head of ICT monitors the requirements of existing and emerging legislation to ensure statutory compliance.

8 ICT ASSETS

BFRS has a variety of ICT assets located throughout the Service area. This section examines where these assets are used and the key stakeholders in maintaining the asset and maintenance contracts. A comprehensive ICT register is maintained and available on the Service IS Systems drive.

Networks

All sites have Wide Area Network (WAN) high speed links connecting them to the corporate network, in addition three of the main sites, HQ, Bedford and Luton stations have secondary links for resilience. These are fully managed through the network contract, including internet connectivity with BFRS being a founding member of the Cambridgeshire Public Sector Network (CPSN).

There are direct resilient links (provided by a separate network supplier – Up Data) to the HQ mobilising system from Essex FRS who host the mobilising system as part a joint collaborative procurement. BFRS effectively operates its own mobilising system as a remote satellite link to Essex FRS. BT is responsible for network telephone lines feeding the control room.

8.1 Overview of Hardware Assets

Servers

BFRS Virtual servers and key network assets are based on BFRS premises with mirrored services on Cambridgeshire FRS premises.

Clients

There are a variety of client devices deployed across the Service. These are a mixture of PC's, Laptops, Smartphones, tablets, thin clients as well as a range of Audio Visual (AV) equipment which includes projectors, amplifiers, speakers and DVD players. All fire stations and area offices have number of PC's, terminals, two e-learning and one audio-visual (AV) PC, and a number of portable computing devices including iPads.

Desktop PCs have undergone a programme of replacement with Virtual Desktop endpoints as part of the VDI project. As working practises have evolved and equipment has become end of life a number of users have changed from using desktops to Laptops or tablets. The VDI project has been closed down in March 2018 through the Corporate Programme Board.

The Incident Command Training Suite is equipped with PC, AV and telecoms equipment.

Devices on Appliances

All Rescue Pumps have incorporated a mobile data terminal on a hardened tablet PC platform and Automatic Vehicle Location System (AVLS). The Incident Command vehicle is provided with AVLS, laptops and other AV equipment. ICT staff are responsible for 1st line maintenance.

Telephony

Currently in use is a network consisting of Meridian Option11 and Nortel BCM PBX. A variety of telephone instruments are deployed at all locations (analogue, digital and IP) and voice mail provided Fax machines are also provided at various locations throughout the Service. Primary fax machine is implemented using call pilot (Meridian voice mail system) providing email fax message facilities. RDS stations are provided with a PSTN line. ICT SS staff are responsible for provision, changes, system maintenance and handsets. A maintenance contract for second line repair also exists with BT. All of these PABX will be replaced by a Unified Communications platform (Skype for Business), the project is due to close at end of 2018.

Portable Computer Equipment

To assist flexible working practices, laptops, Smart Phones and tablet devices have been issued for use across the Service many Service laptops have full 3G connectivity. ICT SS staff are responsible for supply, administration, audit and first line maintenance. In addition, ICT have enabled a secure remote service allowing BFRS staff to have full access to the Corporate Network work from any computer with an internet connection as part of providing flexibility in working practises and also in the event of civil contingency.

Message Pagers, Radio, and Mobile Phones

These are provided as communication facilities for senior staff, flexible duty officers and lone working staff. ICT SS staff are responsible for the supply, administration, first line maintenance, and auditing of the above. Maintenance is as required basis with a local repair facility. Message pagers are rented on a three year contract.

Printers

The multi-function printers across the BFRS provide secure printing, copying, scanning facilities. This is a managed service contract from Canon; ICT SS staff are responsible for contract management.

Message pagers	60
Mobile Telephones & Sim Cards	315
Printers	32

8.2 Overview of Software Assets

The BIT manages the day to day running of the Services software assets. Any major issues are escalated to the software suppliers via maintenance agreements including Microsoft Gold Partners. Functional support, and training is provided through the BIT in liaison with system owners and ICT.

Business applications

Microsoft Dynamics Great Plains - Is the Authority's financial management system which integrates all the Authority's financial ledgers and also provides a purchase ordering system, a stock control system and an electronic stock requisition system. The system is accessed on a daily basis by Finance staff, Budget Managers, Procurement Section, Stores and stations.

Pharos, supplied by Sophtlogic Ltd, is an integrated Employee Resourcing Platform (ERP) used widely through the Service. Databases integrated include; Training, Fire Safety including Legislative Fire Safety, Fleet Management and Whole time Duty rostering. The day-to-day running, maintenance and development is managed and provided by the BIT.

Work has been underway since 2016 to utilise 'best of breed' products which will replace the Pharos suite of applications, where applicable this will be supplemented with internally developed products using open source software. This migration will continue into 2019.

There are in excess of 50 applications used throughout the Service, notable applications include:

Gartan -Retained Duty System (rostering for retained firefighters, supplied and supported by Gartan.

Infographics Fire Safety (Protection) which is the replacement product

iTrent- HR/Payroll provided as a cloud based hosted application by Midland HR Ltd

ReqLogic (Procurement),

Incident Recording System Cloud based application provided by Home Office for upload of performance data.

Microsoft Office Suite of productivity tools

Corporate Performance System

Corporate performance data is managed and stored in Microsoft SharePoint. SharePoint provides a controlled document management and project management workspace and assists in analysing BFRS corporate performance.

Integration and Process Automation

Automation of Service processes and bespoke system integration between applications has been developed using open source software including micro services for middleware. These have been based predominantly on .net language with a limited number using Java open source. Support is provided by the BIT, without further third party support costs.

9 THE NEXT FOUR YEARS

The following changes are aligned to the Corporate Plan and Medium Term Financial Plan. They underpin the ICT Roadmap for the four years. As can be seen in the Medium Term Financial Plan, monies have been designated to ICT to deliver these services.

9.1 Technology Projects

The ICT Shared Service will continue to build on joint infrastructure projects as well as application upgrades. In a number of these the BIT and ICT Shared Service work in conjunction with each other.

- **Shared servers and Hardware replacement programme.** Contained in the medium term financial plan the use of the existing assets have been 'sweated' to extend their life without compromising performance or security to maximise use of finances. The Server replacement project has started in 2018 as these are now end of life. As part of the implementation of the new hardware, disaster recovery testing is planned to be take place once implementation is completed. The underlying infrastructure has been established with BFRS and Cambridgeshire FRS providing back-up infrastructure for each other.
- **Wide Area Network.** The existing contract for the provision of Wide Area Network will come to an end in in June 2018, an 18 month extension has been put in place to extend it by 12 months plus 6 months, to December 2019 as part of a joint procurement approach. Procurement for the replacement service known as 'Eastnet' has reached a major milestone with contract award to a new supplier. This continues to be a joint venture with other mid-Anglia public sector bodies and Cambridgeshire FRS in order to leverage economies of scale.
- **Security and Resilience, Penetration Testing and Enhancements.** The programme of penetration testing continues as a yearly cycle. Further enhancement of cyber protection has taken place with active email and advance threat detection put in place during early 2018. Rollout of secure messaging will continue in 2018/19.
- **VDI Upgrade.** A secondary project has been started to move the VDI on product to its next generation replacement Xen Desktop this project has been scoped for a completion date of Q3 of 2018.

- **Cloud Services.** The Service has been able to take advantage of appropriate cloud technologies and infrastructure where possible. BFRS operates a hybrid environment with applications such as iTrent, hosted as Cloud based services with the predominant number internally hosted using Virtual Server based on VM Ware virtualisation technology.
- **Unified Communications.** A project is underway to deliver a suite of communication products to enhance productivity as part of the Microsoft Skype for Business product. This will include replacement telephony system providing a resilient platform based on IP for all non 999 voice calls. In addition it will provide a suite of collaboration tools such as Desktop conferencing, Instant Messaging, Presence and facilities for video to the desktop. The project is due to complete in April 2019.
- **Windows 10 Upgrade.** A project will be incepted during 2018 to upgrade the underlying Windows Operating System from Windows 7 as this will become end of life and no longer supported after December 2019. Whilst this will upgrade the underlying operating system the compatibility and upgrades of a number of applications may be necessary to ensure functionality is not compromised. Compatibility testing is underway in 2018.
- **SharePoint Upgrade.** The existing SharePoint product is a multifaceted platform that provides various productivity tools and an information knowledge environment. These range from an Intranet function for communications and knowledge sharing, document management, collaboration platform and document sharing. The upgrade will increase its functionality and stabilise an end of life hardware environment.

9.2 Technology supported projects

Replacement Mobilising System

The BFRS Options Appraisal for a new mobilising system to replace Frequentis and Remsdaq is now complete, and the FRA has approved a partnership with Cambs and Suffolk Fire and Rescue Services. The new mobilising system Project has been aligned to the national ESMCP project. Work will continue through the next two years.

Whole Time Availability System

The Service is implementing a replacement Whole Time Availability system which will provide significant improvements in the assessment of availability and deployment of our whole time firefighters.

HR and Payroll System - iTrent

The HR and Payroll system is the Service's cloud based application. The system was procured in April 2016 and has gone live with Core HR, payroll and manager self-service as part of Phase 1. Phase 2 has commenced and will replace the PharOS system with new recruitment, time and expenses functionality and is expected to complete by end of financial year 2018/19.

Cloud Based Products Systems and Applications

BFRS is 'Enterprise Licenced' allowing upgrades to take place in-line with business need through the ICT Shared Service. The Service is assessing and evaluating the potential of cloud based and open source software where this is appropriate to our needs following central government direction.

Asset Management and Asset Tracking

An Asset Management and Tracking tool is being assessed to assist the Service in maintaining accurate and timely records of all the Service's assets to include their location, servicing record, value, replacement date and modification record.

Replacement of Public Address Systems

Following extensive surveys at four stations Luton station has been deemed to be the priority to replace aging infrastructure, to optimise deployment of staff resources at the locations.

Implementation of Fire Safety Application Protection element of 'Prevent and Protect'

As part of migrating from the PharOS suite of applications, a Fire Safety application which contains and manages information relating to premises and Fire Safety checks, visits and compliance orders has been procured and is being implemented throughout 2018.

Implementation and Go Live of Safe & Well application element of 'Prevent and Protect'

A new in-house developed Open Source application has been developed iteratively, following Agile methodology, defined and customised specifically for BFRS needs. This is being introduced to replace the current Home Fire Safety Check database, providing additional functionality around the management and recording of Safe and Well visits. The product went live in May 2018 with further customer driven enhancements being developed throughout 2018/19.

10. FINANCIAL PLANNING

The Head of Information, Communications & Technology (HICT) is a member of the Service's Capital Strategy Group (CSG). HICT will annually provide capital bids using the Revenue and Capital Project Appraisal Form (FMS3/4) for consideration by CSG and the budget approval process.

Any Corporate Management Team member seeking an improved ICT facility that would be subject to a capital bid is required to discuss and consult with HICT. HICT is then required to provide the technical elements to the business case bid ensuring appropriate consultation is undertaken with Cambridgeshire FRS to ensure opportunities for harmonisation of technologies are identified and acted upon. If agreed, the proposal will be taken to the FRA for formal inclusion in the Capital Programme. The Services Objectives, plans, ICT Strategy and asset replacement policies provide the framework for forward planning of ICT requirements, including by means of annual reviews of this Asset Management Plan, with the associated ICT related budgetary provisions incorporated into the Service's Medium-Term Financial Plan.

11. MEDIUM TERM CAPITAL PLAN – TECHNOLOGY INVESTMENT PROFILE

The table below shows the planned technology infrastructure upgrades and replacements contained within the medium term Capital Plan. Before proceeding with any replacement the costs are justified and considered as part of the project business case. In certain cases due to the rapid pace of change and working practises such as the move to mobile technologies from fixed technology costs are being re-balanced and shifted from one area to the other to accommodate the need for the organisation to become more flexible.

	Project	2018/19	2019/20	2020/21	2021/22
		£000's	£000's	£000's	£000's
1	Server & Storage Hardware Renewal	320			
2	Unified Communications	197			
3	Primary Network Switch Replacement		100		
4	Network Structured Cabling Replacement		60		
5	Local Area Network (LAN) Replacement		50		
6	Secondary Network Switch replacement			35	
7	Renewal of Mobilising System Mobile Data Terminals (who & where resources available)		276		
8	VDI Upgrade (Xen Desktop)	104			
9	SharePoint Upgrade	77			
10	Wi-Fi Refresh		tba		
11	End Point Refresh				tba
12	Public Address Systems Replacement	30			
13	Upgrade Unified Communications				tba

12. CONTRACT PROVISIONS & RENEWALS

The ICT function manages a large number of contracts on behalf of the Service for the provision and ongoing support of technology products and services. These contracts are let in line with Public Sector procurement rules and legislation. Where new projects involve the purchase of services, funding for the first year ongoing support contract is normally part of the project cost. Subsequent years funding will form part of the ICT budget bid in line with BFRS annual financial planning cycle.

As support contracts terms reach end of term, planning is put in place for procurement of the new contract. These are shown below for contracts due to expire in 2018/19:-

Service	Start date	End date
Annual Software Support & Maintenance	01/04/2015	31/03/2019
Penetration testing on behalf of BFRS and CFRS	01/10/2015	30/09/2020
BlueLight Tender Management and Contracts Register	01/11/2015	31/10/2018
Airtime & Silver Service Level Support	01/02/2015	31/01/2019
Software - RDS mobilisation system	03/07/2015	02/07/2019
GP Licence/Software Support	05/09/2013	03/09/2018
OH Software	01/10/2015	11/01/2019
Maintenance of phone switches at HQ sites	04/12/2014	25/01/2019
Trade Mark Licence Renewal	14/10/2011	07/10/2018
Pharos 10 Software	22/04/2004	31/03/2019
WAN & LAN Web Services	07/11/2011	31/12/2019

Marketing	01/08/2011	06/08/2018
Software licence and support	01/06/2013	30/09/2018
Licences for EU-Supply CTM Contract Management	01/04/2015	06/04/2019
ChemData Coporate Licences (x75)	01/04/2014	31/03/2019
Desktop package, messaging service	08/06/2015	07/06/2018
Escrow Agreement 37626	01/03/2016	28/02/2019
Chemdata Pocket Licences	01/10/2013	30/09/2018
Supply and fit of communication devices and audible and visual vehicle mounted warning systems (blue light)	01/11/2016	31/10/2018
Specialist ICT Contractor Services	08/09/2016	07/08/2018
ICT Hardware Maintenance Support	01/07/2016	30/06/2019
Unified Comms	29/03/2017	28/03/2019
Microsoft subscription licences	01/01/2018	31/12/2018
Service Management for CPSN	01/12/2015	30/06/2018
BSI H&S Professional Services Subscription/Licences (H&S) - Barbour	01/10/2017	30/09/2018

13. REVIEW OF ACTION PLAN 2017/18

Progress against each of the actions is detailed in the table below, where particular business cases are deferred or projects or work streams re-baselined to complete in subsequent years, these are shown below.

REFERENCE NUMBER	ACTION	STATUS
ICT AMP01/17-18	Produce revised ICT Asset Management Plan for 2017/18 to 2020/21 updating previous content and incorporating new ICT roadmap and applicable corporate projects from Community Risk Management Plan.	Completed May 2018
ICT AMP02/17-18	Deliver technical requirements for the forthcoming Asset Management Project which will provide a method of managing and tracking assets in line with requirements	Project suspended to recommence 2018/19
ICT AMP03/17-18	Implement core hardware for Unified communications project for telephony upgrade and provision of collaboration tools incl. messaging and integration with VDI	Core Hardware completed April 2017
ICT AMP04/17-18	Review of annual customer satisfaction and adopt findings into ICT Shared Service Plan	Completed July 2018
ICT AMP05/17-18	Review and refine ICT Strategy aligned to service requirements	Reviewed and ongoing development
ICT AMP06/17-18	Develop Information management strategy and action plan to implement General Data Protection Regulation (GDPR)	Ongoing enhancements
ICT AMP07/17-18	Enhance Cyber threat defence measures to protect our information and data assets	Completed early 2018 and ongoing as BAU
ICT AMP08/17-18	Implement ICT elements for new Website to provide enhanced customer experience and informative data analytics	Completed May 2018
ICT AMP09/17-18	Upgrade of Share point environment providing technical infrastructure facilities.	To commence
ICT AMP10/17-18	Develop strategy and roadmap for Workbench development applications in line with business priorities.	Ongoing
ICT AMP11/17-18	Implement Phase 2 of HR (Recruitment) in line with required project timelines	Ongoing through 2018
ICT AMP12/17-18	Implement Whole-time Availability System in line with required project timelines	Ongoing through until Q1 2019
ICT AMP 13/17-18	Review and refresh of mobile working technologies and associated assets complementing ESMCP project.	Review undertaken implementing Risk MDT's through 2018
ICT AMP14/17-18	Complement secure email facility with additional solution to support secure communications with organisations operating outside of the government secure network.	System in place

REFERENCE NUMBER	ACTION	STATUS
ICT AMP15/17-18	Upgrade existing Microsoft e mail Exchange platform to new version	Completed summer 2017
ICT AMP16/17-18	Establish the ICT tactical response to the Emergency Services Mobile Communications Programme assessing technical requirements and impact on existing infrastructure and resources and future strategies	Ongoing in line with national time scales
ICT AMP17/17-18	Work with CPSN partners to establish next generation Mid-Anglia Public Sector Network including actively supporting procurement process for PSN services.	Achieved in line with partner requirements
ICT AMP 18/17-18	Replace Public Address Systems at Kempston and Stopsley stations in line with estates plan.	Re-baselined to 2018 for Luton
ICT AMP 19/17-18	Provide additional WAN capacity for Camborne to provide enhanced support for the ICT estate	Completed Summer 2017

13.1 Other Achievements in 2017/18

- Completed and in live use, three internally developed open source applications for Sickness Absence, People Position and Other Absences using Workbench platform
- Go Live of internally developed prevention application for 'Safe & Well' using open source software on the Workbench platform
- Go Live of Retained Recruitment application developed as a collaboration STEP project
- Replacement of Service wide pagers, used for response and deployment.
- Implementation of Information Audio Visual screens at HQ
- Implementation of station screens at Whole time stations

14 ACTION PLAN 2018/19

Activities planned for continuation, commencement or completion in 2018/19, are shown in the table below. It aims to build upon the previous year's achievements to ensure continuous improvement in Technology & ICT service delivery. Where particular projects or work streams are planned to complete in subsequent years, the phases within this 2018/2019 year are shown. Where dates have not been confirmed within each of the projects, the nearest estimated month is shown.

REFERENCE NUMBER	ACTION	TARGET DATES
ICT AMP 01-18/19	Produce revised ICT Asset Management Plan for 2017/18 to 2020/21 updating previous content and incorporating new ICT roadmap and applicable corporate projects from Community Risk Management Plan.	Completed June 2018
ICT AMP 02 - 18/19	Deliver technical requirements for the forthcoming Asset Management Project which will provide a method of managing and tracking assets in line with requirements	Ongoing through the life of the project
ICT AMP 03 -18/19	Implement Unified Communications for telephony upgrade and provision of collaboration tools incl. messaging and integration with VDI	Completion April 2019
ICT AMP 04 -18/19	Implement upgrade, server & storage refresh project	October 2018
ICT AMP 05 -18/19	Implement VDI upgrade project	By December 2018
ICT AMP 04 -18/19	Review of annual customer satisfaction and adopt findings into ICT Shared Service Plan	August 2018
ICT AMP 06 –18/19	Review and refine ICT Strategy aligned to service requirements	Throughout 2018/19
ICT AMP 07 –18/19	Implement a series of further control measures & enhancements to ensure ongoing compliance for General Data Protection Regulation (GDPR)	January 2019
ICT AMP 08 –18/19	Enhance Cyber threat defence measures to protect our information and data assets	Throughout 2018/19
ICT AMP 09 –18/19	Upgrade of Share Point environment providing technical infrastructure facilities.	March 2019
ICT AMP 10 –18/19	Implement Phase 2 of HR (Recruitment) in line with required project timelines	Throughout 2018
ICT AMP 11 -18/19	Implement Whole-time Availability System in line with required project timelines	Throughout 2018
ICT AMP 12 -18/19	Implement replacement Fleet Management application in line with required project time scales	Throughout 2018/19

REFERENCE NUMBER	ACTION	TARGET DATES
ICT AMP 13 -18/19	Complete rollout of Risk Mobile Data Terminals	Complete by October 2018
ICT AMP 14 –18/19	Implement applications compatibility testing and complete upgrade where needed ready for Operating System upgrade for Windows 10	March 2019
ICT AMP 15 –18/19	Implement Operating System upgrade for Windows 10	September 2019
ICT AMP 16 -18/19	Provide ICT support to the Emergency Services Mobile Communications Programme assessing technical requirements and impact on existing infrastructure and resources and future Strategies	In line with Project time scales
ICT AMP 17 -18/19	Establish implementation plan for next generation Network 'Eastnet' Wide Area Network working with Mid-Anglia Public Sector partners.	September 2018
ICT AMP 18 -18/19	Replace Public Address System at Luton stations in line with estates plan.	By December 2018
ICT AMP 19 -18/19	Carry out Penetration Testing and implement any improvements from its findings	September 2018

15 ICT PERFORMANCE

The ICT Services Catalogue provides a detailed description of the support the shared team provides to BFRS and Cambridgeshire Fire and Rescue Service (CFRS). The catalogue identifies the shared ICT across both Services with annexes for those ICT systems that are unique to a particular Service. Each entry aims to describe the ICT service being delivered from a user perspective, when it is available, what is included and how the level of service is measured. The Catalogue was drawn up in collaboration with senior ICT users across both services. Their advice and guidance on how each system is used, where it is needed and when was critical in ensuring each ICT system was given an appropriate level of cover.

15.1 ICT Performance Review 2017/18

Performance in the ICT Shared Service has shown a steady improvement as practices and controls were introduced, generally achieving or exceeding performance targets across the range of ICT indicators over the last three years.

In 2017/18 there was increased pressure to maintain the performance that had been established in previous years due to staff shortages. However the Virtual Desktop Infrastructure that has been rolled out helped to maintain good levels of support through the ability to resolve incidents remotely as part of a standardised environment.

Targets achieved for last quarter for 2017/2018 are not yet available as these are being calculated. These figures will be reported as soon as the data is available.

15.2 ICT Performance Targets 2018/19

For 2018/19 we are maintaining previous years' targets taking into account the severity of each incident, these are aligned to ICT systems delivering an efficient service ensuring the Service's primary objectives can be met effectively. This approach continues to build upon the foundations that have been laid, in preparation for structural changes planned in the ICT organisation which aims to stabilise resources and improve performance in the area of project delivery and business change through introducing new technologies as part of the Medium Term Capital Programme.

APPENDIX 1 – ICT PERFORMANCE 2017/18 AND TARGETS 2018/19

Measure		2014/15	2015/16	2016/17	2017/2018	
No.	Description	Actual (Target)	Actual (Target)	Actual (Target)	Actual (Target)	Comments
IM1	The Number of Incidents on Mission Critical services resolved within 1 Hour	100% (90%)	100% (90%)	92% (98%)	n/a (80%)	Comparative TBA
IM2	The Number of Incidents on Business Critical services resolved within 2 Hours	92% (86%)	100% (86%)	99% (96%)	n/a (96%)	Comparative TBA
IM3	The Number of Incidents on Business Operational services resolved within 4 Hours	92% (83%)	100% (83%)	100% (90%)	n/a (90%)	Comparative TBA
IM4	The Number of Incidents on Administration Services resolved within 8 Hour	88% (80%)	94% (80%)	93% (90%)	n/a (90%)	Comparative TBA
AV1	Core ICT services availability	97% (97%)	100% (97%)	100% (97%)	100% (97%)	3% Better than target
AV2	Business Applications Availability	97% (97%)	100% (97%)	100% (97%)	100% (97%)	3% Better than target

APPENDIX 1 – ICT PERFORMANCE 2017/18 AND TARGETS 2018/19

INFORMATION AND COMMUNICATION TECHNOLOGY PERFORMANCE TARGETS 2018/19								
Ref	Performance Indicator	Source of Performance Indicator	Frequency of Reporting	Benchmark Performance Data	BFRS Baseline Performance	BFRS Target 2017/18	BFRS Target 2018/19	Target Setting Rationale
ICT1	User Satisfaction	Customer Survey	Annual	Better than ICTSS 60.2% starting benchmark set by earlier survey.	2014 - 60.73% 2015 - 67.5% 2016 - 89.0%	70%	70%	Performance has been showing steady improvement from inception of ICT Shared Service to Target being achieved in 2016. As this is the first time this target has been achieved and not established over time it is proposed to maintain at the same level.
IM1	The Number of Incidents on Mission Critical services resolved within 1 Hour	Joint Catalogue of Services	Quarterly	Catalogue of Services SLA. All Mission Critical, Priority A and B Incidents resolved within 1 hour.	2014/15 - 100% 2015/16 - 100% 2016/17 - 92%	80%	80%	Target based on Services SLA. Resources are diverted from other incidents and work to deal with Mission Critical Services incidents. Due to the low number of incidents raised within this category failure to meet the target for just 1 incident would mean failure to achieve the overall target of 80%. For this reason it is proposed to leave at 80%.

APPENDIX 1 – ICT PERFORMANCE 2017/18 AND TARGETS 2018/19

IM2	The Number of Incidents on Business Critical services resolved within 2 Hours	Joint Catalogue of Services	Quarterly	Catalogue of Services SLA. All Business Critical, Priority A and B Incidents resolved within 2 hours.	2014/15 - 92% 2015/16 - 100% 2016/17 - 99%	96%	96%	Performance has exceeded target 2015/16 with lower performance in 2016/17 but still exceeding Target. For this reason it is proposed to maintain the existing Target acknowledging resources may be diverted to Mission Critical Incidents. The small number of incidents of this type makes the impact of a single incident on performance significant.
IM3	The Number of Incidents on Business Operational services resolved within 4 Hours	Joint Catalogue of Services	Quarterly	Catalogue of Services SLA. All Business Operational, Priority A and B Incidents resolved within 4 hours.	2014/15 - 92% 2015/16 - 100% 2016/17 - 100%	90%	90%	Target based on Services SLA. The 2018/19 target acknowledges that resources may be diverted to Mission Critical Incidents and Projects. The small number of incidents of this type makes the impact of a single incident on performance significant. Therefore proposed to be retained at 90%.
IM4	The Number of Incidents on Administration Services resolved	Joint Catalogue of Services	Quarterly	Catalogue of Services SLA. All Administration I	2014/15 - 88% 2015/16 - 94% 2016/17 - 93%	90%	90%	Target based on Services SLA. The highest proportions of incidents fall into this

APPENDIX 1 – ICT PERFORMANCE 2017/18 AND TARGETS 2018/19

	within 8 Hour			Priority A and B Incidents resolved within 8 hours.				category. The anticipated draw on resources to support priority projects throughout 2018/19 is expected to reflect in the performance outcome for these lower category incidents therefore recommended to maintain 90% target.
AV1	Core ICT services availability	Joint Catalogue of Services	Quarterly	Catalogue of Services Core ICT availability median 98%	2014/15 - 97% 2015/16 - 100% 2016/17 – 100%	97%	97%	Target meets the agreement for levels of Service from ICT Catalogue of Services. It is proposed to maintain the Target at 97% which has been met for the last two years.
AV2	Business Applications Availability	Joint Catalogue of Services	Quarterly	Catalogue of Services Core ICT availability median 98%	2014/15 - 97% 2015/16 - 100% 2016/17 – 100%	97%	97%	Target meets the agreement for levels of Service from ICT. Catalogue of Services. It is proposed to maintain the Target at 97% which has been met for the last two years.

APPENDIX 2 – ICT ASSET MANAGEMENT REPLACEMENT POLICIES

Renewal Policy	Renewal Point	Consideration	Renewal Restriction	Applying the policy
Desktop Hardware/end points	5yrs Due 2020	Limit of Warranty or major software upgrade compatibility	Like for like functionality	Additional functionality that is not available within the specification of a like for like replacement will be payable from Function Budget
Servers	5yrs Due 2018 Then 2023	Limit of Warranty, technology viability	Subject to the ICT Strategy and Asset Plan	At Y3 the Service will commence review of future requirement aligned to ICT Strategy to be built into an options appraisal at leading into Procurement process (including specifications and requirements) Options examples - extend life, explore new technologies- replace like for like.
Major Business Software Systems	10 yrs	Legislation, Supplier roadmaps and technology viability	Subject to Service Business Plan and Technology Plan.	A requirements document will be prepared for each business system and reviewed annually by the System Owner supported by BIM. Yr. 7 - Options Appraisal. Yr. 8 Confirmation of Requirements, Assessment of Market Yr. 9 Procurement Process begins (may be deferred in time if OJEU not required)

APPENDIX 2 – ICT ASSET MANAGEMENT REPLACEMENT POLICIES

Renewal Policy	Renewal Point	Consideration	Renewal Restriction	Applying the policy
Network hardware	5yrs	Limit of warranty, technology viability	Subject to the ICT Strategy and Asset Plan	At Y3 the Service will commence review of future requirement aligned to ICT Strategy to be built into an options appraisal at leading into Procurement process (including specifications and requirements) Options examples - extend life, explore new technologies- replace like for like.
Mobile technology	3yrs	Limit of warranty, external national projects infrastructure	Subject to the ICT Strategy and Asset Plan	Review at Yr. 3. The mobile phones/smart devices are commoditised items which are generally replaced due to wear and tear during the three year plan of the total system.
Structured Cabling	10 to 15 yrs	Technology Standards	Subject to the ICT Strategy and Estates Plan	All Service sites, however an assessment will be undertaken at the time and where possible the extend the replacement lifecycle
Paging Systems	3 yrs	Commodity	Subject to Service delivery strategy	Review at Yr. 3. The pagers are commoditised items which are generally replaced due to wear and tear during the three year plan of the total system.
Printers	5 yrs	Managed contract	Subject to the ICT Strategy and Asset Plan	Review at Yr3 with start of options appraisal. Procurement to begin at Yr4

APPENDIX 2 – ICT ASSET MANAGEMENT REPLACEMENT POLCIES

Renewal Policy	Renewal Point	Consideration	Renewal Restriction	Applying the policy
Unified Communications/ Telephony	5yrs	Technology Standards as these are software driven systems	Subject to the ICT Strategy and Asset Plan	Review at 3 years with view to extend to 5