

**Finance and Corporate Resources** 

# **South Lanarkshire Council**

# Information and Communication Technology Asset Management Plan 2021/22

### 1. Introduction and contextual statement

**1.1** Information Technology Services within Finance and Corporate Resources employs 107 staff and administers a controllable annual budget of £5.69 million.

Information Technology Services operate as a centralised Information and Communication Technology (ICT) service provider for the Council, coordinating and delivering a wide range of services. These include the support and maintenance of PCs and servers, running business applications for all departments including schools. This delivery is supported by Council wide networks including fixed and mobile telephony, electronic mail, training and all internet services.

Information Technology has a significant role to play in enabling efficient and effective services throughout the Council. In addition to supporting and enabling the Council's values and objectives, the IT Service will be a key enabler of business transformation through consolidation of information systems and provision of ICT that provides cost benefit to the Council in the longer term.

Technology Services design, manage, implement, and secure all of the Council's hardware investments, including personal computers, associated servers and backup and recovery functions. In addition, the section facilitates availability of the Council's Mail and Internet Services whilst ensuring that the voice and data networks are in place to support all the Council's business.

The IT Business Project Managers and teams are responsible for planning, managing and effectively and efficiently delivering a range of IT projects and programmes. Whilst projects vary in both size and complexity, they will deliver positive business outcomes and transformational change for the Council. These projects are defined and prioritised in the ICT Service Plan 2021/2022. These teams are also responsible for the day-to-day support and maintenance of the Council's business IT systems. This includes the management and resolution of issues, the implementation of requests and minor enhancements and the performance of routine monitoring and maintenance tasks.

IT Service Delivery provide day-to-day service provision to IT Services and supply business management and process control functions. Services provided are the IT Service Centre, IT Support Team, National Entitlement Card Team, Project Management Office, and IT Security.

**1.2** In 2009, CMT and Executive Committee approved the development of an extended model for Corporate Asset Management. This included developing asset plans across a number of service areas, in line with CiPFA guidance, and summarised, under an overarching Corporate Asset Management Plan, which demonstrates how each area supports corporate objectives. The service areas are Property, Housing, Roads Infrastructure, Fleet and ICT:-



- **1.3** Aims of the ICT Asset Management Plan are:
  - To create an effective ICT asset management process
  - To modernise working practices and improve service quality
  - To effectively manage and maintain all the Council's ICT assets.

#### 2. Strategic objectives and priorities

#### 2.1 Link to Finance and Corporate Resource Plan outcomes

The ICT Asset Management Plan feeds into the Resource outcomes of the Finance and Corporate Resource plan.

Delivering the plan and achieving best value Resource outcome – Digital and ICT services meet the needs of the council and its customers Action:

- Take forward IT strategic developments

#### 2.2 Links to 2021/22 council ICT priorities

In aligning the Digital and ICT Strategy, operational service delivery and in turn ICT assets to the objectives of the Council, it is important to consider the following:

- The needs of service users to access and receive services in different ways (channels).
- Develop the right blend of channels for digital, mobile and electronic service delivery.
- Maximise availability of information and technology to include as many customers as possible.

It is therefore essential to maintain the current ICT asset estate which is in place to support the business objectives of our customers whilst maintaining a robust solution for business continuity through a disaster recovery strategy.

Objectives and strategies should reflect the needs of users for receiving services through different channels and to address the demands of Local Government in a public sector environment where both capital and revenue funding is reducing.

Therefore, future investment in ICT assets will be challenged by the IT Senior Management Team, the ICT Programme Board, and the Corporate Management Team to meet the following criteria:

- Investment in ICT assets will be closely aligned to council priorities.
- Investment in ICT assets will be sufficient to support statutory requirements.

#### 2.3 Links to sustainability objectives

- 2.3.1 Sustainable Development and Climate Change Strategy – The 2017-2022 strategy proposes the theme - Sustainable Council which considers the Council's own impact on the environment and what they will do with staff and partners to minimise it. The strategy outcomes of this theme are:
  - The Council's carbon emissions are reduced.
  - The Council is environmentally responsible in the procurement, use and disposal of resources.
  - Climate change duties are further embedded in the delivery of Council services and its collaborations with partners on climate change mitigation and adaption.

IT Services has focussed particularly on improving effective use of energy in our buildings, using our equipment more efficiently and increasing recycling. Also, ICT equipment that has come to end of life is disposed/recycled by an approved supplier who disposes of the equipment following the Waste Electrical and Electronic Equipment Regulations (WEEE) and provides a confirmation of disposal certificate.

- 2.3.2 The Council's Environmental and Sustainable Procurement Policy ensures the process of purchasing goods and services take into account the social, economic and environmental impacts that such purchasing has on people and communities. It is about considering what products are made of, where they have come from, who has made them, how are they transported and how they are eventually disposed of. It may even be about whether the purchase requires to be made at all. In addition to this the tendering process for IT contracts contains contract specific environmental questions in relation to equipment manufacturing, components, recycled content, packaging, transportation, disposal and energy consumption.
- 2.3.3 As part of the Caird exit project, the Council's server and storage estate will be migrated to a modern, energy-efficient datacentre managed by an external provider.

#### 2.4 ICT asset management objectives

Aims and objectives that will seek to ensure that the Council's ICT assets are fit for purpose within current financial constraints.

- ICT assets should meet the needs of those that use them including staff, elected members, pupils, visitors, customers and the general public through the different access channels.
- ICT assets must be safe, secure and comply with current legislative and statutory requirements, for example assets must meet the level of security accreditation required by PSN and Cyber Security Essentials, as well as DSE assessments for users, PAT testing of all electrical ICT assets, compliance with WEEE regulations for disposal of electrical ICT assets, to name a few.
- ICT assets should be environmentally sustainable, meaning the effective and efficient use of assets to reduce energy consumption and in turn CO2 emissions.
- Maximise use of existing ICT assets where possible. Where asset acquisition is necessary there is a robust business case supporting procurement of the asset and where possible a single corporate solution.

# 3. Current position

## 3.1 What assets do we have?

## 3.1.1 ICT assets:

Asset type	Quantity
Desktop and server hardware:	Quantity
Servers (Physical and Virtual)	340
Servers (Curricular)	168
Storage	2
Monitors	7404
PCs	2071
PCs (Curricular)	9456
Laptops	4118
Laptops (Curricular)	1947
Tablets	125
Port Replicators	3372
Portable Devices (Curricular)	12348
Networks and communications:	12040
Comms (ACI) APIC server	3
Comms (ACI) switches	24
Comms FMC	2
Comms Firewall	11
Comms Load Balancers	4
Voice Gateway	4
Voice SIP Gateway (cubes)	4
Comms Wireless (Access Points)	280
Comms Wireless (Security Appliance)	2
Switches - Chassis	13
Switches – Ethernet L2	455
Switches – Ethernet L3	56
Routers - Chassis	1
Routers - Access	23
Routers (IPVPN Broadband)	92
Lines (Exchange)	1736
Lines (Private Circuits)	93
Lines (IPVPN broadband - including backhaul)	93
Network Management	8
Radius Security Appliance	2
Telephone System – Small	218
Telephone System – IP	3
Telephone System – SIP	4
Telephone System – Softphone	2
Mobile Devices	5181
Data centres:	
Air Conditioning Units	23
Fire Suppression System	4
UPS	5
Generator	2
Video Surveillance Equipment	2
Environmental Monitoring System (NETBOTZ)	2
Sprinkler System	1
Leak Detection System	1
Software:	
P1 Applications	138

#### 3.1.2 Caird Data Centre

The Caird data centre houses many of the servers and storage devices which support the Council's major IT systems and much of the telecommunications infrastructure which ensures the connection of all Council sites. The Caird Centre is the primary datacentre for the Council and also hosts ICT systems for other public sector organisations in line with the Efficient Government Agenda for Shared Services.

The Caird data centre represents a significant asset for the Council, in that it was designed and commissioned as a purpose-built environment for ICT equipment. Significant work has been undertaken to improve the fabric of the building and to ensure that the air conditioning, environmental monitoring, secondary power supplies and fire suppressant systems are fit for purpose and meet new regulations.

The Caird data centre is set to close by the end of December 2021 under joint University of the West of Scotland (UWS)/Council plans to re-develop the land currently occupied by the datacentre and the former UWS campus. The Council is in the process of migrating the data centre to premises hosted by DataVita in Chapelhall and will continue to make use of the Caird data centre as its primary data centre until this is completed.

#### 3.1.3 Council HQ and Brandon Gate IT Data Hubs

As part of the move out of the Caird datacentre, the IT data hubs in Council Headquarters and Brandon Gate have been upgraded to accommodate the corporate telephony system and to maintain corporate network resiliency. The two refurbished computer rooms are the two main network hubs for connection to our new Data Centre at Chapelhall.

#### 3.2 How well are they meeting objectives?

All ICT assets have been implemented/installed following business requirements and justification exercises to ensure they meet the needs and objectives of the organisation. As the Information Technology environment continuously changes it is inevitable that some ICT assets will reach end of life and become obsolete.

Software and Hardware assets are continually reviewed to ensure they remain fit for purpose. Specific product versions are monitored, and we work closely with our software and hardware partners on product roadmaps to ensure they remain at a supported level.

Where products are approaching end of life, we will develop proposals for continued use based on risk assessment, upgrade or replacement as appropriate.

At present the majority of ICT assets meet the objectives of the organisation with a minority of assets at end of life and in need of replacement.

### 4. Performance core facts

Notes to tables below – core facts are categorised using a traffic light system which operates on the basis of:

Green – Good or excellent Amber – Fair Red – Poor

### 4.1 Desktop hardware

IT desktop hardware						
			Asset condition			
Туре	Total	Green	Amber	Red		
PC	2071	285	341	1445		
PC (Curricular)	9456	9456	-	-		
Monitor	7404	4239	3165	-		
Laptop	4118	2154	1127	837		
Laptop (Curricular)	1947	1947	-	-		
Tablets	125	-	35	90		
Port Replicator	3372	393	2285	694		
Portable Devices	12348	12348	-	-		
(Curricular)						

### 4.2 Server hardware

Server hardware						
			Asset condition			
Туре	Total	Green	Amber	Red		
Server	340	76	197	67		
Server (Curricular)	168	168	-	-		
Storage	2	-	-	2		

### 4.3 Networks and communications

Networks and communications						
			Asset condition			
Туре	Total	Green	Amber	Red		
ACI APIC server	3	3	-	-		
ACI switches	24	24	-	-		
Firewall Mgmt (FMC)	2	2	-	-		
Firewalls	11	-	2	9		
Load Balancers	4	-	-	4		
Voice Gateway	4	3	0	1		
Comms wireless Access Points (corporate)	280	77	45	158		
Comms wireless Security Appliances (corporate)	2	-	2	-		
Switches – Chassis	13	-	-	13		
Switches – L2	455	33	334	88		

Switches – L3	56	32	24	-
Routers – Chassis	1	1	-	-
Routers – Access	23	-	-	23
Routers – IPVPN	92	-	92	-
Broadband				
Lines – Exchange	1736	1736	-	-
Lines – Private	93	72	7	15
Circuits				
Lines – IPVPN	93	5	-	88
Broadband (incl				
backhaul)				
Network	8	-	-	8
Management				
Radius Security	2	2	-	-
Appliances				
Telephone System – Small	218	109	90	19
Telephone system – IP	3	-	3	-
Telephone system – SIP	4	-	4	-
Telephone system – Softphone	2	-	2	-
Mobile Devices	5181	3352	-	1829

# 4.4 Software applications

Software applications					
Asset condition					
Туре	Total	Green	Amber	Red	
IT Applications	138	111	11	16	

### 4.5 Datacentres

Datacentres						
			ion			
Туре	Total	Green	Amber	Red		
Air Conditioning Units	23	2	8	13		
Fire Suppression	4	1	-	3		
System						
UPS	5	2	-	3		
Generator	2	1	-	1		
Video Surveillance	2	1	-	1		
Equipment						
Environmental	2	1	-	1		
Monitoring						
System						
Sprinkler System	1	-	1	-		
Leak Detection	1	-	-	1		
System						

#### 5. Review of current performance

#### 5.1 Summary

The majority of ICT assets are of a good standard (Green) and work efficiently and effectively.

All desktop assets and server assets are supported and maintained to a high standard as part of the 'ICT Desktop Equipment' and 'Supply and Support of Servers and Storage' contracts.

The Caird centre represents a significant asset for the Council, in that it was designed and commissioned as a purpose-built environment for ICT equipment. Significant work has been undertaken on the property over recent years to improve the fabric of the building and to ensure that the plant systems are fit for purpose and meet new regulations. The building will be shut by the end of 2021.

Desktop and server hardware information along with information on smart devices is captured in the Assyst Configuration Management Database which is managed by IT Services.

Overall, there is a high level of confidence and reliability in the ICT assets.

#### 5.2 What issues have been highlighted?

5.2.1 Red – These assets have been classified as approaching end of life and require replacement:

Caird Datacentre – the datacentre is due to be shut by the end of December 2021. Servers marked as 'end of life/red' will continue to be maintained and only replaced if its failure cannot be fixed and threatens Council service operation.

Caird UPS units – the 3 units are 'life expired' and will continue to be maintained and only replaced if its failure cannot be fixed and threatens Council service operation.

Datacentre – 7 AHUs within Caird data hall 1 and 5 in Almada server farm are 'life expired' and will continue to be maintained and only replaced if its failure cannot be fixed and threatens Council service operation.

Legacy server hardware – 7 Virtual Machine hosts are out of general support from March 2020 and technical guidance support from March 2022. There are currently 33 Windows servers running MS Windows Server 2008 which is no longer supported. The above will be replaced as part of the move to the new data centre in Chapelhall. There are 21 Linux v5 servers which went out of extended support in November 2020 which require to be upgraded.

Legacy storage hardware – Extended support for XIV storage was purchased from IBM until January 2022. This will provide support until the completion of the Caird datacentre migration in December 2021 when this hardware will be decommissioned.

Desktop hardware – A PC refresh programme is underway to upgrade all desktops and laptops to Windows 10. This work is scheduled for completion by December 2021.

Legacy software versions -

Application	Reason
Capita Academy Housing	No longer supported by supplier. Project
	underway to replace.
Oracle Financial Management	No longer meets business needs. Project
System	underway to consider upgrade or
	replacement.
Oracle Human Resource	No longer meets business needs. Project
Management System	underway to consider upgrade or
	replacement.
SWISPlus Social Work System	No longer meets business needs. Project
	underway to replace.
Civica Flare	Not compatible with remote working software.
	Project underway to replace.
Parking Gateway	Application does not work with Windows 10.
	Project underway to replace.
Weighbridge	Application does not work with Windows 10.
	Consultation with system owner underway to
	determine options
Filemaker	Not compatible with remote working software.
	Project initiated to move to the cloud.
Mimaki – Wide format printing	Application does not work with Windows 10.
	Consultation with system owner underway to
	determine options
Artifax – Corporate and	Not compatible with remote working software.
Theatre Management System	Project underway to replace.
Jadu Website	End of life. Project underway to move to
	cloud.
HFX Etarmis Door Entry/Time	End of life. Consultation with system owner
Recording	underway to determine options
Gladstone Plus2 – Leisure	End of life. Consultation with system owner
Management System	underway to determine options
Seatgeek SR04 – Theatre	End of life. Consultation with system owner
Ticketing System	underway to determine options
Profess	Application does not work with Windows 10.
	Consultation with system owner underway to
	determine options
Gasclam	Application does not work with Windows 10.
	Consultation with system owner underway to
	determine options

Firewalls - The Council's corporate wireless solution offers a GUEST and PARTNER service. The firewall required to provide this service also provides content filtering to its users. This firewall and filtering service is at the end of manufacturer support and requires to be replaced. In addition, the multi context firewall pair which supports connectivity to PSN, Education, NHSL, and NLC is also at end of manufacturer support and requires to be replaced. Replacement hardware has been purchased to be live by October 2021.

Load Balancer – inbound access to web-based services are dependent on load balancers located at the Council's datacantre. The current load balancers are now 'end of life' and a replacement solution has been purchased go live by October 2021.

Layer 2 switches – These switches provide end user device (printer, PCs, CCTV, VoIP phones, wireless access points) connectivity to the corporate network. The manufacturer has announced that a number of layer 2 switches are end of hardware support. Hardware has been purchased to be installed by Dec 2021

Network Management – Servers/appliances required to monitor (e.g. alerting and utilisation) and administer (e.g. hardware backup and policy push) the corporate network to ensure continued network performance and availability. These devices need to be replaced during 2021/22 to ensure supplier support and critical updates.

Lines (private circuits) - The Council has a number of core circuits that are reaching maximum available bandwidth, these circuits require to be upgraded to ensure continuity of service.

Lines (VPN) – many of the small corporate sites currently connected by ADSL VPN and are experiencing performance issues due lack of available bandwidth which prevents normal operational working, these circuits require to be upgraded to ensure continuity of service.

The Council's small telephone estate has a number of systems which have reached the end of support and require immediate replacement. In addition, the enforced migration of telephony system from analogue to digital by 2025 will require an addition number of switches and circuits upgraded to remain in operation prior to this.

Wireless access points. The council has 158 Wireless Access points installed throughout the corporate network which are now end of life and will require investment to replace.

Mobile devices – devices are approaching end of life and a refresh programme is currently being undertaken to ensure new devices can be automatically upgraded to the latest security version.

5.2.2 Amber – This classification denotes assets that are of a fair condition and should be considered for upgrade, or are processes which require improvement:

Corporate data network - South Lanarkshire Council has a significant investment in the corporate data network which is used throughout the geographic area of the Council. The infrastructure requires investment to keep it secure, reliable, up to date and fit for purpose. Continued investment will be required to progress the refresh going forward, for equipment currently marked as amber.

Firewalls – the Council's corporate SIP (telephony) firewalls are nearing end of manufacturer support and require to be replaced to ensure continued software support to address vulnerabilities.

Layer 3 switches and routers – These switches provide network connectivity for many of the outlying offices on the Council's corporate data network. The manufacturer has announced that a number of layer3 switching devices are approaching end of life. It is important that these devices are refreshed to maintain the current reliability and support levels.

Layer 2 switches – These switches provide end user device (printer, PCs, CCTV, VoIP phones, wireless access points) connectivity to the corporate network. The

manufacturer has announced that a number of layer 2 switches are approaching end of hardware support in 2022 through to 2024.

Lines (VPN) – the current contract with RM computers ends in 2023 and funding is required to replace existing equipment as part of any new contract.

VoIP/SIP/Softphone telephone systems – The current system hardware goes out of support in 2023/2024 and will require replacement.

The Council's small telephone estate has numerous systems which rely on analogue switched and telephony circuits. The enforced migration of telephony system from analogue to digital by 2025 will require switch and circuit replacements to keep these systems in operation prior to this.

Application	Reason
Oracle Customer Relationship	Current version no longer fully supported.
Management	Replacement or upgrade to be considered.
Aareon - MRI EDRMS	Runs on old browser versions and does not
	work with remote working software
Aareon - 1st Touch Scheduling	Runs on old browser versions
Vernon (Corporate)	Not compatible with remote working software.
Snap Surveys	Not compatible with remote working software.
Northgate Glamis Licencing	Supplier have indicated that its long-term
System	future is in doubt.
Legal Case Management	No longer meets customer needs
Conference Allocation	Runs on legacy database platform.
	Replacement or upgrade to be considered.
Grants	Runs on legacy database platform.
	Replacement or upgrade to be considered.
Ppvote	Legacy software that is increasingly difficult
	to support.
Brightwave – Learn On Line	Legacy software that is increasingly difficult
	to support.

Legacy software versions -

Consultation with users of these systems is underway to plan the replacement or upgrade of these software assets.

Desktop hardware – Laptops running Windows 10 version 1809, which goes out of support in May 2021, will require to be upgraded by the end of March 2022.

# 6. What action is required / proposed?

# 6.1 Action plan 2021/22

Asset objective	Action	Owner	Timescale	Comment
Replace legacy servers & storage	Replacement of servers and storage which have become end of life.	Head of IT Services	2021/22	Refresh of equipment is being scheduled in line with the Caird migration and hosting project.
Legacy software versions	Upgrading of software versions which have become end of life.	Head of IT Services	2021/22	IT Services and application provider to schedule refresh of software
Switches	Hardware is end of life. Review specification, procure and install refreshed hardware	Technology Services Manager	2021/22	Networks and contractor to schedule refresh of hardware
Telephone systems (Small)	Hardware is end of life. Review specification, procure and install refreshed hardware	Technology Services Manager	2021/22	A number of systems are out of support.
Lines	Review connection capacity and prioritise bandwidth upgrades required for Windows 10 equipment	Technology Services Manager	2021/22	Capacity management on several sites shows lack of bandwidth for current Windows 7 devices, changes to Windows 10 will require additional bandwidth at these sites.
Firewall hardware and software	Hardware end of life and filtering software service end of support.	Technology Services Manager	2021/22	Refresh of hardware and source new filtering service.
Load Balancers	Hardware end of life	Technology Services Manager	2021/22	To be refreshed subject to technical discussions with contractor and manufacturer.
Network Management	Hardware requires replacement to ensure supplier support and critical updates.	Technology Services Manager	2021/22	To be refreshed subject to technical discussions with contractor and manufacturer.

Desktop Hardware	Replacement of desktop equipment running Windows 7	Technology Services Manager	2021/22	Replace devices as part of refresh programme.
Desktop Hardware	Upgrade of desktop equipment running Windows 10 1809	Technology Services Manager	2021/22	Upgrade devices
Datacentre	Complete exit of Caird Datacentre	Technology Services Manager	2021/22	Complete project

# 6.2 Completed actions in 2020/21

Asset objective	Action	Owner	Timescale	Comment
IT productivity tools software and licences	Microsoft Office License Procurement & Rollout	Technology Services Manager	2020/21	MS Office 2013 and 2016 replaced with MS Office 365.
Switches	Hardware is end of life. Review specification, procure and install refreshed hardware	Technology Services Manager	2020/21	Hardware refreshed.
Data Hubs	Create new Data Hubs in Brandon Gate and Almada HQ to host telephony and network comms and provide resiliency	Technology Services Manager	2020/21	Data Hubs complete in preparation of Caird exit.

If you need this information in another language or format, please contact us to discuss how we can best meet your needs. Phone: 0303 123 1015 Email: <u>equalities@southlanarkshire.gov.uk</u> <u>www.southlanarkshire.gov.uk</u>