

Governance, Risk and Best Value Committee

10:00am, Tuesday 24th January 2023

Quarterly Status Update – Digital Services

Executive/routine Wards Council Commitments	Executive All
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1. Recommendations

- 1.1 It is recommended that the Committee reviews, scrutinises and notes the progress detailed in this quarterly update.

Richard Carr

Interim Executive Director of Corporate Services

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Quarterly Status Update – Digital Services Programme

2. Executive Summary

- 2.1 The purpose of this report is to provide a quarterly progress update upon the Council's Digital Services programme of works. The Council and our technology partner, CGI UK Limited, have continued to work in partnership to increase the pace of delivery to improve core digital services, achieve further improvement and progress the associated major systems changes and developments which will further enable and enhance our citizen facing services and the internal business operations of the Council.

3. Background

Council Digital and Smart City Strategy

- 3.1 In October 2020, the Policy and Sustainability Committee approved the Council's new Digital and Smart City Strategy (2020-2023) which describes how we will embrace innovative technical solutions to meet rapidly evolving and changing citizen and business needs, respond to the changing shape of the organisation, provide value for money, and enable us to respond to opportunities for improved joint working with our community planning partners.
- 3.2 Our strategic technology partnership with CGI was extended to the end of March 2029 following negotiations between the Council and CGI with formal approval to the extension being given by the Finance and Resources Committee on 27 August. This contract extension enables the Council to deliver further digital enhancements and improvements to our services and has yielded further financial savings, building upon the progress made in partnership with CGI to date. As a part of this extension, a greater focus will be given to digital change management, enhanced service delivery and the development of new strategic solutions.
- 3.3 Both the original and extended contracts with CGI have provided savings to the Council which are detailed in Section 6 of this report.
- 3.4 The digital environment in which we operate continues to evolve and the Council becomes increasingly reliant on technology to deliver its services. The approved

Digital and Smart City Strategy and our extended partnership with CGI provide a clear strategic direction, leadership, capacity, and support for both the Council and the City's future digital ambitions. These ambitions will be aligned with the Council's refreshed business plan, the Edinburgh 2050 City Vision, the work of the Adaptation and Renewal programme and the work with community planning partners and the Edinburgh and South East of Scotland City Region Deal.

- 3.5 The implementation of the Strategy has been supported by significant investment in Digitally Empowered Learning and Smart Cities specific projects, approved by the Council at the Budget setting meeting on 18th February 2021.

4. Main report

Stability Plan from CGI

- 4.1 In September 2022, issues relating to performance across the Council's Learning and Teaching network were raised.
- 4.2 CGI's slow response to resolving these issues coupled with a period where incidents had become more impactful on the Council and a lack of progress with several key priorities led to an escalation by the Council to CGI's UK and Australia President on the 23rd of September.
- 4.3 As well as successful resolution of the performance issues, the Council asked CGI to provide additional resourcing and focus on a key set of ongoing issues:
- Council Corporate Wi-Fi connectivity
 - Procurement of Wireless Access Points to support Empowered Learning
 - Resolution of Public Wi-Fi Access in our buildings
 - Certificate Issues
 - Improvement in the operational change process
 - Greater engagement with users to make sure that things are working and not simply rely on calls.
- 4.4 As part of the response to the Council, and to lead on the work of a stability plan, CGI have appointed Faris Mohammed, the CGI Chief Operating Officer for UK and Australia, to temporarily align himself with the account and provide senior CGI oversight and support to drive this forward. This action was taken by CGI as a result of a direct request by the Council to have an Executive sponsor to scrutinise and resolve CGI operational issues.
- 4.5 The Council meet with CGI twice weekly to review progress on the stability plan and Digital Services will continue to review the performance of all aspects of CGI delivery, escalating issues as appropriate.

Protecting Our Organisation - Cyber Security Management

- 4.6 The Council and CGI teams are collaboratively managing Security Risks continuously across the estate. The security risks cover a range of issues from the new Cyber Resilience Framework vendor management to user account privileges that ensure the Government or legal frameworks by service improvements, integration, or removal, are not at risk.
- 4.7 The Security Risk Management Plan (RMP) has continued its quarterly reviews and risk owners have been asked to provide regular updates to improve on the risk appetite by both partners in this framework, the Council and CGI. Enhanced reporting has been developed between key stakeholders within CGI and the Council.
- 4.8 The Council has engaged the Cabinet office early and the external assessment of our network for PSN 2023 has completed. We are working with CGI on a remediation plan for the output from this and will be forwarding the collateral to the Cabinet Office for our PSN 2023 accreditation in early February as planned.
- 4.9 The Council has provided evidence to support the Scottish Government's Public Sector Cyber Action Plan Cyber Resilience Framework (PSCAP CRF) to the Scottish Government in early 2022. This is the first evidence request from the Scottish Government for this. The Scottish Government in October 2022 released a draft V2.0 framework for comment prior to final release.
- 4.10 Monthly e-Learning for Cyber Security continues to be successfully rolled out across the Council. The Council Cyber Security team have implemented several improvements recently notably allowing people to re-visit previously distributed training modules. Service areas should continue to encourage their teams to complete the training to generate a greater uptake and in tandem the Digital team are assessing options for making this training mandatory with reports for services to track and monitor performance. Simulated phishing exercises continue and are results are reported to the internal Cyber steering group.
- 4.11 Monthly automated vulnerability scanning is now in place across both Corporate and Learning and Teaching estates. The Council and CGI meet on a fortnightly basis to work through the vulnerabilities identified with a view to reducing the overall numbers. Penetration Testing of the Learning and Teaching Environment has been completed and results have been shared with the Council. Active remediation of findings is ongoing and being tracked at the fortnightly vulnerability meeting.
- 4.12 The Council has approved a change with CGI to implement additional e-mail security protocols known as MTA-STX, which requires authentication checks and encryption for email sent to the Councils domain.
- 4.13 The Council is an active member of the CisP community, an initiative developed by the National Cyber Security Centre (NCSC) to allow for collaboration on Cyber Security initiatives and also provides a platform for sharing threat intelligence information.

4.14 The current threat level to the Council remains very high, amplified with the war ongoing between Russia and Ukraine. Communications have been sent to all Council staff asking them to remain vigilant and to report any suspicious events. Staff have been reminded of the importance of completing their mandatory Cyber awareness training. The Council and CGI are consistently monitoring threat intelligence feeds through various channels and applying controls where appropriate.

Governance, Audit and Contract Management

4.15 The Council and CGI have an operational governance framework in place, built upon the requirements of the partnership contract. This includes regular reporting to the Corporate Leadership Team's Change Board on the delivery and development of major transformation programmes, in accordance with the Council's approved approach to managing major projects and change.

4.16 Internal Audit has planned audits in the 2022/23 Audit Plan for CGI Risk Management, CGI Enterprise Architecture, and the Security Operations Centre. All three have commenced and the Security Operations Centre audit has fully concluded with actions assigned and included below.

4.17 Digital Services currently has 21 open audit actions owned by either CEC or CGI – 8 high, 9 medium and 4 low findings. All open actions are within date. These are being actively managed and kept under regular review by the Service Director and the Digital Services Senior Management Team.

Core Digital Service Performance

4.18 Service performance is driven through a set of twenty-five key contractual measures that, in turn translate to a set of key performance indicators (KPIs). Service incidents definitions can be found in Appendix 1.

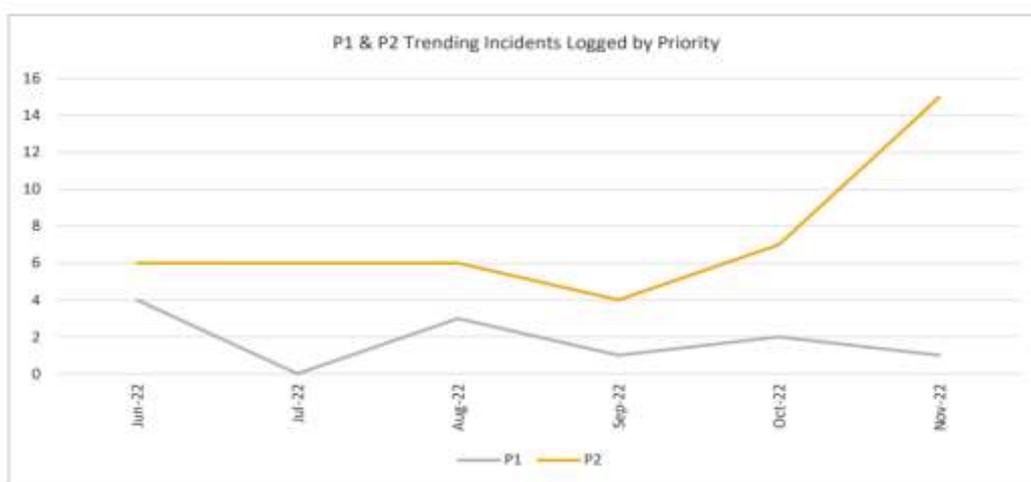
4.19 Customer (User) satisfaction scores have remained well above KPI levels but have dipped slightly aligned to the impact of priority 1 incidents.



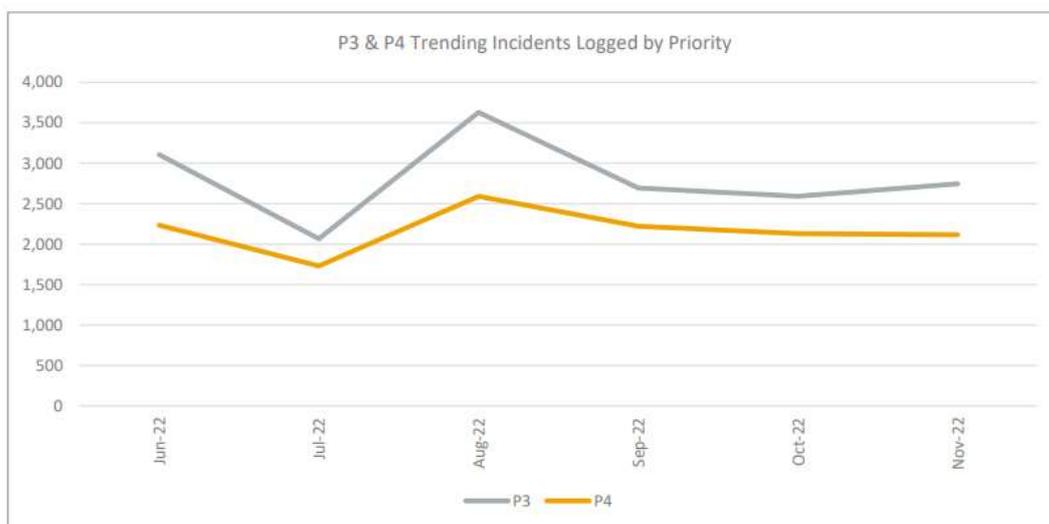
4.20 The response rate for customer satisfaction surveys remains low. Communications have been distributed across the Council to encourage colleagues to participate in these which are distributed to every call once closed.

	June 2022	July 2022	August 2022	September 2022	October 2022	November 2022
Surveys Distributed	5542	4480	6013	5476	5250	5106
Surveys Completed	307	196	309	277	258	288
Response Rate	5.54%	4.38%	5.14%	5.06%	4.91%	5.64%

4.21 The volume of Priority 1 (P1), or the highest severity incidents, has remained at a low and acceptable number. The volume of Priority 2 (P2) incidents rose in October/November 2022 and this increase, and the underlying causes, form part of the ongoing work to improve stability of service which CGI are progressing.



4.22 The overall volume of non-critical Priority 3 (P3) and Priority 4 (P4) incidents shows a steady and stable pattern over the last six months with a dip over the Summer holiday period as schools closed and colleagues took leave and a slight and expected increase as school return from the summer break.

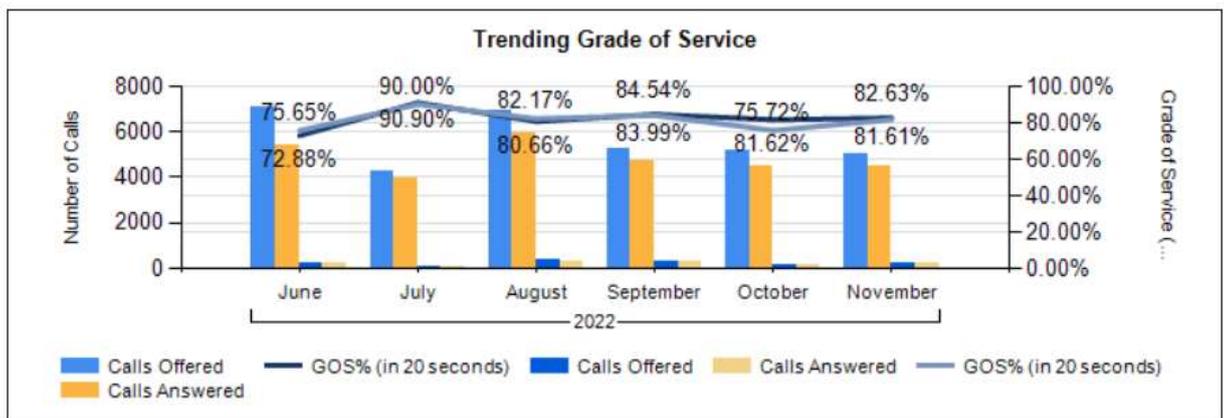


4.23 Call Volumes

Priority	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Total
Critical (P1)	4	0	3	1	2	1	11
High (P2)	6	6	6	4	7	15	44
Medium (P3)	3,108	2,066	3,629	2,695	2,592	2,746	16,836
Low (P4)	2,236	1,730	2,591	2,220	2,131	2,117	13,025
Total	5,354	3,802	6,229	4,920	4,732	4,879	29,916

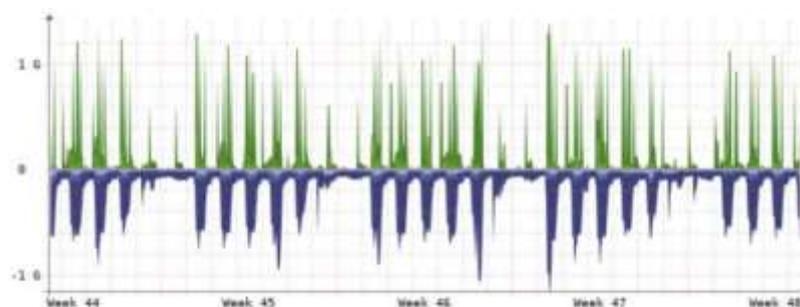
4.24 Call volumes have remained at stable and acceptable levels. Appendix 2 provides a comparison of P1-P4 calls over five full years to November 2022 and highlights the overall reduction in calls over the last few years and the stabilisation of volumes. Appendix 3 provides a comparison of call volumes this year and last.

4.25 As our call volumes have stabilised over the years, the grade of service has improved.



Network Usage

4.26 Our bandwidth usage is constantly monitored and the primary WAN circuit for both estates is well within capacity. There is active review of individual sites to monitor their usage, cancel unused lines and update where traffic has increased.



Strategic Programme of Work and Change Programmes

- 4.27 The Digital Services Strategic Programme of Work presents a portfolio of projects to support the execution of the Council's Digital and Smart City Strategy over the next 12 months. The remaining elements of the delivery of the six main transformational programmes previously reported on, ERP and Business Intelligence, are incorporated within this and updates are provided for these.
- 4.28 The Strategy defines the principles that support project decisions and choices in relation to priorities, funding models, resourcing, scheduling, hosting, security, and application architectures.
- 4.29 Progress on the work programme will be monitored through this Committee quarterly. A high-level snapshot of the 2022-23 plan is included as part of Appendix 4 for reference along with detailed information on the wider programmes underway. Details of the major and transformational programmes included below:

Empowered Learning – Digital Education

- 4.30 Work began in April 2021 on the delivery of the Empowered Learning solution which will provide every pupil from P6 to S6 with a device and access to devices for all P1 to P5 pupils as well as augmentation of our existing wireless network in schools. This programme has now also been expanded to include Early Years.
- 4.31 The work is being carried out in partnership with CGI.
- 4.32 Benefits of this programme include:
- Equity of access from P6 to S6, ensuring all pupils have personal access to digital learning with their teacher in school or at home
 - Over 41,000 devices distributed across the city
 - Effective digital workflow to increase engagement, improve teacher feedback and raise attainment
 - A range of powerful accessibility features to improve access to the curriculum for pupils with additional support needs
 - Learners can work online simultaneously in a class or collaboratively outside the classroom
 - High quality digital applications for productivity and creativity, providing increased personalisation and choice
 - Development of learning, thinking and digital literacy skills vital for success in today's rapidly evolving, technological society.
- 4.33 The solution is now in the final stages of delivery with all one to one devices distributed. This solution has also expanded to include Early Years and a device for all P6-S6 Ukrainian pupils enrolled in an Edinburgh school.

- 4.34 The final elements of this programme - rollout of shared iPads, installation of the remaining Wireless Access Points and the rollout of the AV solution will be completed over January/February 2023.

Application Performance - NetApp SAN / File Storage

- 4.35 A programme to upgrade a key component of the Council's file storage infrastructure known as the "NetApp SAN", is now underway. As the NetApp SAN supports many of the Council's core applications including iTrent, Swift, iWorld Housing, and iWorld Revenues and Benefits, the programme requires careful planning and coordination with business teams, to support testing and ensure the upgrades have minimal impact on business operations. The infrastructure for the new "NetApp SAN" is now fully deployed and live migrations for Oracle E-Business, Housing and iWorld Revenues and Benefits have been completed. The purpose of upgrading the NetApp storage is to improve the performance speeds of applications, which in turn will improve overall productivity for end users.

Social Care Rostering - Driving Operational Efficiency

- 4.36 The project to introduce a new Health and Social Care rostering system is now fully mobilised and moving forward. This includes a fortnightly project board and specialist working groups and teams with responsibilities for key areas such as technical delivery, business change, procurements, planning and logistics, interfaces, and data quality. Activities underway include iPhone deployments, system integration testing, interface developments, business process re-engineering, communications, and stakeholder engagement sessions.
- 4.37 The system will drive efficiencies and support new ways of working to deliver the best quality of care, adopting a three conversations approach, and help support individuals live independently in their own home, offering the right care and support, at the right time and in the right place. The programme was originally planned to complete in March 2023. In consultation with other Local Authorities the EHSCP have reprofiled the delivery plan to adopt best practice and to ensure this significant change is embedded into the service area, which as a result will mean that the programme will conclude in December 2023.

Customer Digital Enablement – Enhancing On-Line Offering

- 4.38 We are continuing to expand the range of online services offered to citizens through the Council CRM system, which is led by the Customer team. A key highlight from the last month was the launch of the new Repairs Direct online booking service - which integrates the CRM with our housing and workforce scheduling systems, allowing citizens to book housing repair appointments online.
- 4.39 Further online services which have recently been delivered include forms to support annual gas servicing and blue badge payments, and ongoing developments to build

forms to support online requests for dropped kerbs and disabled parking bays, and to report traffic signal faults.

- 4.40 In parallel we are also enhancing the CRM knowledge base functions which will assist both the contact centre and members of the public in solving issues and answering questions. We are also working with CGI and Verint, to investigate options for improving and simplifying the customer authentication and login process for the CRM.

Smart Cities – Smart Waste and Smart Housing

- 4.41 Work continues to progress around the platform configuration for the Smart Cities Operations Centre. As of 30th December, 2119 sensors have now been installed and are functioning as expected in the Smart Cities test environment set up by CGI. Installations to litter bins in the City Centre was completed ahead of the Christmas markets opening. Regular shipments of sensors have now commenced and plans are well underway to deploy up to 11,000 sensors in to litter and communal bins across Edinburgh by June 2023. Council resource, part funded by ERDF match funding, are key contributors to this project activity and additional resource has been brought in to expedite these installations. Survey work around the various components of the system is underway and progressing as expected.
- 4.42 A trial deployment of damp sensors in empty Council properties is due to take place and will comprise 270 sensors, with six tradespeople completing installation across 90 properties. This four-week stretch will be used to assess installation rate and identify any outstanding issues surrounding iWorld software and familiarise tradespeople with the software used when installing sensors. The data collected from these sensors will be used to help design reports which will be used by the Council to identify and predict dampness in homes.
- 4.5 Appendix 4 provides further details on the large scale of digital transformational activity across service areas.

5. Next Steps

The Council continues to further strengthen and improve our management, governance, security, and delivery arrangements for the digital programme in partnership with CGI. The approval of our Digital and Smart City Strategy provides the strategic direction for the next phases of our digital developments. The approval of this strategy also informs the future prioritisation of investment, both capital and revenue, in digital activities. This will ensure that appropriate consideration can be given not only to future improved systems to drive efficiency but also to investing in core Council systems which are end of life or nearing end of life such as the Finance and Debt management upgrades, SWIFT and the HR system replacement.

6. Financial impact

- 6.1 Our partnership with CGI is saving the Council an estimated £6m per annum against the 2015/16 baseline spend on ICT with our former partner, BT. Over the first phase of the Council's contract with CGI, this will save £45 million. The Committee should note that this saving has already been fully assumed and incorporated as part of the Council's Medium-Term Financial Framework and planning assumptions.
- 6.2 During 2018 the Finances and Resources Committee approved a negotiated 'variation' to the baseline contract which included a reset of all digital transformation programmes and the Council receiving just over £11m of rebate.
- 6.3 On the 27 August 2020, the Finance and Resources Committee approved a 6-year extension to end March 2029 following negotiations between CGI and the Council, realising a further saving of £14.1m. This contract extension enables the Council to realise financial savings and build on the progress made in partnership with CGI, with greater focus upon change management and enhanced service delivery.
- 6.4 In addition to the savings generated by our IT partner, considering future digital investments should assist with driving wider operational efficiency benefits along with improved employee and citizen outcomes, like we have seen with our Verint CRM on-line portal, Total Mobile workforce rostering solution rolled out into Housing and now being rolled out to the EHSCP and our Smart City digital waste and smart housing programme which are in implementation stage.

7. Stakeholder/Community Impact

- 7.1 The Council's Corporate Leadership Team (CLT) risk register formally identifies digital capabilities and information governance as a risk and ensures that sufficient mitigations and active management of risks continues to be undertaken. This is further complemented by risk reporting and management in respect of information governance, including Data Protection Compliance.
- 7.2 The Council's Change Board actively monitors and tracks progress on all Council wide programmes ensuring that targeted action is taken should timelines, benefits or costings deviate from the original business case, this includes the ICT programme.

8. Background reading/external references

- 8.1 [Digital & Smart City Strategy 2020-23](#)

9. Appendices

- 9.1 Appendix 1 - Incident Definitions
- 9.2 Appendix 2 - Year on Year service level agreement (SLA) Volume Comparison 2018-2021
- 9.3 Appendix 3 – Two-year SLA Volume Comparison (Last & Current)
- 9.4 Appendix 4 – Strategic Programme of Work
- 9.5 Appendix 5 – Digital & Smart City Implementation Plan

Appendix 1 - Incident Definitions

"Severity 1 Service Incident"

A Service Incident which, in the reasonable opinion of the Authority:

- (a) constitutes a loss of the Services which prevents a large group (of at least 50) End Users from working; or
- (b) has a critical impact on the activities of the Authority; or
- (c) causes significant financial loss and/or disruption to the Authority; or
- (d) results in any material loss or corruption of Authority Data; or
- (e) results in a P1 being Non-Available; or
- (f) causes an entire business area to be unable to work.

Non-exhaustive examples include: A failure of the Services to provide user authentication service; or at least 50 End Users unable to work or a P1 failings its KPI Availability targets.

"Severity 2 Service Incident"

A Service Incident which, in the reasonable opinion of the Authority:

- (a) has the potential to have a major (but not critical) adverse impact on the activities of the Authority and no workaround acceptable to the Authority is available; or
- (b) has the potential to cause a financial loss and/or disruption to the Authority which is more than trivial but less severe than the significant financial loss described in the definition of a Service 1 Service Incident; or
- (c) causes financial loss and/or disruption to the Authority; or
- (d) affects greater than 25 but less than 50 End Users; or
- (e) results in a P2 Application being Non-Available.

Non-exhaustive examples include: Corruption of organisational database tables or loss of ability to update Authority Data.

"Severity 3 Service Incident"

A Service Incident which, in the reasonable opinion of the Authority:

- (a) has the potential to have a major adverse impact on the activities of the Authority which can be reduced to a moderate adverse impact due to the availability of a workaround acceptable to the Authority; or
- (b) has the potential to have a moderate adverse impact on the activities of the Authority; or
- (c) affects less than 25 End Users; or
- (d) results in a P3 Application being Non-Available;

Non-exhaustive examples include: inability to access data or a class of customers.

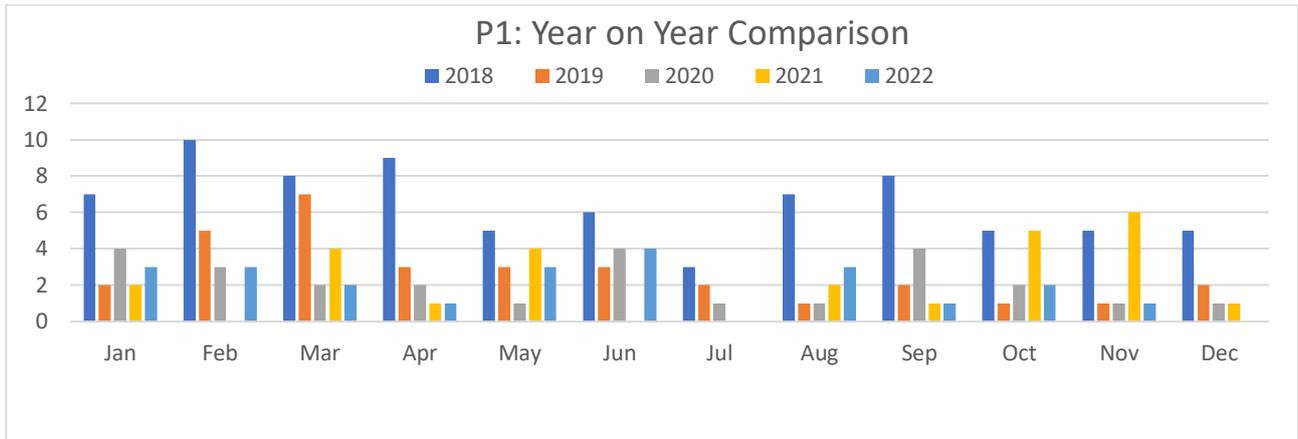
"Severity 4 Service Incident"

A Service Incident which, in the reasonable opinion of the Authority has the potential to have a minor adverse impact on the provision of the Services to End Users.

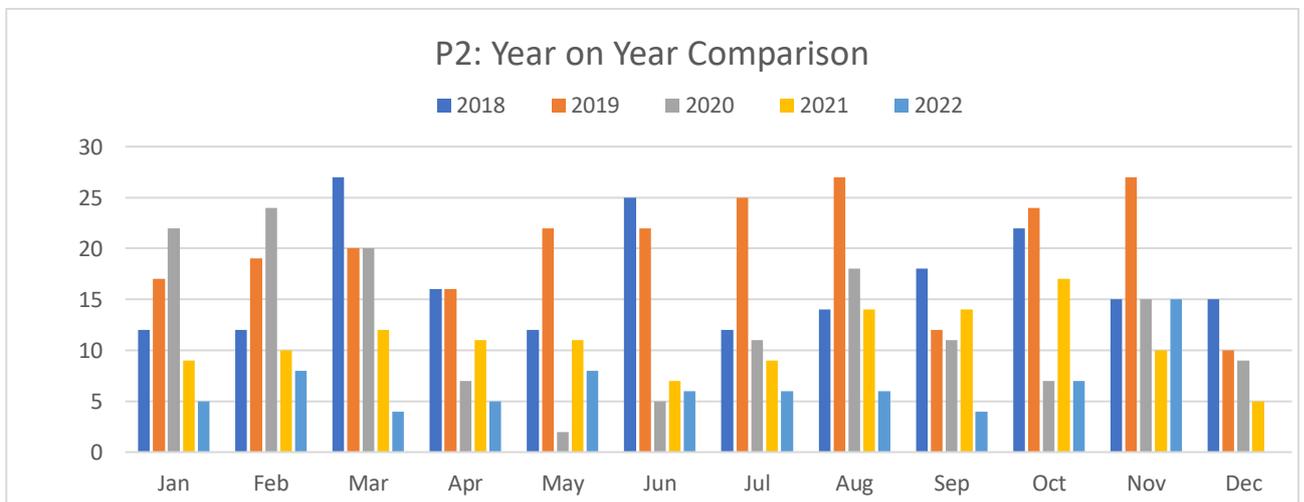
Non-exhaustive examples include an inability to access data for a single customer.

Appendix 2 - SLA Volume Comparison – 2018-2022

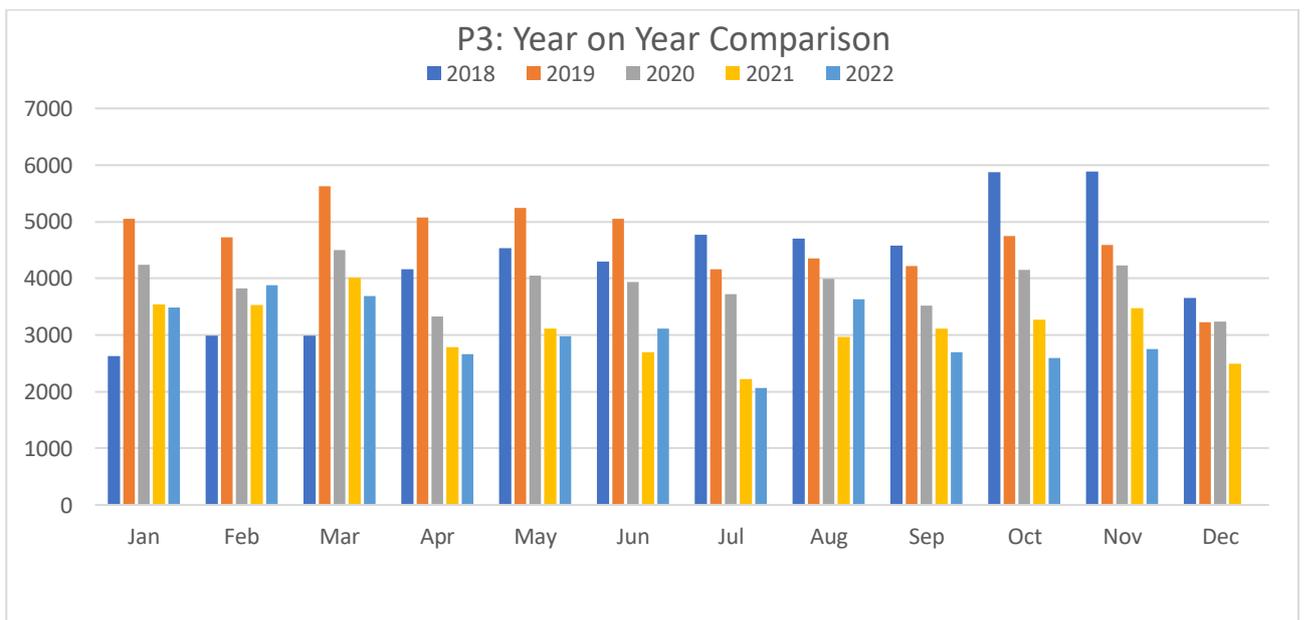
P1: Year on Year Comparison



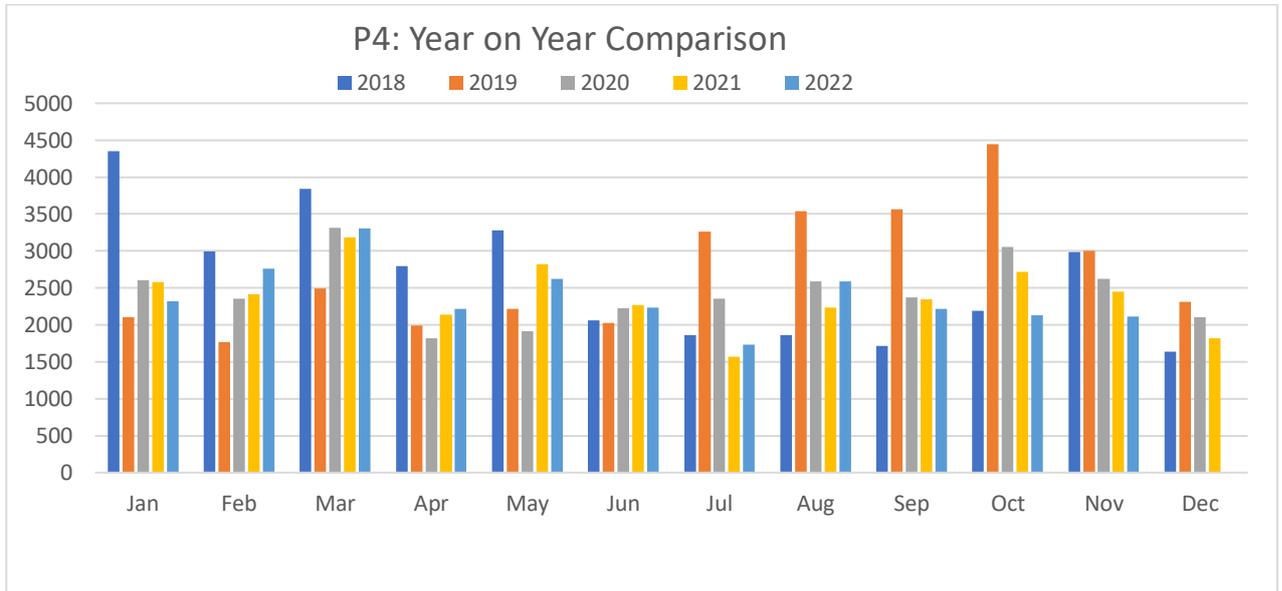
P2: Year on Year Comparison



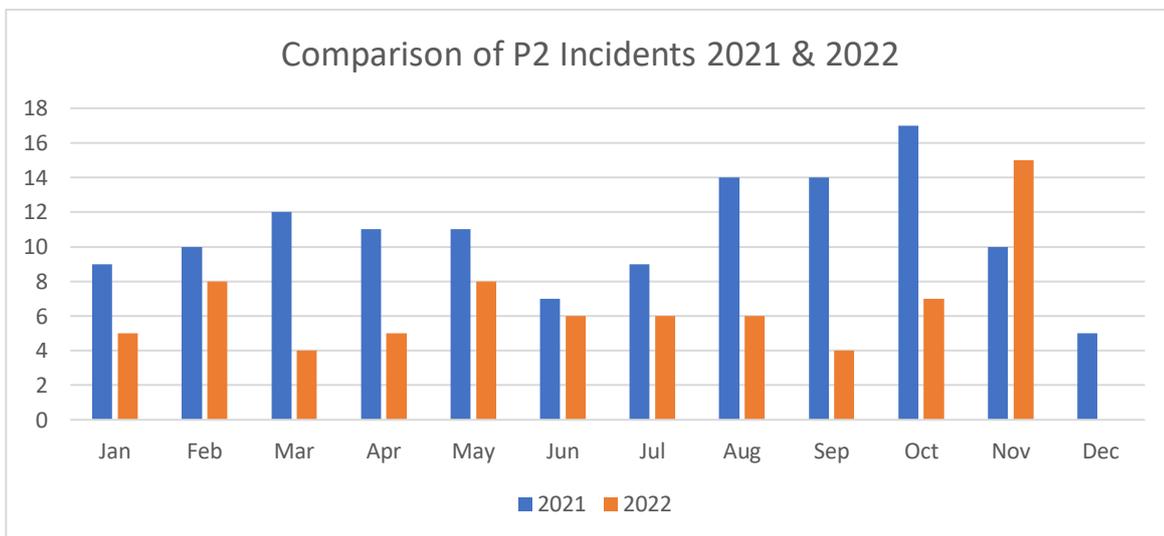
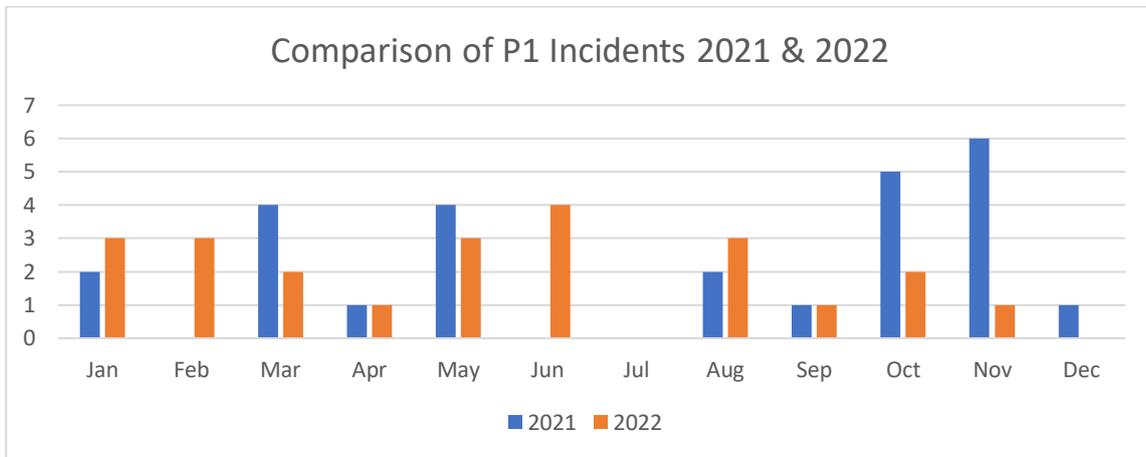
P3: Year on Year Comparison



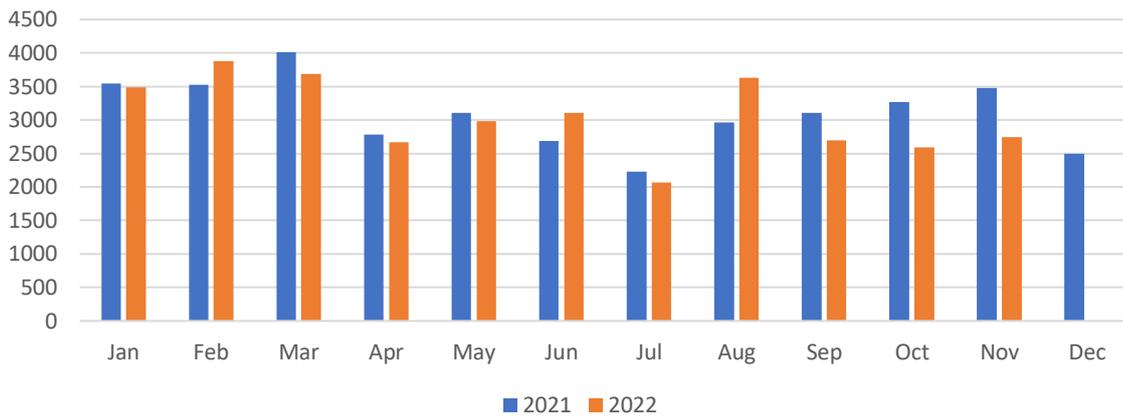
P4: Year on Year Comparison



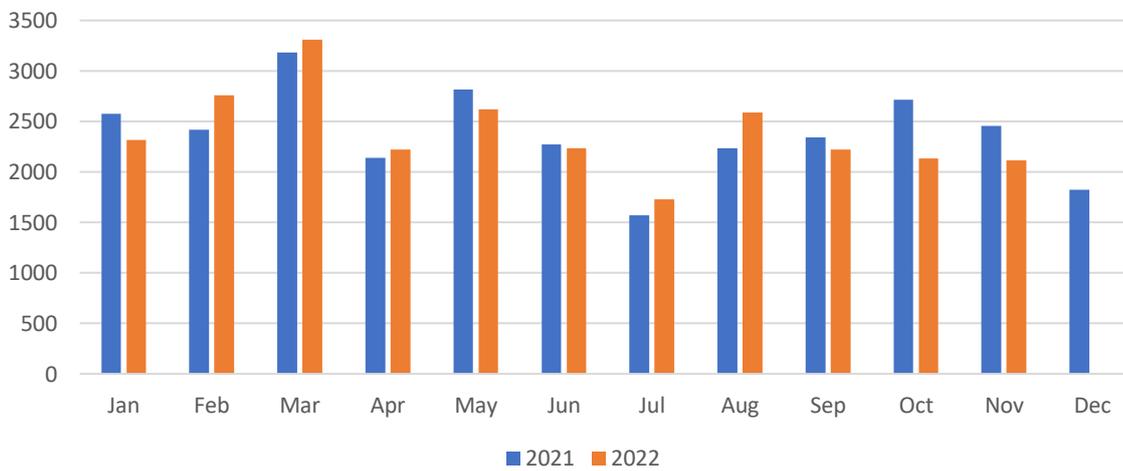
Appendix 3 – Two Year SLA Volume Comparison – 2021 & 2022



Comparison of P3 Incidents 2021 & 2022



Comparison of P4 Incidents 2021 & 2022



Appendix 4 Strategic Programme of Work

Operational Efficiency

The following programmes assist with driving operational efficiency within the service areas they relate to.

Housing Asset Management

- Over October we successfully rolled out the final module of the Housing Asset Management application to help support the maintenance and upkeep of the Council's social housing stock. The project has delivered a raft of new functions and services to assist the administration of housing assets including the tracking and control of asbestos, and the coordination of condition surveying.
- The system underpins wider business changes to improve efficiency, help reduce operational wastage, and improve regulatory compliance.

Community Transport Management

- We have now formally launched a project to introduce a new integrated community transport system to support the routing of vehicles and management of drivers. This will assist in areas such as the transportation of children with Additional Support Needs (ASN) to and from school.
- The introduction of the new transport system will provide more flexibility and support more efficient scheduling and route planning thereby reducing mileage, costs, and environmental impact. The system will also provide an online portal for parents and carers to book and track journeys.

Mobysoft RentSense

- We successfully went live with the new rent management system, Mobysoft RentSense, in October to assist Housing officers identify and assist tenants who are struggling to pay their rent.
- The system enables officers to make targeted and early interventions and will help ensure tenants receive the appropriate help and support and drive forward improvements in the overall rent collection.

ERP – Oracle EBS12

- The ERP programme, which will deliver a range of upgrades and improved interfaces between core systems in Finance, HR/Payroll and Banking and Payments Services is now in full delivery with contracts in place with the Council, CGI, and the sub-contracted Oracle integration and managed service partner.
- A key focus is regression testing for the Oracle E-Business Suite v12 upgrade (regression testing is the re-running of functional and non-functional tests to ensure that previously developed software continues to perform as expected); the finalisation of the debt management environment and the set-up of environments for the next stage of testing. Confirmed programme costs have been built into the

financial model, which is rigorously monitored by Finance and the programme board. Internal Audit remain fully engaged with and provide agile audit support for this programme.

Hosted IDOX

- As a pre-requisite to the phased migration of the core Planning and Building Standards application into the Cloud, we successfully upgraded both the Uniform application and the Public Access portal running within the CGI data centre. This precursor to the full migration of the system into the Uniform Cloud in early 2023, will transfer responsibility for maintaining infrastructures, IT compliance, system upgrades and support over to the supplier, allowing the service to become more agile, scalable, and resilient and to focus on delivering improved public services

Computer Added Facilities Management (CAFM)

- Workshops are underway between Digital Services, Property and Facilities Management, and CGI to plan the final migrations of the property management legacy system onto the new CAFM application for the running of corporate properties and programmes. This work follows the previous transition of FM services onto the CAFM system which provides front line staff with functions to manage aspects such as condition monitoring, asbestos, maintenance, and inspections via their smart phone.

Ethitec ELMS2

- The Community Equipment Loan Service is a partnership between the City of Edinburgh Council, East Lothian Council, Midlothian Council and NHS Lothian which provides, delivers, installs, repairs, maintains and recycles a range of equipment helping people of all ages to live independently. The service is supported by the Ethitec ELMS2 system for the management of stock and orders.
- A project is now underway to extend the use of ELMS2 to help administer the provision of urology prescriptions, creation of purchase orders and reporting for financial reimbursement of those. Go live is scheduled for Q1 2023.

Masterbill

- Work has progressed with the Housing Repairs team to upgrade the Masterbill cost analysis and bill of quantities management system which supports the running of construction and maintenance projects within the social housing sector. The project is scheduled to go live in early 2023

Civica CX

- Work continues on the Civica CX project which will replace the legacy “Civica APP” system with an upgraded cloud-based solution to drive business improvement and transformation across Licensing, Trading Standards, Food Safety and Hygiene. The project is being delivered in phases with Phase 1 now underway to transition Licensing from APP onto CX and planning for Phase 2 is in progress.

Housing Repairs and Mobile Working

- Earlier last year we successfully closed Phase 2 of the Housing Repairs project which has delivered a new mobile workforce management solution for Empty Homes and Gas Servicing as well as further enhancements to the Repairs archiving system. Planning activities are now underway for Phase 3 which will deliver further efficiencies and service improvements.

MFD Rollout

- Following successful trials of the new Apogee printers and multi-functional devices (MFDs) December 2021, the City of Edinburgh Council launched a programme in January 2022 to replace print devices across both the Corporate and Learning and Teaching estates. This rollout covered approximately 350 sites within Edinburgh and two outdoor education centres. The new print and MFD devices offer a range of benefits, including easy printing, the cost to print, better analysis and reporting tools, improved security features and more efficient ways to order various print products.

The roll-out of the new Multi-Functional Devices started on the 10 January 2022 and concluded for the Corporate and Learning and Teaching Estates on 1 April 2022. The exceptions to this roll out were People's Network Devices (Libraries) and non-networked sites, including remote Council sites Benmore and Lagganlia outdoor education centres both of which are nearing completion.

- As a project, the L&T estate installation was prioritised first, with the exception of several key Corporate sites including Waverley Court, City Chambers and Locality Offices also installed early in the roll-out. Apogee managed the roll-out seamlessly, removing old Xerox devices and swapping them over with new HP devices
- Once the print solution had been installed, some early performance issues were encountered across learning and teaching, particularly around the exam period in late April/May when there is heavy reliance on the printing solution. The response from Apogee was excellent and they worked tirelessly to get to the root of the problem and provide a resolution, supported by CGI.
- With the project nearing completion and transitioned to business as usual, performance across the full Council estate points towards an efficient print solution with users now fully utilising the Apogee portal and providing vital MI for future initiatives.

Digital and Smart City Strategy

- The Implementation Plan to support the Digital and Smart City Strategy has been developed and the latest version can be found in Appendix 5.
- This Plan is a snapshot of work at a point in time. The date of this is noted on the plan.
- The Digital and Smart City Strategy will be revised during 2023.

Providing Accessible Services

Fostering Edinburgh

- Work continues between Digital Services, the Family Based Care team, and Communications to further enhance the new “Foster with Edinburgh” website which successfully launched on Tuesday the 21st of September. The website is a key part of a wider campaign to promote the service and provide carers and prospective carers with information and advice on our Adoption and Fostering services. Further work is now commencing to leverage the platform and capture requirements for enhancements as a phase 2 activity.

Intranet External Gateway

- Following workshops over July to August with HR, Communications, Digital Services, CGI and Jadu, a specification has been developed for an external gateway to the Council Intranet. The gateway will enable the 5000 employees without Council email addresses to connect to the ORB via their personal email accounts - providing secure access to vital HR information such as
 - Internal staff communications
 - Council policies, and policy-related guidance and support
 - Wellbeing guidance and initiatives
 - General updates relating to pay and benefits

This additional solution addresses one of the actions in the Tanner Report and is required regardless of HR receiving approval to proceed with an HR system replacement.

- CGI have prepared a costed proposal for the delivery of the Intranet gateway, which will feedback into a business case for senior management review.

Website Developments and Accessibility

- Following the conclusion of the Cabinet Office accessibility audit of our websites in February 2022, further work is now underway on our own next-level accessibility testing from which we will begin the next phase in ensuring that we continue to achieve and maintain accessibility compliance standards. The aim of this work is to ensure the Council’s websites are accessible for all Citizens. Work is also underway to develop a ‘Welcome to Edinburgh’ webpage which will bring key service links to a central web location for citizens new to the authority.

People’s Network

- We are upgrading the People’s Network which provides members of the public with free and secure access to computers and the internet within libraries, and Wi-Fi connectivity for customers who wish to use their own devices. It particularly benefits citizens who do not have access to computers, the internet or printing at home.

Following extensive delivery activity and testing over July to August, we successfully deployed the first pilot of the new solution into Fountainbridge library. This formed the template for a council wide rollout to all remaining libraries and is now nearing completion.

Analogue to Digital Programme

- In preparation for the BT OpenReach Public Switched Telephone Network (PSTN) decommissioning deadline in December 2025, work has started with Procurement and Directorates to raise awareness and ensure that they have plans in place to switch over any remaining analogue telephone or broadband circuits before that date.
- The Council is well positioned for this transition, as the main telephony system (Mitel) is now fully digitised however a significant number of legacy PSTN lines remain in place to support miscellaneous services such as alarm lines, building managements systems, and payment terminals, which will require to be replaced with digital alternatives.

AdvicePro

- We rolled out a new ICT system, AdvicePro, to assist the Council's Advice Services in supporting members of the public around aspects of welfare rights including income maximisation through welfare benefits, tax credits and grants, and to provide advice to help resolve personal debt.

Using data to drive improved outcomes

Business Intelligence

- Having successfully signed-off the final dashboards for the Confirm asset management system within Waste Services, which in conjunction with the Routesmart waste collection dashboards, completes delivery of the contractual elements of the Business Intelligence transformation programme, we are now moving to the final stages of this programme of work and a project closure report will be completed.
- Over January to March we will finalise work on new reports and dashboards for Homelessness services, and finalise the plan to transition business intelligence support and development capabilities over to Council teams by March 2023

Maintaining and enhancing core systems

Property ICT Programme

- We have a very busy schedule of ICT infrastructure projects to support the capital property programme including the installation of networks, Wi-Fi, telephony, printers, and other ICT equipment in new and refurbished buildings. Key projects which have recently completed include Darroch Annex, Canaan Lane Primary, and

Victoria Primary. Other building projects which are underway include the new Currie High School, the new Multi-Agency Centre (ESMAC) and work associated with the ongoing nursery expansion programme.

Currency Programme

- Our currency programme is the ongoing process of understanding how functional an item of hardware or software is compared to the latest version. As part of our currency programme, we are working closely with our technology partner and business areas, to ensure that our IT applications and infrastructures remain aligned to supplier support cycles, run at peak performance, and capitalise on functionality and features offered through new product releases. Key currency programme activities underway include:
 - We completed the upgrade of the AXIM construction management system for Roads Services
 - We have upgraded the LACHS insurance claims system and are now investigating opportunities to move it into the supplier cloud
 - We are upgrading the SWIFT Business Objects reporting platform.

Softphones

- We completed a “softphone” pilot which allows colleagues to use their PCs to make and receive calls using their Council landline numbers. This offers all the features typically reserved for traditional business phone systems like the ability to receive, place, and transfer calls, set up call waiting, reroute calls, and is particularly advantageous for staff who are home or hybrid working and require to be contacted directly via their office number.
- Information on softphones will be communicated more widely and a process is being put in place to manage softphone requests and allocations through the ICT catalogue portal.

Microsoft 365

- A number of significant Microsoft 365 technical, security and user-facing improvements have commenced or have been fully rolled out. These include:
 - Development of a strategy for release of further Teams and MS365 applications is in planning; and,
 - Continued updates to the Teams application including seminars, breakout room support and improved presentation capabilities
 - Pilot rollouts of Power BI to support our wider Data Strategy and Business Intelligence objectives.

Change Processes

- Over March to April last year, we ran a series of structured interviews with teams from both City of Edinburgh Council and CGI, to capture user feedback on the effectiveness of the current ICT change processes and ideas for improvement.
- In response to the review, further work is now underway to deliver a change improvement action plan which will set out a series of specific and measurable improvement tasks with clearly defined owners and timeframes.

Digital Working Groups

- We are continuing to work with Services across the Council to set up new working groups with our relationship managers to coordinate digital developments within their service areas and identify and drive forward new opportunities to harness technology to deliver service improvements, efficiencies, and underpin new ways of working.
- As part of our improved reach and relationship management, Digital Services has been working closely with services in both operational and strategic matters. A recent example was the short notice supply of loan devices to support an inspection in the HSCP and these devices have since been redeployed to support temporary social work staff across Children and Families.

DIGITAL SERVICES - STRATEGIC PROGRAMME OF WORK - NOVEMBER 2022																					
Category	Project	Comment	2022						2023												
			Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Business Improvement	SWIFT Upgrade	Upgrade of SWIFT social care system - timescales and approach to be finalised																			
Business Improvement	iTrent Upgrade	HR and Payroll year-end upgrades and patches																			
Business Improvement	Rolling "Customer" Digital Developments	Rolling programme of Customer & Transactions system upgrades and development projects																		///	
Business Improvement	Rolling "Place" ICT developments	Rolling programme of Place system upgrades and development projects																		///	
Business Improvement	Mitel Telephony	Softphone pilot now completed.																			
Business Improvement	LSCMI Upgrade	Migrating H&SC Level Service/Case Management Inventory to new Scottish Government service																			
Business Improvement	Peoples Network Upgrade	Upgrade of Peoples Network in libraries providing free public access IT services																			
Business Improvement	NetApp																				
Business Improvement	Ethitec - Urology	Extending the use of ATEC24 ELMS2 to help administer the provision of urology prescriptions																			
Business Improvement	Masterbill Upgrade	Upgrade of Masterbill cost analysis, and bills of quantities application within Housing Repairs																			
Business Improvement	AdvicePro	Rollout of new Council Advice system to supporting members of the public around aspects of welfare rights																			
Business Improvement	Pest Control work scheduling and management system	Development of new Pest Control work scheduling and management system																			
Business Improvement	Capture	Tactical upgrade of legacy Capture complaints/case management system																			
Infrastructure	Rolling Currency Programme	Server and database refresh and upgrade programme																		///	
Infrastructure	Rolling Cyber Security Programme	Information security projects policies, procedures, guidelines, and standards.																		///	
Infrastructure	2025 PSTN Decommissioning Programme	In preparation for the December 2025 PSTN decommissioning deadline. In planning.																			
Infrastructure	Property ICT Programme	Rolling schedule of ICT infrastructure projects to support the capital property programme																		///	
ANNOTATIONS:																					

Appendix 5 - Digital & Smart City Implementation Plan – Update as at 30th November 2022

The table below sets out key deliverables and milestone delivery dates from our **Technology Roadmap** and will be updated quarterly.

Key deliverable	Delivered to date	Ongoing Improvements	June - Dec 2022	Sept – Dec 2022	2023	Beyond 2023
Core Technology & Platforms - Cloud Migration Strategy	<ul style="list-style-type: none"> Cloud Migration Strategy adopted Agreed IDOX and Mobile Social Care as Cloud migrations 	<ul style="list-style-type: none"> Commence development pilots and adoption plan Begin migration pilots 		<ul style="list-style-type: none"> Commence engagement and consultation with key stakeholders on benefits and opportunities of Cloud adoption 	<ul style="list-style-type: none"> Phase 1 Continued cloud migration work 	<ul style="list-style-type: none"> Review Strategy and update to reflect current technologies, security, and the Council's technology landscape Minimum on premise
Core Technology & Platforms - Maximise Microsoft 365 capabilities	<ul style="list-style-type: none"> OneDrive, Teams, Outlook for the Web, Office.com and associated apps rolled out across Corporate Estate 	<ul style="list-style-type: none"> Maximise potential of Microsoft365 to support Learning & Teaching operationally, delivery of curriculum, and strengthen wider community links 	<ul style="list-style-type: none"> PowerBI, Power Automate, PowerApps, Bookings, Forms and SharePoint all in pilot. M365 App Strategy nearing completion providing a timeline for the remainder of M365 deliverables. Sensitivity labelling pilot under review. 	<ul style="list-style-type: none"> Drive innovation further with adoption of additional M365 capabilities 	<ul style="list-style-type: none"> Maximise potential M365 for low code for Council- based innovation and development (Digital and power user-based) Develop "patterns" for low code use cases Exploit the potential of MS Teams for collaboration opportunities 	<ul style="list-style-type: none"> Teams and SharePoint online lifecycle management (BAU)
Core Technology & Platforms - Mobile/Flexible Working	<ul style="list-style-type: none"> Mobile/Flexible UYOD CEC managed devices migration to Intune Microsoft app adoption 			<ul style="list-style-type: none"> Commence review of thin client delivery options 	<ul style="list-style-type: none"> WVD Pilot VPN Review Mobile Homecare rostering solution for Social Work 	<ul style="list-style-type: none"> New solution in place
Architecture	<ul style="list-style-type: none"> Governance framework developed, agreed, and implemented EA Principles and Directions agreed Ongoing High Level Design reviews New Shadow IT framework 	<ul style="list-style-type: none"> Application Currency Review (ongoing) 	<ul style="list-style-type: none"> Commence application consolidation (combined with Cloud Migration - ongoing) Smart Cities Commence development of Azure capability 	<ul style="list-style-type: none"> Commence development of combined app database (CGI and the Council) Commence review of network services 	<ul style="list-style-type: none"> Data used for modelling services through BI. Delivery of a consolidated application list & standardised toolset of strategic applications 	<ul style="list-style-type: none"> Drive further efficiencies by streamlining application set
Governance	<ul style="list-style-type: none"> ICT technology Acceptable use policy implemented Digital and Smart City Strategy EADA – both enterprise architecture and design authority in place 	<ul style="list-style-type: none"> Change Board Digital Strategy Group Improved departmental Digital Governance e.g., RM's engagement with departmental SLTs 	<ul style="list-style-type: none"> Shadow IT review (complete) 	<ul style="list-style-type: none"> Reflect national picture Review current open data provision Information Strategy 	<ul style="list-style-type: none"> Governance Review GIS Strategy Website accessibility review Digital & Smart City Strategy Review 	<ul style="list-style-type: none"> Strategy and Implementation Plan Reviews Open Data and BI Strategies

Technology Solution - Digital print & mail strategy

The Council has already embarked on an ambitious strategy to become paperless.

Key deliverable	Delivered to date	Delivered to date	Delivered to date	Sept - Dec 2022	2023	Beyond 2023
<p>Digital print & mail (paperless) strategy</p> <p>Reducing our use of paper and print through the Print and Mail Programme.</p>	<ul style="list-style-type: none"> • “My letters” desktop sending of Royal Mail letters using online system. • Digital Mail assistant – scanning of inbound mail to the Council direct to recipients e mail account • Digital Scanner technology deployed to allow scanning of FOI’s and legacy paperwork to digital archives • Recycled Paper for copiers and envelopes introduced • Reduced mailing vehicles and physical mail pickups by 85% contributing to carbon reduction targets • Paper Form reduction planning started – evaluation of paper form printing underway at printing facility • 5-year savings plan developed and submitted to further reduce MFD machines. • New device deployment completed. 	<ul style="list-style-type: none"> • Deploy papercut software – centralising bulk printing • Develop and communicate a Council wide print policy and framework – delayed and will be communicated in March in line with device role outs. • Start paper form usage reduction processes • Reducing storage space for legacy and future documents • Increase back scanning of archive to reduce storage footprint • Continue to reduce incoming paper mail flow into the Council by identifying and eliminating these at process source. 	<ul style="list-style-type: none"> • Deploy Multi-Functional Devices to schools and corporate estate to a reduced footprint – started in January and delivered as planned. • Introduce local printing and scanning hubs – Equipment ordered, and machines will be deployed – machines delayed due to global supply chain issues and are being prioritised for delivery. • Introduce individual printing transparency and billing for MFD copier usage – on track. • Identifying Lean and automation opportunities and developing and deploying them while promoting digital processes rather paper-based ones • Start analysing machine usage over the network using new advanced reporting now available. 	<ul style="list-style-type: none"> • Reduce colour and black and white printing in line with Business Case. • Reduce volumes of A3 printing • Reduce transactional mailing volumes for all centralised mailings – using document composition tools and expertise • Reduce number of deliveries from Paper and Stationery contract to Edinburgh sites from five per week to two per week. • Reduce the management of 300,000 incoming I&B emails by introducing the Email Import Module for W360. • Introduction of Papercut Job Ticketing for efficient job ordering and data transfer to the Print Unit. • Identifying Lean and automation opportunities and developing and deploying them while promoting digital processes rather paper-based ones 	<ul style="list-style-type: none"> • Identifying Lean and automation opportunities and developing and deploying them while promoting digital processes rather paper-based ones • Reduced energy consumption evident from using newer more efficient Multi-Functional Devices • Further reduce MFD machines deployed in line with planned 5% year on year volume reductions. 	<ul style="list-style-type: none"> • Look to reduce centralised printing facilities footprint in line with much more reduced demand where possible • Business case the new MFD contract proposal – which is envisaged should be very light touch going forwards and plan for further savings. Contract tendering and award period should start mid-2023. • Deploy scanning to SharePoint once SharePoint has been rolled out – TBC

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Technology Solution - Customer Digital Engagement

Though the Customer Digital Engagement programme we will look to create a single view of our customers to better model and shape our services and provide more targeted support to those citizens who need it most.

Key deliverable	Delivered to date	Delivered to date	June – Sept 2022	Sept - Dec 2022	2023	Beyond 2023
<p>Customer Digital Engagement</p> <p>Move from traditional customer engagement routes to omnichannel, providing citizens with greater choice around how to transact and the 24/7 ability to pay, report or request public services.</p>	<ul style="list-style-type: none"> Report/Request forms for: Litter, Road, Pavement, Streetlight, Pothole, Road Sign, Graffiti, Dog Fouling, Overhanging tree, bush or foliage problem, Grit Bin Requires Filling, Missed Bins (communal and individual)/ Communal Bin full or Overflowing, Request a Grit Bin, Recycling Bin or Box, Special Uplift/Bulky Waste, Assisted Bin collection, Garden Waste subscription Register for Garden Waste/ Garden waste change of details, View Account History/Transaction Change of Details, Set up Account/Create a Citizen Compliment, Suggestion or Complaint/, General Enquiry, Building Payment, Fixed Penalty Notice Payment, Sheltered Housing T.V. License Payment, ESRS - Shared Repairs, roadworks penalty notice, Pay us back - housing benefit, Pay your Council Tax or Business rates, Council rent, Non-emergency housing repairs, School Transport, Adult and Children Social Care Assessment forms, Covid related support and business grants, Submit and pay for licensing transactions, Report damp in Council owned homes, Apply for the Scottish Milk and Healthy Snack Scheme, School Registration, Apprentice Trainee, Religion and under 18 discounts for CTAX, RingGo refund, Report and Illegally Parked Vehicle, Low Income Housing Payments 	<ul style="list-style-type: none"> Omni Channel – give customers choice of channels to transact with the council, maximising the proportion of digital transactions and reduce where possible face-to-face transactions Citizen centric – put citizens at the centre of what we do by engaging them in the design and delivery of services Digital by default – implement a digital approach to the delivery of services Mobile first – priority to ensuring that those services can be delivered through mobile technology 	<ul style="list-style-type: none"> Improved housing repairs form to deliver benefit around the customer and agent journey ahead of the fully integrated transaction. Customer satisfaction survey development for form submission Contact forms for waste, streetlight and roads transactions 	<ul style="list-style-type: none"> Fully integration of housing repairs process with the CRM Integration of communications platforms (Mitel, social media) with Verint CRM Consolidate Knowledge Base that can be surfaced through the CRM Upgrade of the CRM platform to latest version 	<p>To be confirmed - options include:</p> <ul style="list-style-type: none"> Replace myGovScot single sign on platform with a fit for purpose solution that includes facility for business accounts Integration of Civica CX with Verint Integration of Civica EDM with Verint 	<ul style="list-style-type: none"> Customer Digital Engagement programme - create a single view of our customer transactions to shape our services and provide targeted support where needed. This will use: <ul style="list-style-type: none"> UPRN & UCRN as key identifiers Provide single source of truth on the customer and the services they consume Enable personalised and localised services to be delivered Support pro-active grouping of services around user needs

Technology Solution - Data as an asset

Our data is an asset that is of value to the organisation and our partners that needs to be managed accordingly.

Key deliverable	Delivered to date	Sept to Dec 2022	2023	Beyond 2023	
<p>Data as an asset</p> <ul style="list-style-type: none"> • Through better use of systems, we will ensure that our data is: • Easier to identify and find • Managed consistently across the organisation • Transferrable into information to support our evidence-based decision making • Support the work of our localities • Stored once and defined by effective metadata and information governance framework/rules • Structured to support a single view of the customer • Subject to constant analysis and review cycle to ensure effectiveness data management and governance (IGU) • Ensure our data is used and shared ethically • Open data where possible and capable of exploiting Smart City Data • Exploitable by AI in generating potential automations, additional intelligence, security heuristics etc 	<p>GIS Developments</p> <ul style="list-style-type: none"> • We worked with NHS National Services Scotland using our in-house Geographical Information Systems (GIS) capability to improve the data we have in modelling COVID-19 outbreaks and to assist in our response to this. This work is part of a wider data sharing project with NHS NSS and both Glasgow City Council and Aberdeen City Council. NHS Lothian is following the outputs of this work closely and we are sharing this with them • Unification of property and street gazetteer data to enhance consistency and reliability of key address data used across the Council and shared nationally with the One Scotland Gazetteer. 	<ul style="list-style-type: none"> • Delivering a Business Intelligence platform to integrate and leverage software information assets, and to transform data into actionable insights that drive the Council's strategic and tactical business decisions • We successfully signed-off the final dashboards for the Confirm asset management system within Waste Services, which in conjunction with the Routesmart waste collection dashboards, completes delivery of the contractual elements of the Business Intelligence transformation programme • Business Intelligence dashboards for Waste Services now fully embedded into business as usual, supporting improved performance and customer service. • Digital Services working with IGU to create Information Strategy • CAG Quality Improvements: designed to further enhance currency and reliability of address information and increase frequency with which it is shared with national users, e.g., emergency services. 	<ul style="list-style-type: none"> • Business Intelligence - further work underway to build new reports for HR and Homelessness services, and to develop a strategic plan to transition business intelligence support and development capabilities over to Council teams by March 2023. • Microsoft "Power BI" pilots underway to explore the potential of the tool to support data-driven decision making and new ways to visualise and analyse data. • Mobilisation of the Azure Data Warehouse to support the Smart City Operation centre, providing a holistic view of the city by utilising the latest technology to drive operational efficiencies, improve security and analyse trends • Data Strategy and Implementation Plan being finalised 	<ul style="list-style-type: none"> • We will work with services to improve the tools that enable a Council-wide approach to business intelligence to enhance services and digital engagement with our customers and communities. • Further adoption of Power BI for strategic reporting and analytics. • Consolidation of legacy geospatial asset management systems onto the corporate GIS platform, to improve data sharing and systems interoperability. • Further development of open data strategies and initiatives to publish information in a linkable and re-usable format with the aim to drive transformation and improvement through transparency and citizen/business participation. • Data Strategy Approved 	<p>We will highlight the benefits of sharing open data and its use to help model and shape our services and our city.</p> <p>BI and GIS Strategies</p>

Digital capabilities and services - Security

We will ensure that Council infrastructure is secure and resilient, and that continuity of services is maintained using appropriate technical measures to protect our network and the data we hold in our systems.

Key deliverable	Delivered to date	Ongoing Improvements	Ongoing Improvements	Sept – Dec 2022	2023	Beyond 2023
<p>Security</p> <p>The security challenges we face are increasing and ever changing. As well as more documented attack routes such as virus or ransom ware, other challenges are emerging. Our increased use of multiple and remote devices creates a challenge to protecting this as our increased use of systems and who accesses them increases the attack surface for those wishing to compromise our security.</p>	<ul style="list-style-type: none"> Follow National Cyber Security Centre (NCSC) current guidelines, including NCSC 10 steps to Cyber Security – ongoing every year Ensure compliance with Cyber Resilience Framework, CE+, PSN Improve cyber defences e.g., phishing Enhance password policy for Corporate Provide comprehensive security and awareness platform for all staff to detect, deter and defend against cyber threats - delivered through MetaCompliance Work with partners across the public sector through participation in the Cyber Security Information sharing partnership (CISP) and the Scottish Local Authority Information Security Group (SLAISG) Develop a comprehensive communication plan for cyber security Partnership with Scottish Business Resilience Centre Revised DPIA process for technical assurance Technical restrictions to block Webmail provision. 	<ul style="list-style-type: none"> Follow NCSC current guidelines Ensure compliance with Cyber Resilience Framework Improve cyber defences Implementation of all NCSC active cyber defence tools – implementation of DMARC/DKIM Enhance password policy for Learning & Teaching Support cloud first strategy by moving the onus on patching to vendor/contract - by moving services to the cloud Work with public sector partners through participation in the Cyber Security Information sharing partnership (CISP) and the Scottish Local Authority Information Security Group (SLAISG) -ongoing Maintain and develop cyber risk management framework – joint cyber risk register Update comms plan for cyber security 	<ul style="list-style-type: none"> Follow NCSC current guidelines Ensure compliance with Cyber Resilience Framework Improve cyber defences Enhance password policy for Learning & Teaching Implementation of DMARC/DKIM Improve cyber defences data loss prevention – work with IGU Develop a comprehensive communication plan for cyber security – ongoing Improve cyber defences network access control as part of Network management audit Phishing simulations Maintain and develop cyber risk management framework – joint cyber risk register Audit Work Word towards implementation of MTA-STS PSN Certification Prep Blocking of auto forwarding out with Council 	<ul style="list-style-type: none"> Follow NCSC current guidelines Ensure compliance with Cyber Resilience Framework Completion of implementation of DMARC/DKIM Support the implementation of shadow IT framework Support cloud first strategy - move the onus on patching to vendor/contract - by moving to cloud implementation of all NCSC active cyber defence tools – Update comms plan for cyber security PSN Certification Maintain and develop– joint cyber risk register Audit Work implementation of MTA-STS, USB NAC Project Meetings SOC Services Review Threat Intel review Tabletop Exercises Continued Drive in reduction of Vulnerabilities. L&T Pen Test Review and RAP New Security Suppliers review and appointment 	<ul style="list-style-type: none"> Follow NCSC current guidelines Ensure compliance with Cyber Resilience Framework Continued delivery of security and awareness platform Work with public sector partners through participation in the Cyber Security Information sharing partnership (CISP) and the Scottish Local Authority Information Security Group (SLAISG) -ongoing Maintain and develop cyber risk management framework – joint cyber risk register Update comms plan for cyber security PSN Certification L&T Penetration Testing Audit Work Network Access Control implementation across Corp and L&T Domains SOC Services Review Threat Intel reviews Tabletop Exercises Business Cases 	<ul style="list-style-type: none"> Continued compliance with NCSC guidelines and Cyber Resilience Framework Improve cyber defences Data loss prevention Implementation of NCSC active cyber defence tools Upgrade/remove legacy applications – support cloud first strategy adoption Continued delivery of security and awareness platform Work with public sector partners through participation in the Cyber Security Information sharing partnership (CISP) and the Scottish Local Authority Information Security Group (SLAISG) -ongoing Maintain and develop cyber risk management framework – joint cyber risk register Update comms plan for cyber security PSN Certification L&T Penetration Testing Threat Intel reviews Tabletop Exercises

Digital capabilities and services – Standards

We plan to measure performance to improve our service both strategically and operationally using metrics to measure success.

We will focus on transforming our service provision to better meet the changing requirement of the organisation and a modern workforce. Using industry standard practices for IT service management that focuses on aligning IT services with the needs of business approach.

Key deliverable	Delivered to date	Ongoing Improvements	Sept - Dec 2022	Sept - Dec 2022	2023	Beyond 2023
Performance Management Measuring performance to continually drive improvements and customer satisfaction.	<ul style="list-style-type: none"> Monthly CSR meetings CSI (Continuing Service Improvement) discussed as part of CSR meeting 	<ul style="list-style-type: none"> Incident response and resolution analyse to ensure meeting SLAs Customer satisfaction review Continue to progress innovation. E.g., Amelia RMs to set up meeting with Business areas re strategy 	<ul style="list-style-type: none"> Review KPIs Look to improve service related to customer feedback Have trackers set up relating to Strategy with Business areas 	<ul style="list-style-type: none"> Implement KPI changes Review Trackers 	<ul style="list-style-type: none"> Reassess KPI changes impact Over-arching review of Business areas matching strategy 	<ul style="list-style-type: none"> Annual review of Business areas Digital Strategies
Service Management Improve service management provision through delivery of continual improvements for users.	<ul style="list-style-type: none"> New Internal Service Desk (Halo) within Digital Services to improve interaction and service with colleagues Chat- bot Amelia has been piloted and roll out extended 	<ul style="list-style-type: none"> Improving user experience piloting Chat- bot Amelia Continual improvement of Service Catalogue Continue to Promote use of My-ICT ITIL training for appropriate staff 	<ul style="list-style-type: none"> Continual Service Improvements Monitor uptake of My-ICT Ensure ITIL standards are being met Review Digital Services Customer facing processes Continued focus on CSI 	<ul style="list-style-type: none"> Chat Bot embedded across Corporate estate Work with Comms to promote channel shift online Implement Digital Service Customer facing review Outputs 	<ul style="list-style-type: none"> Move to more online tools – self service Chat Bot embedded across L&T estate Review impact of Chat Bot and Internal Service Desk 	<ul style="list-style-type: none"> Service Strategy Review

Digital capabilities and services - Standards

We will apply a blended approach to project change management which will bring together the best elements of the Prince2 and Agile methodologies. Change requests will be assessed and coordinated through a joint change review board. The board will check that requests have a supporting business case and align to our enterprise reference architectural principles and technology roadmap. The change process will include options to fast-track legislative and emergency requests.

Key deliverable	Delivered to date	Sept to Dec 2022	2023	Beyond 2023	
<p>Change Management Establish and embed improved change management processes that meet the needs of the Council for technology change requests and project and portfolio management.</p>	<ul style="list-style-type: none"> Weekly Programme Boards and Risk Reviews to ensure effective management of project risks and plans, and regular highlight reporting Application of PRINCE2 project management methodology for all major projects Quality Gate processes in place to evaluate, authorise, and monitor projects through their lifecycle Weekly Relationship Management meetings with CGI to provide guidance and quality check change requests Weekly Joint Change Review Board to review the progress of changes requests and discuss risks, escalations, and prioritisations Application of ITIL governance framework for ICT change management Formal reporting of Change Performance SLA's through the Monthly Partnership Board 	<ul style="list-style-type: none"> Launch of Emergency / Resilience Change Process to fast-track legislative and emergency requests Early adoption of Hybrid Agile / Waterfall models enabling more iterative approaches to project delivery Quarterly reporting of the Strategic Programme of Work to GRBV Emergency / Resilience Change Processes fully operational Digital Working Groups established in key business areas to improve collaboration Migration of the complex change application process onto the new Halo self-service portal CEC Relationship Managers to attend Strategic meetings with Business areas to ensure any developments match the Digital strategy Developing systems and staff capability responsive to changing business needs: Change process to ensure that futureproofing is always considered in terms of system agility and staff capacities Review of RM Board attendance and outcomes 	<ul style="list-style-type: none"> Following workshops with CEC and CGI change teams on the effectiveness of the current ICT change processes, a "Change Improvement Action Plan" has been put in place. Over September to December, further work will be undertaken on the plan to drive improvements in key areas such as value for money, delivery on time, and customer satisfaction Cloud First – further developments to transition the next tranche of applications onto the Cloud Refresh of the change process guidelines and information on the Council Intranet Initiating a communications campaign to promote the change processes and help business users understand how to engage with both Digital Services and CGI, with new ideas, business cases and ICT change requests 	<ul style="list-style-type: none"> Annual refresh of Digital Business Plans with each Service area - ensuring alignment with the Digital and Smart City Strategy Extending in-house development capacity e.g., Business Intelligence and Website accessibility Cloud First – business case developments and projects to transition the next tranche of applications onto the Cloud / SaaS Model Establish a network of Digital Champions embedded within service areas 	<ul style="list-style-type: none"> Embedding Continuous Improvement into our change processes Cloud First - majority of applications move onto the cloud Agile Waterfall becomes the dominant delivery model - applying a more iterative approach focused on fine-tuning deliverables to the needs of the business Move towards a portfolio approach to digital programme management, in line with future business demand

Digital capabilities and services - Standards

Develop capability to be responsive to changing business needs. Embrace more agile and customer focused apps to support improved digital engagement with our citizens.

Key deliverable	Delivered to date	Sept to Dec 2022	2023	Beyond 2023	
<p>Business Solutions As well as changes to our Infrastructure and the way we transform our business, we need to position our line of business systems to be an engine for change.</p>	<ul style="list-style-type: none"> We successfully upgraded the Barclaycard online payment gateway across a range of customer facing applications including the contact centre CRM, the outdoor learning booking system, the planning and building standards portal, adult education booking and the Yakara mobile payment system. We upgraded the legacy Capture database in June 2022 which is primarily used to track and manage complaints. It also supports some contact centre transactions including housing repairs and Clarence requests related to items such as trees, parking meters, bus shelters and traffic signal queries Business Intelligence - we successfully signed-off the final dashboards for the Confirm asset management system within Waste Services - which in conjunction with the Routesmart waste collection dashboards, completes delivery of the contractual elements of the Business Intelligence transformation programme Total Mobile (Housing Repairs and Mobile Working) – further developments completed to deliver a new mobile workforce management solution for Empty Homes and Gas Servicing and further enhancements to the Repairs archiving system 	<ul style="list-style-type: none"> The Cabinet Office accessibility audit of our website successfully completed in February 2022, and further work is now underway on our own next-level accessibility testing from which we will begin the next phase in ensuring that we continue to achieve and maintain accessibility compliance standards. Currency Programme - we are working closely with our technology partner and business areas, to ensure that our IT applications and infrastructures remain aligned to supplier support cycles, run at peak performance, and capitalise on functionality and features offered through new product releases Property ICT Programme - we have a very busy schedule of ICT infrastructure projects to support the capital property programme including the installation of networks, Wi-Fi, telephony, printers, and other ICT equipment in new and refurbished buildings. Key projects which have recently completed include Castlebrae High School, Canaan Lane Primary, and Victoria Primary. 	<ul style="list-style-type: none"> Upgrade of the Peoples Network (PN) which provides members of the public with free and secure access to computers and the internet within libraries, and Wi-Fi connectivity for customers who wish to use their own devices Homecare - phased rollout of the new homecare rostering system starting in Autumn 2022. The system will drive efficiencies and support new ways of working to deliver the best quality of care, adopting a three conversations approach, and help support individuals live independently in their own home, offering the right care and support, at the right time and in the right place Websites – we are working closely with the Family Based Care team, to deliver a new “Foster with Edinburgh” website which will provide carers and prospective carers with information and advice on our Adoption and Fostering services, and a further development is in progress to upgrade the Edinburgh Guarantee website Further development of the Business Intelligence platform to deliver of new reports and dashboards for HR and Homelessness services IDOX Cloud Migration - work is underway to transition key Planning and Building Standards systems onto 	<ul style="list-style-type: none"> NetApp Sans – an upgrade to the Council’s file storage infrastructure known as the “NetApp SAN”. The NetApp SAN supports many of the Councils core applications including iTrent, Swift, iWorld Housing, and iWorld Revenues and Benefits, the programme will require careful planning and coordination with business teams, to support testing and ensure the upgrades have minimal impact on business operations Community Transport - introduction of a new transport system to support flexible and efficient scheduling and route planning - thereby reducing mileage, costs, and environmental impact. It will also allow drivers to receive real time route instructions on handheld devices in their vehicles which will replace the current outdated paper-based route allocation system. The system also provides an online portal for parents and carers to book and track journeys The ERP Programme - upgrade of the Council’s core finance systems to support key activities such as accounting, procurement, debt 	<ul style="list-style-type: none"> Relationship Managers to identify other opportunities Analogue to Digital Programme – work to decommission all analogue BT PSTN lines before December 2025

	<ul style="list-style-type: none"> • End User Device Refresh programme - we successfully completed the rollout of the ultra-high specification PC's for AutoCAD users within the Capital Projects Team and work also completed to upgrade Cashless Catering PC's within schools 		<p>"Software as a Service" running on the IDOX cloud</p> <ul style="list-style-type: none"> • Introduction of a new rent management system, Mobyssoft Rentsense, which will assist Housing officers identify tenants who are struggling to pay their rent. This will enable officers to make targeted and early interventions and will help ensure tenants receive the appropriate help and support, leading to an improvement in the overall rent collection • Rollout of the cloud based Civica CX application to drive business improvements and transformation across Licencing, Trading Standards, Food Safety and Hygiene. The project is being delivered in phases with Phase 1 now underway to transition Licencing from the legacy system onto CX and planning for Phase 2 is in progress. 	<p>collection and supply chain operations</p> <ul style="list-style-type: none"> • Transitioning business intelligence support and development capabilities over to Council teams by March 2023 • Rationalising our portfolio to reduce datasets, costs and improve sharing of data • Change process to always consider re-use ahead of off-the-shelf, ahead of bespoke and new. • Update and review "Council on a Page" Enterprise Architecture to uncover potential for rationalisation • Managers Embedded in Business area Strategic meetings • Ensuring systems are fit for purpose: • Departments to carry out audits of all their key systems • Ensuring that the data we hold, is needed, accurate and up to date: 	
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Governance

A balanced governance model will provide flexibility with optimal discipline.

Key deliverable	Delivered to date	Delivered to date	Sept - Dec 2022	2023	Beyond 2023
<p>A range of governance tools will be put in place to provide assurance that the technologies we implement, and the investments made to put these in place, serve the strategic aims of the Council, the business needs of services and are in line with this Strategy.</p>	<p>As part of our already established Weekly Programme and Risk Review meetings we will:</p> <ul style="list-style-type: none"> ensure that the key deliverables from this strategy are subject to the same governance arrangements to ensure effective management of project risks and plans, and regular highlight reporting <p>The Enterprise Architecture Board and Enterprise Architecture Authority Design (EADA) have been re-invigorated and are up and running to:</p> <ul style="list-style-type: none"> ensure that we have an agreed baseline architecture guide technology investment decisions - including funding investments review technology standards, processes, and procedures make recommendations for the implementation plan and future technology strategies <p>In addition to the Strategy implementation plan and its reporting requirements to Corporate Leadership Team, we will:</p> <ul style="list-style-type: none"> establish a Smart Cities Board All proposed changes, projects and programmes will be required to have: <ul style="list-style-type: none"> an approved business case funding available to implement and maintain the change through lifetime of the proposed solution Investment related to the individual projects or programmes and be provided by the Service responsible for the change We will set up: <ul style="list-style-type: none"> Change Board Digital Strategy Group Improved departmental Digital Governance Joint Council/CGI Disaster Recovery Board due to be re-established <p>We will:</p> <ul style="list-style-type: none"> Work with Internal Audit to review and assess the adequacy and effectiveness of the processes and governance controls established to support development, communication, and implementation of the Council's Digital and Smart City Strategy 	<ul style="list-style-type: none"> Review of shadow IT - procurement to be managed under a new framework/system by Feb 22 	<ul style="list-style-type: none"> Information Strategy to CLT and P&S Digital Maturity Assessment 	<p>We will take forward:</p> <ul style="list-style-type: none"> updated cloud and cyber security strategies clear ICT governance arrangements participation in national and regional programmes collaborative working with partners strategic alignment with Council goals and vision opportunities for innovation Governance review Update of Digital & Smart City Strategy 	<ul style="list-style-type: none"> Strategy reviews Governance for strategy implementation plans

Digital Council and Smart City - Digital Learning

To realise our vision, partners at both a national and local level will work together to achieve all four of the interrelated objectives that are central to successful digital learning, teaching and assessment:

- Develop the skills and confidence of educators in the appropriate and effective use of digital technology to support learning and teaching
- Improve access to digital technology for all learners
- Ensure that digital technology is a central consideration in all areas of curriculum and assessment delivery
- Empower leaders of change to drive innovation and investment in digital technology for learning and teaching

Key deliverable	Delivered to date	Delivered to date	June - Dec 2022	December 2022	June 2023	2023 and beyond
<p>Digital Learning Supports and promotes the appropriate and effective use of digital technology within education to give all City of Edinburgh learners the opportunity to improve their educational outcomes and to develop digital skills that will be vital for life, learning and work in an increasingly digital world.</p>	<ul style="list-style-type: none"> • Digital Learning and Teaching framework shared with all education staff • Cross sectoral Digital Learning Board established • Funding and agreement to embark on Empowered Learning project • Key staff identified to create staff networks that will support Empowered Learning • Engagement with educational staff networks, third parties, and council colleagues to create and populate Learning Management System (Thrive) • Enhanced engagement of core platform MS365 to ensure continuity of resources, allow networking between settings and safe interactions with external partners. • Introduction of core interactive multi-media curricular content platform (ClickView) • Engagement with National E-Learning offer (eSgoil and West OS) as hosted on ClickView • Empowered Learning project piloted at 1 Secondary school and 1 Primary school • Promote engagement with Learning Management System (myLearningHub) • Appointment of 3 Digital Learning Development Officers to support Digital Learning Coordinator network and the development of e-learning materials • Infrastructure reviews conducted at each educational establishment (Early Years, Primary, Secondary and Special schools) 	<ul style="list-style-type: none"> • Improvements to infrastructure made at each educational setting, starting 2021 and extending to Dec 2022. • Digital Learning Coordinator networks engaged to support teaching staff, learners, and their wider school communities 	<ul style="list-style-type: none"> • Empowering school leaders • Providing professional learning opportunities for staff and equity of access by embracing e-learning (DLC networks and myLearningHub) • Deployment of 1 to 1 devices for all Secondary teaching staff and Learners (Build and Grow secondary students Aug '22.) • Focus on STEAM subjects to prepare learners with a digital toolset for future life and work • Creation of a dedicated AV and IoT network to enhance potential of AV equipment paired with staff and pupil device provision. • Introduction of new print approaches. • Rising rolls iPad stock increased • iPads to support Ukrainian young people enrolling in schools. • Increasing awareness of and confidence in using digital tools to support communication (Ukrainian language tools) 	<ul style="list-style-type: none"> • Deployment of 1 to 1 devices for all Early, Primary and Special teaching staff and for P6 & P7 learners • Deployment of devices in a ratio of 1 to 5 for P1 – P5 learners • Deployment of devices to Special and EY learners appropriate to those settings • Professional learning opportunities for staff with equity of access by e-learning (DLC networks and Thrive) • Edinburgh Learns curricular teams update curricular progressions and training opportunities • Learning community engagement with Data Education. University of Edinburgh colleagues will support learning communities using sensors within the local environment and analyse the returned data. Students will develop a range of skills through inter-disciplinary engagement with data. 	<ul style="list-style-type: none"> • Developing our employees to be comfortable with the technologies we use to deliver service • Providing and promoting e-learning to enhance digital skills • Continuing professional learning opportunities for teaching staff • Edinburgh Learns curricular groups to support evaluation of Empowered Learning identifying areas for further support and next steps 	<ul style="list-style-type: none"> • Review and refresh Empowered Learning provision

Digital Council and Smart City - Digital Skills

Consumer technology growth has created a new digital era. There is an increased need for consumers to develop their own digital literacy and cyber resilience skills to engage digitally with the Council and our customers must feel empowered to do so.

Key deliverable	Delivered to date	Sept 2021	Jun - Sept 2022	Sept – Dec 2022	2023	Beyond 2023
<p>Digital Skills To be the Digital Council we aspire to be we will need different skills and knowledge. We will need:</p> <p>Council</p> <ul style="list-style-type: none"> • Leaders who understand the value technology brings to our organisation • Leaders who develop digital skills to become digital leaders • A digitally skilled workforce who engage with professional development to further develop and enhance digital skills <p>Customers</p> <ul style="list-style-type: none"> • Citizens who feel confident in their digital skills and secure in their ability to promote their own cyber resilience • Citizens who engage with Smart City and Digital Council initiatives providing feedback that helps to shape future improvements <p>Schools and Lifelong learning</p> <ul style="list-style-type: none"> • Learners who engage with opportunities to develop their digital literacies • Learners who develop their understanding of their own cyber resilience to be safe and secure when using digital tools. • Learners who have digital skills for life, learning and work. Skills that will empower them to become the digital citizens and workforce of the future <p>Teachers who utilize digital tools to support their working, develop high-quality teaching and effective assessment methods</p>	Elected Member ICT and Digital Sounding Board meetings		<p>We will do this by:</p> <ul style="list-style-type: none"> • Developing our employees to be comfortable with the technologies we use to deliver services • Providing and promoting e-learning to enhance digital skills • Recruit Get Online Volunteers to support the delivery of digital inclusion learning in our libraries <p>Providing professional learning opportunities for staff and ensuring equity of access to such opportunities by embracing e-learning</p>	<p>We will do this by:</p> <ul style="list-style-type: none"> • Provide and signpost a wide range of digital support tools and materials • Provide adult learning opportunities using e-learning opportunities • Deliver digital inclusion learning opportunities for citizens via our libraries • Designing services and support capabilities that deliver digital inclusion for all our citizens • Embracing social media as a tool for engagement and communication both internally and externally <p>We will do this by:</p> <ul style="list-style-type: none"> • Supporting schools and early years to access and deliver a 21st century educational experience • Empowering school leaders to drive innovative changes within their setting • Providing up to date infrastructure, hardware, and software to ensure learning to enable learning that provides the best future life chances for all learners • Focusing on STEAM subjects to ensure learners are prepared with a digital toolset fit for future life and workspace • Embracing our core platform MS365 to ensure continuity of resources, allow networking between settings and safe interactions with external partners 	Review digital literacy and cyber resilience skills against participation and engagement, identify gaps and develop opportunities for further engaging and empowering customers and colleagues	Review digital literacy and cyber resilience skills against participation and engagement, identify gaps and develop opportunities for further engaging and empowering customers and colleagues

Digital Council and Smart City – Libraries Digital Inclusion

Digital inclusion is about ensuring the benefits of the internet and digital technologies are available to everyone. This is important not only to ensure that citizens can access Council services, but also to support the Council's central priorities of reducing poverty and improving well-being. Our aim is to provide our citizens with access to digital connectivity and that we can provide support for our citizens to gain digital skills and the confidence to use them.

Key deliverable	Delivered to date	Throughout 2022	June - Sept 2022	Sept – Dec 2022	2023	Beyond 2023
<p>Digital inclusion We will:</p> <ul style="list-style-type: none"> • Ensure connectivity is available in our community spaces including libraries, schools, and early years settings • Ensure citizens can access resources within our libraries • Ensure citizens can access learning opportunities to further their digital skills and cyber resilience abilities 	<ul style="list-style-type: none"> • In March 2020, at the start of the Covid-19 pandemic, we worked to provide our most vulnerable families with devices and connectivity • Edinburgh Libraries provide various digital support offers for staff and customers to help improve digital skills and raise confidence with digital technology on a local level. • Edinburgh Libraries provide a varied catalogue of digital resources and a wide range of virtual learning, entertainment, and support activities freely accessible to all library members 24/7. • Edinburgh Libraries provide free access to pcs, internet and Wi-Fi for all customers, citizens, and visitors. 	<ul style="list-style-type: none"> • Delivery of Empowered Learning which will • Edinburgh Libraries continues to support SCVO in administering Connecting Scotland fund – shortleeting applications and distributing digital technology equipment and connectivity to local applicants. • Initial pilot of SLIC Digital Training platform in Edinburgh Libraries – national platform designed to provide training and learning resources on selected digital activities and resources. Designed for public library staff to increase confidence and capability – aiming for 100% digital champion staff cohort. • Edinburgh Libraries Get Online digital support delivered remotely over the telephone to combat technological barriers and physical barriers due to Covid19 building closures 	<p>Edinburgh Poverty Commission identified that action must be taken to address and ensure that digital participation opportunities are made available for those living with poverty. We will:</p> <ul style="list-style-type: none"> • Support the delivery of measures set out in the Council's Our Future Council; Our Future City plan to provide digital inclusion opportunities for our citizens. We will continue to identify opportunities, develop plans and work with partners to exploit and deliver these commitments throughout the lifespan of the strategy • Roll out of remote check-out and return via individual digital device and Edinburgh Libraries App – will allow customers to issue and return books and check their library account using their mobile phone. 	<ul style="list-style-type: none"> • Providing up to date infrastructure and hardware • Get Online – volunteer led 1:1 support for all learners. Sessions informal and user-led underpinned by SCVO Digital Charter and Good Things Foundation's Learn My Way online modules & resources • Get Online VIP - smart technology and e-resources offer accessibility functions which support and facilitate access for customers with sight loss and visual impairment. Identify staff training opportunities in Technology support for people with sight loss • Refresh People's Network - new hardware and software with updated features like wireless printing by Oct 2022 – Digital Services are working closely with CGI and the Place team to finalise plans and costs for the upgrade which provides free public access PC's and Wi-Fi connectivity. The upgrade will not only improve performance and resilience, but also offer new services and future options to integrate customer hubs services into libraries. • Provide an Online Public Access Catalogue (OPAC) in every library location • Roll out of remote check-out via individual digital device and Edinburgh Libraries App – will allow customers to issue books and check their library account using their mobile phone 	<p>Open Plus technology - to enable access to all library buildings and resources outside normal opening hours, with no staff onsite, by swipe card access. This would be for approved and inducted library customers – but available by application for all adult members (pending approval of infrastructure improvements)</p> <p>Self-service on the Edinburgh Libraries App-phase 2 – Library customers will be able to Return books via Library App. Online VIP sessions explore people's needs and provide the right support via small workshops</p>	<ul style="list-style-type: none"> • Replace desktops and software in all library locations • Provide an Online Public Access Catalogue (OPAC) in every library location • Upgrade of People's Network and potential for introduction of "tablet" technology • Self-service kiosks • New LMS (Libraries Management System) • Review of digital connectivity infrastructure and development of plans to meet with current and future technologies

Digital Council and Smart City – Empowered Learning and Citizens Digital Inclusion

Digital inclusion is about ensuring the benefits of the internet and digital technologies are available to everyone. This is important not only to ensure that citizens can access Council services, but also to support the Council's central priorities of reducing poverty and improving well-being. Our aim is to provide our citizens with access to digital connectivity and that we can provide support for our citizens to gain digital skills and the confidence to use them.

Key deliverable	Delivered to date	Throughout 2022	To Sept 2022	Sept – Dec 2022	2023	Beyond 2023
<p>Digital inclusion We will:</p> <ul style="list-style-type: none"> • Ensure connectivity is available in our community spaces including libraries, schools, and early years settings • Ensure citizens can access resources within our libraries • Ensure citizens can access learning opportunities to further their digital skills and cyber resilience abilities • Ensure that digital literacies are embedded into all aspects of the curriculum • Foster positive relationships between families and early years settings/schools allowing for support opportunities to be identified • Provide equity of access to digital resources for all learners in schools • Ensure that citizens on low incomes are involved in the design and development of digital services that matter to them • Ensure super-fast broadband infrastructure is rolled out across the whole Council owned estates. This will provide benefits to tenants and the potential to support colleagues across the Council to work in a more mobile and efficient way. This will enable services across the Council, such as the Smart Cities project to develop their programme to reduce/eliminate the barrier of internet access. 2/3 of all council homes now connected to the CityFibre infrastructure. • Working with partners CityFibre to enable FTTP (fibre to premises) infrastructure rollout across the City • Working with 3rd sector partners to provide families with connectivity and devices as part of the SG Connecting Scotland programme. Connecting Scotland is a Scottish Government initiative being managed by the Scottish Council for Voluntary Organisations set up during the pandemic to provide funding to support organisations to help get every citizen in Scotland online 	<ul style="list-style-type: none"> • In March 2020, at the start of the Covid-19 pandemic, we worked to provide our most vulnerable families with devices and connectivity • Schools worked during lockdown to provide devices to pupils to enable remote learning • Funding and agreement to embark on Empowered Learning project, Empowering Learners through access to digital platforms & apps • Ensuring all our Council owned homes are connected to infrastructure to enable a fast and reliable broadband service and can support our colleagues across the Council to work in a more mobile and efficient way and meet tenant's needs. This could also enable services across the Council, such as the Smart Cities project to continue to develop their programme to reduce/eliminate the barrier of internet access. • City of Edinburgh council is working in partnership with CityFibre and Openreach to enable FTTP (fibre to premises) infrastructure rollout across the City to provide super-fast fibre broadband infrastructure to all our council own homes. Through open networks, this infrastructure will prove our tenants with the ability to choose from over 600 different broadband providers, ensuring they have access to the best deals without any set up costs, to date 2/3homes have been connected so far 	<ul style="list-style-type: none"> • Delivery of Empowered Learning which will see nearly 40,000 digital devices to children and teachers in the city, training and roll out of this solution will start August/September • We will continue to work with our partners to identify and develop opportunities around our digital infrastructure to improve connectivity, improved connectivity will mean that our citizens, councillors, colleagues, visitors, and businesses will benefit from full use of our digital services and increase participation in a digital city • CityFibre and FTTP infrastructure work well underway, now reviewing options to utilise this infrastructure and settle on a final strategy. A follow up strategic planning meeting set for June 2022. 	<p>Edinburgh Poverty Commission identified that action must be taken to address and ensure that digital participation opportunities are made available for those living with poverty. We will:</p> <ul style="list-style-type: none"> • Support the delivery of measures set out in the Council's Our Future Council; Our Future City plan to provide digital inclusion opportunities for our citizens. We will continue to identify opportunities, develop plans and work with partners to exploit and deliver these commitments throughout the lifespan of the strategy • Continue to explore and develop digital connectivity opportunities for Council tenants. A follow up strategic planning meeting set for June 2022. • Broadband infrastructure connectivity work continues 	<ul style="list-style-type: none"> • Providing up to date infrastructure and hardware • Get Online – • As part of their Community Benefits commitments CGI will undertake work to improve digital inclusion and participation • Deployment of 1 to 1 devices for all Early, Primary and Special teaching staff • Deployment of 1 to 1 devices for P6 & P7 learners • Deployment of devices in a ratio of 1 to 5 for P1 – P5 learners • Continue to explore and develop digital connectivity opportunities for Council tenants. A follow up strategic planning meeting set for June 2022. • Take forward opportunities to involve Council tenants in user groups to help inform the development and testing of new digital improvements to the Council's housing services, such as improved online reporting of repairs 	<ul style="list-style-type: none"> • Edinburgh Learns curricular groups to support evaluation of Empowered Learning identifying areas for further support and next steps • Continue to explore and develop connectivity opportunities for Council tenants. A follow up strategic planning meeting set for June 2022. • Take forward opportunities to involve Council tenants in user groups to help inform the development and testing of new digital improvements to the Council's housing services, such as improved online reporting of repairs 	<ul style="list-style-type: none"> • Review and refresh Empowered Learning provision <p>In planning to be confirmed:</p> <ul style="list-style-type: none"> • Review of digital connectivity infrastructure and development of plans to meet with current and future technologies <p>CityFibre expect to have completed their build by the end of 2024</p>

Digital Council and Smart City - Smart Cities

A smart city is an urban area that uses different types of Internet of Things (IoT) sensors to collect data then use insights gained from this to manage assets, resources, and services. Our vision for a smart city is the application of data and technology to increase efficiency, minimise costs and enhance convenience.

Key deliverable	Delivered to date	Ongoing work	Sept - Dec 2022	Sept - Dec 2022	2023	Beyond 2023
<p>Smart Cities</p> <p>Our aim for Edinburgh is to:</p> <ul style="list-style-type: none"> • Make the city more liveable, workable, and sustainable • Have world class connectivity • Manage the city resources as effectively and intelligently as possible • Deliver world-class citizen-centric city services • Underpin a continuous process of reinvention, transformation, and creativity • Support economic development and long-term prosperity • Improve resilience <p>Empower citizens to become Smart/Digital Citizens of the future.</p> <ul style="list-style-type: none"> • For Edinburgh this will include: <ul style="list-style-type: none"> • connectivity – 5G and FTTP • sensor technology, IoT, AI • smart parking and EV charging • wearable and mobile tech • smart public transport • city Wi-Fi • smart energy • health and social care • smart citizens • DDI • conversational platforms • GPS/GLONASS and location analytics • greater citizen engagement 	<ul style="list-style-type: none"> • Approved proposal for a fully integrated IoT Platform. Project delivery to commence in Q1 2022. • Project Initiation Document • Platform High Level Design • Orders for bin and housing sensors 	<p>We will continue over the course of the Strategy to reshape our IT services and help to reshape the city with an approved plan for a fully integrated IoT Platform. This will enable Edinburgh to take advantage of the opportunities afforded by new and transformative technologies to become a digital Council and a world leading Smart City.</p> <p>Through our Customer Digital Engagement and Web programme, we will be:</p> <ul style="list-style-type: none"> • Digital by default – implement a digital approach to the delivery of services • Citizen centric – put citizens at the centre of what we do by 	<p>The City of Edinburgh Council is developing an operations centre to support smart city services. This internet of things (IoT) platform will be able to incorporate artificial intelligence (AI), smart bin and housing sensors, upgraded CCTV and analytics technologies. This concept is underway and will be delivered over the course of the coming years in phases.</p> <p>Edinburgh’s plan for a Smart City Operations Centre foundational platform and sensors benefitting from 8th City European Regional Development Fund support. The 8th City Programme is one of 3 workstreams delivered by the Scottish Cities Alliance, a partnership of Scotland’s seven cities and the Scottish Government</p> <p>Engagement with all mobile operators/infrastructure providers to encourage improved connectivity.</p>	<ul style="list-style-type: none"> • By delivering our Digital Skills and Digital Inclusion commitments, we will: <ul style="list-style-type: none"> • Provide and signpost a wide range of digital support tools and materials • Provide adult learning opportunities using • Deliver digital inclusion learning opportunities for citizens • Design services and support capabilities that deliver digital inclusion for all our citizens • Embrace social media as a tool for engagement • Smart City Operations Centre work continues with 834 smart sensors deployed in on-street litter bins. Work now commencing in Communal Waste Bins. • 30 Smart Housing Sensors measuring dampness have been deployed to 10 homes in an early pilot 	<p>By treating data as an asset, we will:</p> <ul style="list-style-type: none"> • work with services to improve the tools that enable a Council-wide approach to business intelligence to enhance services and digital engagement with our customers and communities • Smart City Operations Centre work will continue with a target of 5500 smart bin sensors deployed by June 2023 • Smart Housing Sensor deployment to continue after initial pilot phase • Dashboard development will continue; making use of data received from smart sensors and helping business areas to realise the benefits of this information <p>Ongoing projects to improve 4G/5G coverage through use of Council Assets to improve coverage.</p>	<ul style="list-style-type: none"> • We will review our Smart City capability and create a portfolio of smart city projects that balances short-term versus long-term impact, risks, investment, and social value, and establishes key strategic outcomes. As part of the work of the board, we will: <ul style="list-style-type: none"> • Develop a structured innovation management framework and innovation toolkit that builds on best practice from a broad range of relevant sectors • Work with 3rd party telecoms providers to exploit the connectivity available to us • Adopt and support the development of relevant Scottish UK and international Smart Cities actions and standards to build trust and confidence, ensure interoperability, and provide shared frameworks for city transformation plans • Develop governance to ensure a well-integrated smart city approach and coordinated governance of critical elements associated with portfolio, data and information management, cybersecurity, procurement, ethics, and privacy • Connect and share smart city knowledge, learning and assets • Introduce incubator projects at low cost to pilot tech benefits to solve real world problems • Smart City Operations Centre work continues • Working with SFT/InfraLink to encourage increased 4G/5G coverage across the City including working with our Planning team.

Digital Council and Smart City - Innovation

Innovation is about addressing problems in new and original ways that better meet the needs of customers.

Many developments in both the systems we use and in Smart Cities technology are experienced as innovation, having a disruptive impact on how services have previously been experienced or delivered; both positive and negative.

Key deliverable	Delivered to date	Delivered to date	Jun – Dec 2022	Jun – Dec 2022	2023	Beyond 2023
<p>The Council sees two forms of innovation driving empowerment:</p> <ul style="list-style-type: none"> un-proven: The first focuses on new 'unproven' technology, where the Council would be an early adopter proven: The second is the adoption of new, or re-use of existing, proven technologies by the Council. This approach will be supported through a business case approach. <p>Both approaches will be supported as appropriate to the technology and the solution.</p>	<ul style="list-style-type: none"> Teams unified communications Team collaboration (on request) Mobile Device Management re-platform (Intune) Outlook Online BYOD self-service password reset Our Shared Repairs service was a Challenge Sponsor in the Scottish Government's CivTech 4.0 Innovation Programme, supported by Digital Services Relationship Management. 2 Phases included the Tenement App and Case Management system. Phase 1 – Tenement App has been completed. Phase 2 – Case Management cloud-based system for tenement repairs led by the Council has been delivered and is in use. 	<ul style="list-style-type: none"> OneDrive for Business Continue to use technology and innovation to assist in new ways of working 	<p>We will:</p> <ul style="list-style-type: none"> Promote an understanding of new products, process, services, or technologies that are emerging in the market, both locally and globally as well as from SMEs and well-established providers Support an innovative culture across the Council Enable third parties to pitch innovative concepts to the Council following procurement guidelines Provide a structured mechanism for the Council to explore and manage its technology innovation portfolio Engage and consult key stakeholders on benefits and opportunities of Cloud adoption <p>We will:</p> <ul style="list-style-type: none"> Encourage cross-departmental re-use and sharing of systems/resources Continue to use technology and innovation to assist in new ways of working 	<ul style="list-style-type: none"> Continue to explore and exploit innovation and collaboration opportunities through DDI (data driven innovation) Review strategy and update to reflect current innovations, technologies, security, and the Council's technology landscape Empowering school leaders to drive innovative changes within their setting Continue Cloud migration Continue to use technology and innovation to assist in new ways of working 	<ul style="list-style-type: none"> Identify opportunities to Increase and drive automation Continue Cloud migration Continue to use technology and innovation to assist in new ways of working 	<p>Potential to drive innovation further with adoption of additional Microsoft 365 capabilities:</p> <ul style="list-style-type: none"> e.g., low code no-code (PowerApps and Flow) migration of G drives to Teams/SharePoint and a range of other new 365 tools Identify further innovation opportunities Final Cloud migration strategy move Continue to use technology and innovation to assist in new ways of working

Digital Council and Smart City - Technology Sustainability

The City of Edinburgh Council has set an ambitious city-wide target to become carbon neutral by 2030.

Key deliverable	Delivered to date	Delivered to date	Jun - Dec 2022	Jun- Dec 2022	2023	Beyond 2023
<p>Technology sustainability</p> <p>Digital Services and our delivery partners for technology and Smart Cities are committed to contributing to this carbon neutral target in several ways including reducing:</p> <ul style="list-style-type: none"> • Energy use • Carbon emissions • The amount of waste generated • The effects of climate change 	<p>To date, we have:</p> <ul style="list-style-type: none"> • Reduced carbon emissions by implementing an automatic shutdown of PCs in pilot areas across the Council in the evenings and over weekends • Installed multi-function devices to replace printers and copiers across the Council • Chosen technology solutions with virtualisation of servers or cloud hosting where possible to promote better value, save energy and reduce heat output and comply with the European Code of Conduct for the operation of data centres energy efficiency • Disposed of hardware responsibly and in accordance with the waste electrical and electronic equipment (WEEE) Directive and recycled equipment where possible • Extended the lifecycle of PCs and other hardware assets to take advantage of both cost savings and reducing waste • Implemented home/remote working solutions that reduce travel between sites and between home and work 	<ul style="list-style-type: none"> • Continue to collect and dispose of hardware responsibly and in accordance with the waste electrical and electronic equipment (WEEE) Directive and recycled equipment where possible when lifting of Covid restrictions allow 	<ul style="list-style-type: none"> • Continue to collect and dispose of hardware responsibly and in accordance with the waste electrical and electronic equipment (WEEE) Directive and recycled equipment where possible when lifting of Covid restrictions allow • Specific review of iPad and iPhone recycling 	<ul style="list-style-type: none"> • Review WAN • Device review • Complete Win2K8 server decommission - reducing number of servers 	<ul style="list-style-type: none"> • Commence device refresh planning focusing on how we can make this more sustainable e.g., use of thin client (remote connection to central server rather than the reliance on local hard drive will mean less need for enhanced devices) 	<ul style="list-style-type: none"> • Support 2030 Climate Strategy where digital technology as an enabler can contribute • CGI has committed to achieving net zero carbon emissions by 2030 with respect to carbon emissions • The City of Edinburgh Council has committed to become a "net-zero" city by 2030. Digital Services will work with CGI to reduce CO2 emissions and achieve these sustainability goals through innovative energy solutions

Key deliverables that aren't viable for progression will be shown in the table below. There can be several reasons why this can happen, as technology is an enabler it may be that the technology to deliver these has changed significantly, or largescale business delivery review is undertaken which means a different technology approach is required. As part of our overarching principles, we will balance delivery, quality, best value, and scope. We will focus on ensuring the delivery of quality solutions that offer best value and meet requirements across the entire organisation. This table will be updated quarterly.

Strategic Theme	Key deliverable not initiated	Rationale

The updates contained within this Digital and Smart City Strategy Implementation Plan were compiled 30th November 2022