## **Digital Enablement and IT**

Schedule 1 STRATEGIC DIGITAL UPDATE AND COVID19 IMPACT March 2021 Table of Contents

<u>1.</u>	EXECUTIVE SUMMARY	4
<u>2.</u>	DIGITAL SERVICES AT ANGUS COUNCIL	6
2.1.	DIGITAL BY 2020 PLAN	6
2.1.	1. WEBSITE DEVELOPMENTS AND STATISTICS	7
2.2.	2020 COVID RELATED DIGITAL PROCESSES	7
2.3.	STRETCH TARGETS FOR DIGITAL 2021	8
2.4.	IT SERVICE REVIEW	9
2.5.	IT BUSINESS SYSTEMS REVIEW	9
2.5.	1. ANGUS COUNCIL APPLICATION STRATEGY	9
2.5.	2. SOCIAL CARE INDEX PROJECT	10
2.5.	3. SEEMIS	10
2.5.4	4. HOUSING SERVICES	10
2.5.	5. Civica	10
2.5.	6. CORPORATE GIS	10
<u>3.</u>	DIGITAL SKILLS	11
3.1.	DIGITAL CHAMPIONS AND IT TRAINING	11
3.2.		11
3.3.		11
3.4.	-	11
5.4.		
<u>4.</u>	DIGITAL INFRASTRUCTURE	12
4.1.	PROGRESS OF ANGUS COUNCIL TECHNOLOGY ROADMAP	12
4.2.	HARD TO REACH SCHOOLS	12
4.3.	ANGUS COUNCIL CORE NETWORK	12
4.4.	O365 PRODUCTIVITY AND COLLABORATION TOOLS	12
4.5.	WI-FI IN SCHOOLS AND CORPORATE BUILDINGS	13
4.6.	CYBER SECURITY	14
4.6.	1. PSN	14
4.6.2	2. COVID-19 IMPACT	14
4.6.	3. CYBER SECURITY TECHNOLOGY DEVELOPMENTS	14
4.7.	GOV ROAM	15
4.8.	CORPORATE END USER PROVISION FOR COVID19	15
4.8.	1. FUTURE WORKSTYLES	15
<u>5.</u>	REGIONAL DIGITAL PROGRAMMES	15
5.1.	TAY CITIES DEAL	15
5.2.	LOCAL FULL FIBRE NETWORK (LFFN)	16
5.3.	RURAL BROADBAND PROJECT	16

2

5.4.	<b>5G TESTBEDS &amp; TRIALS</b>	16
<u>6.</u> [	NATIONAL DIGITAL PROGRAMMES	17
6.1.	NO ONE LEFT BEHIND	17
6.2.	R100 Programme	17
6.3.	DIGITAL OFFICE FOR SCOTTISH LOCAL GOVERNMENT	17
<u>7.</u>	APPENDIX 1	19
7.1.	DIGITAL WORKPLAN UPDATE	19
7.2.	TECHNOLOGY ROADMAP UPDATE	21

# **1. Executive Summary**

This report provides an update to work ongoing to enable digital delivery of services across Angus Council, including the impact of COVID-19 which has accelerated the demands on digital delivery and seen a step change in public engagement within council and council services via digital means.

The Angus Council Digital Strategy was published in 2018 and the digital delivery highlights since then include:

- Significant progress in Process Redesign and automation, with an experienced team able to implement new automated, simple, and accessible processes and services, (such as 23 new COVID-19 related services) which can be ready for customer use within hours of announcements being made.
- Angus.gov.uk as trusted and "go to" information source, the content, and transactions this supports being fundamental to supporting residents
- Customer service improvement on introduction of new services e.g. automated telephony payments introduced to support customers who can't transact online, but can use the telephone, it allows customers to make a payment 24/7 without operator input. Since November 2019 to December 2020, 18,648 transactions have been made via this channel totalling £3.5m of payments. This system has achieved 77% channel shift from the contact centre
- Hard to reach schools: Edzell PS (Primary School), Glamis PS, Inverarity PS, Cortachy PS and Stracathro PS all have broadband services including Wi-Fi and VOIP (Voice over Internet Protocol) with supporting contractual service level agreements.
- Support of schools No One Left Behind programme and reuse of corporate chrome books for schools. Technical development to enable school staff access to SEEMIS remotely
- Projects to improve and test the resilience of Angus Council infrastructure, including improved Wi-Fi in buildings that were not originally scheduled, but now required due to COVID-19
- Support of Tay Cities and national Initiatives to improve broadband throughout Angus
- On-going engagement with customer groups to ensure digital services are accessible and so good that customers prefer to use them freeing up resource in other channels for those that need additional support
- Digital skills of virtually the whole council have seen a step change as everyone has gained experience in productively running and contributing to remote meetings and collaborative delivery internally, with partners and service users
- IT Service Desk remote support capabilities enhanced to enable remote desktop support to improve productivity of Angus Council end users
- Introduction of IT Service Catalogue and OLAs (Operational Level agreements) to help users understand and access IT services
- Application updates such as Eclipse providing user information available 24/7 and workflows designed by practitioners and changes behind the scenes to improve support, security and accessibility
- All end users who need it have a means of accessing Angus Council data and systems, via a significant rollout of devices during March/April 2020 which has been enhanced during December 2020/January 2021 to improve access to applications such as MS Teams

• Staff are able to access corporate telephony via a soft phone on their laptop and the contact centre can work and support end users via a blended model of part onsite/part remote resourcing. Two factor authentication for Citrix environment is now via soft token

The difference being a digital council has made to life experience of Angus Council residents is well summarised by the Head Teacher of one of Angus Council's Primary Schools

" I was just saying to staff the other day there; imagine we didn't have wifi in this pandemic! The difference has been incredible.

Our pupils have now had the opportunity to engage in digital learning; they are quickly learning how to use word documents, powerpoints, emails and how to document and further their learning using devices. They are highly motivated and engaged in this and these skills were developed thankfully prior to lockdown which has allowed these pupils to engage fully in remote learning from home.

As well as this, we have children of key workers and eligible pupils present in school learning who are able to work together in the school hall on devices. They take part in calls with their teachers each day and use the interactive board regularly. Nursery pupils this morning were able to participate in a live singing session with a kodaly singing tutor while others who are at home could participate from there.

It has made a huge difference to our school community. Staff have been able to widen the methods of delivery for teaching and are accessing emails and online learning now. On a practical element, staff are now able to mark attendance on SEEMIS each day, rather than office staff as they can now access SEEMIS easily from their classroom."

The demands from residents and business, and expectations of our own staff for technological improvements will continue at pace. The next phases of digital development are being planned and will be guided by these changing needs across Angus Council and partner organisations, facilitating and sustaining the move to remote working, and the increasing expectations set out by Audit Scotland and the Scotlish Government Digital Strategy review.

The next planned deliverables from Digital Enablement and IT are:

- Redesign the supporting technology to enable a more virtual council, based on agreed workstyles with a full set of productivity and collaborative tools and a secure infrastructure significantly less dependent on routing transactions and information via council data centres (Forfar and Arbroath)
- Development of a corporate council wide Application strategy which will help to ensure a more cost-effective approach to both user and system support with improved contract and financial management, system security and a phased reduction of the Council's IT infrastructure as we move systems to cloud-based services.
- Automation of interfacing will be a key theme of the application approach to improve data quality, reduce the need for manual intervention and rekeying, enable PRPA (Process redesign and Process automation) work to fully automate more business support processes and support the forthcoming Data Strategy.
- Continuing engagement with customer groups to ensure accessibility is designed into digital processes from the outset
- Further O365 functionality will be released in support of a data driven collaborative information-based organisation
- IT will be implementing a new customer focussed portal-based Service desk tool for Schools and Corporate which will transform incident and service request reporting and resolution and provide a better service as we continue to work remotely

- Continually addressing Digital skills as new functionality is released with a focus guided by the outcomes of staff engagement and the Digital Maturity Assessment
- Ongoing improvements in bandwidth and resilience at locations across Angus with an ambitious programme including Local Full Fibre Network (LFFN) and rural Broadband
- Security related remediation work to achieve Public Service Network (PSN) accreditation, increase in communication and training to ensure behaviours that support cyber security are at the forefront of users minds and technology enhancements to add to our "strength in depth" approach
- As part of the redesign to improve remote working, telephony provision, including mobile and contact centre, will be re-assessed to support true UC (Unified communications), integration with Office products to support remote working and manage costs by reducing product proliferation.

This work is governed by the Strategic Digital Board which has a pool of members from across all areas of the Council. These meetings are held monthly and are chaired by Sharon Faulkner, Director of HR, Digital Enablement, IT and Business Support, with assurance provided by a representative from the change programme team.

# 2. Digital Services at Angus Council

### 2.1 Digital by 2020 plan

The digital plan was set out in 2018 and Appendix 1 show the progress against that plan. The highlights are:

- Design and formation of a Digital Team within Digital Enablement and IT, which includes the web team and is dedicated to accessible service redesign, process automation and web content. This team ensures that the customer journey is as accessible, seamless, and efficient for the customer as possible, and makes best use of back-office resources.
- Delivery of process redesign and process automation to business areas covering the entire council. Highlights from this work include:
  - Revenues and Benefits with automation of Council Tax change processes and the option for paperless billing and online account viewing.
  - HR, Staffing and Payroll, with process redesign of the recruitment process and automated import and processing of payroll data
  - Waste, through automation of Garden Waste renewals, applications and direct debits and fly tipping reporting
  - $\circ$   $\;$  Schools and learning with applications for school transport and music tuition
  - Roads with various processes covering reporting of potholes/road defects, broken streetlights
  - Planning with their new process to request, and pay for, pre-application planning advice and their process for reporting breaches.
  - $\circ$   $\;$  Fostering and adoption with delivery of a new website and enquiry form
- Certification from The Shaw Trust regarding the accessibility of our website and forms. We make great efforts at Angus Council to maintain a high standard of accessibility; earning this certification is part of our concerted and professional approach.

- MyAccount adoption. Part of our approach to digital was to promote the citizen MyAccount to give us a single view of our customers and their transactions. To date, 52,605 citizens have signed up for this service which translates to roughly one per household within Angus.
- Recruitment of a Digital Officer within the contact centre to champion our digital services and drive their uptake and adoption within the services. This has included working towards the improvement of our web chat provision, a channel that saw a 50% increase in uptake between March 2020 and December 2020 and enables contact centre staff to manage several queries concurrently.
- Release of automated telephony payments. Introduced to support customers who can't transact online, but can use the telephone, it allows customers to make a payment 24/7 without operator input. Since November 2019 to December 2020, 18,648 transactions have been made via this channel totalling £3.5m of payments. This system has achieved 77% channel shift from the contact centre.

#### 2.1.1 Website Developments and Statistics

The content on angus.gov.uk is a trusted source of information on all of the services that we provide, as well as providing the route to our online services. In 2020 we saw 2.3 million visitors, an increase of 30% from 2019, and 6.8 million page views, up 640,000 on the 2019 total. Peak visits in 2020 were in the March period where COVID restrictions were coming into place and many of our services were being restricted or changed. This is evidenced with, "COVID-19 service information, updates and news", featuring in our top 5 most visited pages in 2020 alongside the expected high traffic pages: home page, search results, My Angus, and Bin collection days.

The metrics that we collect are used to inform our design and support processes. For example, we know that mobile devices are now more commonly used than PC/Laptops and the most used mobile device to view our website uses the Apple iOS operating system. The content pages and forms we create have to be viewable, and useable, on all devices with customer demand for excellent mobile rendering set to continue. In terms of content, we know that "council tax", "contact", "blue badge", "planning" and, "bus pass", are the most popular search terms from within our site, this tells us that this content is of particular importance and has to be easy to find. We also know that our busiest time of the day is between 11am and 12noon, so we know to avoid this time of day if we are making changes or developments.

The information and online service on our website is clearly of high importance to our citizens and they should be able to get this information, or make the transaction that they need to make, as quickly and easily as possible, and at a time that suits them. The Web Team works constantly to ensure this content is as up to date, accurate, and accessible as possible as this work underpins our entire channel shift agenda.

### 2.2 2020 COVID related digital processes

The council's preparedness for responding to new requirements, and for quick reaction to changing business and customer priorities, was facilitated by our approach to building digital processes. IT and Digital Enablement was able to build on the progress made against plan as above, by adding further digital services as and when the requirements became clear. Our approach to agile project management, business analysis and service design meant that we were able to deliver 23 new COVID related forms (as of January 2021), processes, and the accompanying information for the customer, to tight deadlines, which were often a matter of days and in some cases, hours. Built on a

single, shared platform, in line with our commitment to making best use of available resources, these processes covered:

- 8 processes for Angus businesses covering areas such as Coronavirus Key Supplier Support, Business Support Funds and Newly Self-employed Support
- 8 processes for residents including humanitarian aid requests (ARC), vitamin D orders and school meal enquiries, as well as more logistical changes to recycling centre access
- 5 processes for Angus Council staff which covered PPE ordering and stock control, notification of absence due to COVID and applications for IT and furniture to allow home working.

The above processes, specific to our COVID response, resulted in around 5800 individual transactions being logged and processed digitally and, as with all our processes, these are accessible and compliant with Privacy Impact Assessment guidance as well as our GDPR responsibilities.

A highlight of this work was the process that was built to co-ordinate outbound Test and Protect support calls. This was built in order to allow the contact centre to make over 2000 outbound calls to people self-isolating, in a managed way that made best use of our available resources. The process takes incoming data from NHS spreadsheets, presents that information to our operators, and instructs them on how to progress the call. The data collected then in turn informs the reports we make to Scottish Government. Digitisation of this process meant that we could do the same work, to a higher standard, with less resource and less risk of mistakes.

Our ability to deliver all the above, at the pace that was expected, would not have been possible without building the new Digital team and investing in new skillsets.

### 2.3 Stretch targets for Digital 2021

For 2021, the focus for Digital will be on continued delivery on the core areas of Process Redesign and Process Automation, and Channel Shift. These stretch targets remain at 100% automation of back-office processes, and a 100% adoption of digital channels for all customer transactions/interactions.

Although we have made great progress in automating our back-office functions, some staff savings were taken ahead of the automation which has placed increased demand on the staff processing the manual or semi-manual processes that remain. To maintain our efficiency, or to make further savings, work to automate these must continue at pace.

Demand from customers remains high, with an average of 12,000 transactions being logged on our platform per month. Although a stretch target of 100% is ambitious, we must remember that while we have a fixed resource, our ability to support those who can't engage digitally or who require one to one support, increases with every customer who makes the shift to digital, leaving the phone channel free for those who really need it. An excellent example of this is the system we have put in place for booking appointments at recycling centres. Of the 19,839 slots booked, 99.9% of these were booked online, with only 24 of these requiring support via the contact centre. Similarly, requests for extracts of birth, deaths or marriage certificates currently sits at 95% online.

Our services are designed with the customer at the centre and, where possible, we work with user departments to engage with their customers to properly understand their needs. Good examples of this are the work with planning in their pre-planning advice process and within Children and Families around the "MyViews" service.

For 2020, our work to become a digital council, coupled with our approach to the COVID-19 pandemic, saw our statistics shift significantly towards this channel. From April 1<sup>st</sup> 2019 to March 31<sup>st</sup> 2020, the split between online transactions and phone transactions was around 52% online to 48% phone. From April 1<sup>st</sup> 2020 to January 20<sup>th</sup> 2021, this split is at 74% online to 26% phone. This is despite volumes remaining at the average level of 12,000 transactions per month.

These statistics show that we can continue to provide an excellent service to our citizens, at any hour of the day, even with constrained resources. Our focus for 2021 will be increasing this level of uptake, using social media channels to better signpost digital services and getting customers more involved in co-design of automated processes.

### 2.4 IT Service Review

The IT Service review changed the focus of Digital Enablement and IT from back-end server provision to enabling business change, funding the Digital team on a permanent basis and establishing an application development and support function. Similarly, resourcing on the schools managed service was put in place to manage the increasing demand from schools as they take advantage of better connectivity and digital tools. Additionally, we implemented software (Teamviewer) which enables IT support staff to provide better support remotely and this combined with on-going reviews of demand failure has enabled the IT Customer Support team to provide a more efficient service (less travel) and an almost seamless service remotely during COVID, all be it that some user problem resolutions take longer. Throughout the COVID pandemic the Service Desk has managed to maintain incident response and resolution within SLA (Service Level Agreement) for well over 80% of incidents. An example quote from an end user about the IT service desk: "*Excellent and extremely swift service delivered remotely by taking control of my laptop. Really impressed*".

### 2.5 IT Business Systems Review

The IT Business systems review identified several staff who provide systems admin support for line of business systems. These have joined the Applications Support Team in IT on a phased basis and now support Carefirst (Eclipse), SEEMIS Pentanna, Integra, Civica, Northgate, SheAssure (the new Health and Safety Incident Management System) and GIS. Service catalogue entries have been developed and agreed for the supported systems. This allows for a consistent and standardised approach to systems admin support across all core business systems, quicker progression of project-related activities and ensures a robust and professional response to audit recommendations.

### 2.5.1 Angus Council Application Strategy

In early 2021, we will be seeking to formally approve an overall IT/Applications Strategy for all core business systems with this to be submitted to the Strategic Digital Board after consultation from key business stakeholders and internally within DE&IT. The key principles of the strategy will help to ensure we are able to provide a more cost-effective approach to both user and system support with improved approaches to contract and financial management, system security and a phased reduction of the Council's IT infrastructure as we move systems to cloud-based services. There will be an action plan that accompanies the strategy to ensure we can deliver on the overall objectives and monitor progress and benefits realisation in the coming years. There will be an emphasis on system integration and automation, particularly for existing processes that are manual in nature.

### 2.5.2 Social Care index project

We have already migrated from the legacy CareFirst application to the cloud-based Eclipse case management system for Children & Families with Adult (AHSCP) and Justice Services scheduled for 2021 and the Financial module by early 2022. This has coincided with a significant investment in laptops for staff and a move to storing records in digital form as the definitive source of information. This approach has already delivered significant benefits to Children & Families in terms of 24/7 access to digital records, automated workflows and a system which supports the process and services as designed by practitioners and support staff.

#### 2.5.3 SEEMiS

The SEEMiS system is now available remotely for staff in primary and secondary schools which is essential given the importance of the system for schools. There are key projects in the pipeline in the coming years with the cloud-based SEEMiS 'Next Generation' system to be introduced for Early Years schools in Summer 2021 and for primary and secondary schools the following year.

#### 2.5.4 Housing Services

Within the last year, DE&IT have worked closely with Housing Services staff on core IT system services. Effective governance arrangements are in place to oversee this work to ensure that core systems are supported, users are trained and to build a stable foundation for future IT-related services to help transform how Housing services are delivered to tenants and other stakeholders. Successes in the last year include; a) a major system upgrade, b) establishment of a user knowledge base and training materials, c) introduction of a Choice-Based Lettings system available from the Council's website and d) improved security measures in response to the recent Audit recommendations. This provides for a stable platform for an ambitious set of priorities in 2021/22 including the provision of Housing Online services.

#### 2.5.5 Civica

IT is working closely with staff in Communities Services to upgrade the existing legacy system used for Environmental Health, Trading Standards and Waste Management Services and will be introducing the modern, cloud-based system by Summer 2021. We plan to pilot the use of mobile technology for waste management as part of this project.

#### 2.5.6 Corporate Geographic Information System (GIS)

The corporate GIS team supports the wide range of GIS systems and data used regularly by all Council Services. Key achievements in the past year include:

- Provided rapid response, data processing, and reporting in support of HAART/ARC and other Covid-19 related-activities
- Worked with staff throughout the Council to automate a vast array of back-office processes that have already delivered time savings and efficiencies. Key service delivery areas include Education, Finance, Infrastructure and others.
- Delivered multiple online social pinpoint projects for Communities in support of community engagement initiatives.
- Contributed to projects specific to bin collections and calendars, road construction and grounds maintenance.

Future work activities will be linked to Council priorities including the Development Plan, continued Covid-19 activities, and outputs from the IT/Applications Strategy and forthcoming Data Strategy. The expectation is that there will be an emphasis on system integration.

# 3 Digital Skills

## 3.1 Digital Champions and IT Training

Essential Digital Champion training was delayed due to COVID-19 but has been revamped by the Digital Office and is being re launched this year. Angus Council is in the Feb/March Cohort for delivery.

There is on-going and continued effort to co-ordinate awareness and ability of staff to use new tools including MS Teams, Sharepoint training and training focussed on specific applications. There is a Digital Skills working group which aims to identify gaps in the skills of our staff and citizens and then co-ordinate effort across services to address these. This group includes members from our Organisational Development, and IT and Digital teams as well as representatives from our communities' teams.

### 3.2 Digital Maturity Assessment

Angus Council is taking part in the Scottish Local Government Digital Office maturity assessment being undertaken Quarter1 2021 to ensure we cover a wide range of participants to baseline the digital maturity across the organisation and provide a guide to the level of ambition across services for Digital and the pace and direction that may be possible as a result.

### 3.3 Members

Beyond the initial induction sessions held for members to hand over their IT equipment, members have access to support from the IT Service Desk in the first instance, with triage to other teams as needed. Dependent on the nature of the incident/request, these are treated as a priority to ensure that council business can be carried out effectively. Drop-in sessions have been scheduled on specific areas, for example mobile phones, to ensure that members have access to one-to-one support where needed.

With regard to scrutiny of progress and to ensure that members are in a position to champion our digital agenda, updates on digital progress are supplied in the form of the Digital Updates to the P&R and Council committees. Although the production of these has been interrupted by our response to COVID-19, they will be reinstated in 2021. In addition to the formal reporting, informal sessions have been held, to allow members to see what the benefits are to their constituents. Most recently, a presentation was held to show the difference between the older web forms for Council Tax, compared to the newly designed forms.

### 3.4 Staff Engagement

Staff engagement with the use of digital tools has increased considerably and due to necessity because of COVID. Staff, members and partner organisations are all significantly more confident with virtual meetings and virtual collaboration using available tools. IT, OD and Comms have

supported this with "how to" guides and best practice initially via the COVID-19 hub and MS Teams training.

The Hive surveys have also been used to direct developments, priorities, workstyle changes and Capital bid for IT Equipment.

# **4 Digital Infrastructure**

### 4.1 Progress of Angus Council Technology Roadmap

The Technology Roadmap, part of the digital strategy approved by full council in May 2018 set out an ambitious programme of change and improvement against key business drivers of cost containment, demonstrable business benefits of investment, automation, agile working, customer service and protecting and utilising information as an asset. The strategy was based on reducing technical complexity, moving services and infrastructure to the cloud where possible to do so, reducing single points of failure , enhancing security and ensuring IT resources remain skilled and capable of shifting from infrastructure support to an architectural and commissioning role facilitating a culture of innovation and customer focus

The progress update is shown at Appendix 1 and some highlights are covered below.

### 4.2 Hard to Reach Schools

New network links have been fully installed to all 5 "hard to reach " rural schools. Inverarity PS now has a 100Mb BT Fibre/Radio solution with Edzell PS, Glamis PS and Cortachy PS now enjoying the benefits of 100Mb BT Fibre. These schools were originally on dial up ADSL based solutions at around 10Mb at the most. All schools are now in the process of getting Wi-Fi and Voice Over IP phone solutions now their network links can handle them.

Stracathro PS is the final rural school to be moved onto a modern connection, and now also enjoys a 100Mb BT Fibre and all technologies associated with that. A new connection for Friockheim PS has been planned and purchased which will bring it off its increasingly unreliable connection. This is estimated as a February/March handover from BT to IT.

## 4.3 Angus Council Core Network

The new CORE network installation is nearing completion. The centre of the CORE (Arbroath, DC1, CB, AH, Water Tower and Dummies Hole) have been swapped to the new switches, testing for this in a failover situation is ongoing which will make our two data centres and the sharing of services resilient. The other CORE switches in all other towns will follow once a successful test has been completed in the centre. This will provide greater bandwidth and resilience.

## 4.4 O365 Productivity and Collaboration tools

Angus Council is part way through migration to O365. This has been mainly undertaken during COVID-19 lockdown to deliver the main product functionality. Work to date has been;

- Installation of O365 client applications to Direct Access laptops and Citrix desktops
- Synchronisation of Active Directory to O365

- Migration of mailboxes from on-premise Exchange 2010 to O365 Exchange, and deployment of on-premise Exchange 2016 as an edge server
- Migration of Huddle workspaces and SharePoint 2010 sites to O365 SharePoint
- Re-development of the intranet information portal from SharePoint 2010 to O365 SharePoint
- Deployment of MS Teams chat and audio/video call functionality
- Yammer groups to O365
- Commencing retention and sensitivity policies for SharePoint and Teams

To better facilitate remote collaboration required due to COVID, MS Teams deployment was prioritised over email migration and both email migration on Installation of the O365 client took considerably longer due to remote working and the impact on individuals' home bandwidth.

The next priority is a server clean up and upgrade exercise to ensure we can achieve PSN and then address:

- completing retention and sensitivity policies for SharePoint and Teams
- Tidy up and integrate AD to provide a better experience as an employee directory and contacts tool
- Teams collaborative functionality for teams and channels
- Teams Live Events and related capability for hosting, recording and streaming committee meetings
- Defining our mobile and Bring Your Own Device (BYOD) strategy for O365 access by unmanaged devices

Future plans include the deployment of further O365 applications (OneDrive, Planner, ToDo) as well as migration of data from our internal storage platform into O365 SharePoint which is part of the San migration project just commenced.

### 4.5 Wi-Fi in Schools and Corporate Buildings

During Q3/Q4 2018 and Q1/Q2 2019 Schools were converted over to the new Wifi Solution comprising

- New Firewalls
- New Wireless Access Points
- Hosted Fortinet Analyser product
- Hosted Fortinet Manager product
- Dedicated internet connections into seven Secondary Schools

Schools were prioritised due to the increasing number of devices in use (ipads and Chromebooks). There followed a corporate upgrade programme covering all Angus Council sites being retained. The only sites outstanding are a small number of Angus Alive locations. These are mainly the museums and libraries, Saltire Centre, Carnoustie LC, Webster Theatre and Monikie Country Park. All these sites are currently closed due to lockdown restrictions.

Some Social Work offices not originally included in the project have now changed function so have been included in the Wi-Fi estate. Work to have these sites fitted with the new Wi-Fi access points is expected to be completed by the end of March 2021.

### 4.6 Cyber Security

Cyber security threats and mitigations against them are constantly evolving and the council's Networking and Security team is managing these on an ongoing basis combining user awareness, policies and process and technology changes. Appendix 1 Technology Roadmap update covers technology enhancements over the last 2 years and IT has recommenced regular Cyber security updates to the Corporate Leadership Team (CLT). Below is a summary of recent developments.

#### 4.6.1 PSN

Due to COVID related resourcing issues we have been un-successful so far at achieving PSN accreditation. Remediation work deadlines on the action plan we submitted, which was received positively by PSN, have not been met due to significant workload on other COVID-19 related projects and we have been asked to resubmit once this work is complete. We do not anticipate any issue with ongoing PSN connectivity.

PSN will continue to be the service we need to subscribe to as several systems we access will continue to run on that network for the foreseeable future and IT has now paused other projects to complete PSN work.

#### 4.6.2 COVID-19 Impact

Work-arounds have been implemented due to the requirements for services to respond rapidly to the changing situation with COVID-19 and to date there has been limited progress in developing withdrawal plans for these work-arounds which have been put in place. These constitute a potential data leakage route. In relation to the Council's cyber security posture we need to consider for all of these "work-arounds" an exit strategy when COVID-19 is over to maintain and preserve the security of the network.

The situation regarding any significant overall malicious activity on the internet during the COVID-19 pandemic is that it stayed more or less the same. However, the types of language used in this activity has switched from financial to COVID related and awareness and behaviours remain the greatest defences.

#### 4.6.3 Cyber Security Technology Developments

Three products are being implemented currently to enhance Angus Council cyber security defences these are:

- A MFA (multi-factor authentication) platform has been purchased which enhances our login authentication capability and streamlines login to applications. This was installed in 2020 and will be used in conjunction with the CASB (Cloud Access Security Broker) to provide us with the capability to securely share information with partner organisations with a level of assurance not currently available.
- CASB is currently being installed and is in effect a cloud environment enhanced firewall. It will allow us to identify potential unauthorised logins, control access from undesirable locations, prevent data leakage and give us assurance that our cloud applications are protected and enable data leakage policies to be developed in 2021.
- Before a significant number of staff return to the physical office, IT will implement a technology that enables us to have greater visibility of what is connecting and only allows devices which are corporately owned to join the critical parts of our physical network. In

addition, we will be able to check the status of a device which is able to connect and enforce remediation, such as patching the client or updating anti-virus.

## 4.7 Gov Roam

Gov roam is a service that provides easy to use internet access across locations. Once configured, devices will automatically connect to participating sites. NHS users rely on this service when working in Angus House and this service is seen as critical to partnership working with the NHS in Angus Council. Currently other usage of AC users accessing it from other external organisations has been minimal due to the change in working patterns due to COVID-19.

### 4.8 Corporate End user provision for COVID-19

Digital Enablement and IT mobilised very quickly at the end of March 2020 to enable most staff who were able to work from home to do so and continue to provide services.

IT currently runs two technologies (Direct Access and Citrix via 2 factor authentication) that enable remote access to collaboration tools and systems and these were fully deployed during March /April 2020. Over 200 additional Vasco tokens were issued to enable users to use their own equipment from home and 200 plus Chrome books and circa 100 laptops that were available including 60 to AHSCP.

Immediately, the remote access provision was supporting 1000 plus concurrent users per day with 300-400 concurrent Citrix users online at any one time. The priority was to ensure that anyone who needed it had the ability to access the network and core systems with an "in office" experience from their home. Thereafter laptop ordering commenced to improve user experience. This has been limited by supply chain issues. Nevertheless, after the initial rollout of equipment a further 400 laptops have been purchased and rolled out, coordinated with requirements for desks/chairs. A further 150 plus devices are on order mainly for AHSCP.

### 4.8.1 Future Workstyles

Whilst the performance of the underlying IT infrastructure, cloud services and end user equipment has underpinned the ongoing operation of Angus Council services during 2020, the challenge for 2021 and beyond is to totally redesign the supporting technology to enable a much more virtual council with a full set of productivity tools as additional O365 features are made available and a secure infrastructure significantly less dependent on routing transactions and information via council data centres (Forfar and Arbroath).

The outcome of the workstyle survey linking job roles to workstyles will enable IT to start rearchitecting our infrastructure to optimally support the new ways of working model with better performance and resilience (e.g. direct from "home" to cloud) and move to "virtual council"

## **5 Regional Digital Programmes**

## 5.1 Tay Cities Deal

As part of the Tay Cities Deal £1.0m was allocated to improve Digital Connectivity within Angus, the funding was split as follows

• £0.5m LFFN Project

#### • £0.5m Rural Broadband Project

Currently events are in planning for informing local businesses of the digital connectivity work being undertaken as part of the Tay Cities Deal and how it affects them.

### 5.2 Local Full Fibre Network (LFFN)

The Council has received funding from the Department of Culture, Media & Sport of £0.750m in addition to funding of £0.5m from the Tay Cities Deal to install fibre connectivity into 53 Council Buildings. As a result of the Council installing the fibre infrastructure into their buildings and acting as anchor tenants, BT/Openreach are updating their infrastructure in the vicinity of the council buildings resulting in local residences / businesses being able to take advantage of this new improved infrastructure to obtain faster internet connectivity.

The timetable is

- December 2020/March 2021 undertaking of surveys and planning by Council & BT/ Openreach
- April 2021/September 2021 BT/Openreach to install infrastructure
- September 2021 onwards Residences/Businesses able to obtain faster internet connectivity
- October 2021/March 2022 Council will connect their buildings to the new infrastructure

### 5.3 Rural Broadband Project

Proposals are being developed to create an "Open Access" digital infrastructure covering the majority of Angus that will be able to be used by all Internet Service Providers, existing and new. The Council will not be acting as an Internet Service Provider but will be creating the infrastructure that ISPs can use to reduce the cost of connecting premises. This means that the ISP does not need to create its own infrastructure, a costly process, and can use the council infrastructure to backhaul the connection to a central point for access to the internet. The Council will charge commercial rates for ISPs to access this infrastructure.

At present the Council/SmartRural and Rapier Systems Limited are

- Progressing MOUs/Wayleave agreements
- Speaking to Farms with a view to them hosting Wi-Fi infrastructure
- Preparing a detailed project plan

The project is broken down into 5 phases. Phase 1 is Arbroath/Brechin/Montrose and the other phases are being worked on.

In conjunction with this project SmartRural will be using the infrastructure to deliver Internet of Things (IOT) solutions that can be used by the local Farming community.

### 5.4 5G Testbeds & Trials

Dundee City Council is the lead for the 5G project, but regular discussions are held to impart information. Discussions are underway for Smart Port (Montrose) and Agritech to be included in the Testbeds & Trials phase of the project

## **6 National Digital Programmes**

### 6.1 No One Left Behind

The following equipment was purchased for school pupils from the Scottish Government Grant

- 1366 Chromebooks
- 189 IPADS
- 359 MiFi devices for remote connection

All the equipment has been configured and has been handed over to the Schools & Learning service.

Additionally, in the region of 200 Chromebooks will be provided to schools from corporate as DSE (Display Screen Equipment) laptops start to rollout.

Further funding received in January 2021 has resulted in the delivery of a further 800 Chromebooks in support of pupil digital inclusion which are being distributed to schools now.

### 6.2 R100 Programme

The R100 (Reaching 100%) Programme is a £600m project funded by the Scottish Government with a commitment to deliver Superfast Broadband to 100% of premises in Scotland.

The R100 Programme (Northern Lot – including Angus) has been awarded to BT (December 2020). There are approximately 8800 properties within Angus included in the provisional list issued by the Scottish Government.

Originally the R100 Programme was to be completed by December 2021, but due to delays in the procurement process the completion date is likely to be December 2023. All premises that are included in the R100 programme but will not receive a connection until after December 2021 will be able to apply to the Scottish Broadband Voucher Scheme (SBVS) to provide funding via registered suppliers to provide a connection quicker.

### 6.3 Digital Office for Scottish Local Government

Angus Council continues to contribute to the Digital Office for Local Government (LGDO) through membership of, and contributions to, the board itself, as well as leading on collaborative work. Angus Council Depute Chief Executive is Vice Chair of the Partnership Board and Angus Council, Service Leader for IT and Digital Enablement is a member of the Digital Office Delivery Board and has been active in helping shape the feedback on the Scottish Government's Digital Strategy.

In terms of work delivered, Angus Council Digital Manager, was a lead on a piece of work to deliver awareness training on Agile Project Management practices across local government. This project collated best practice case studies on project delivery, including our own Digital Team's projects, and resulted in an, "Agile Project Management", playbook being created and distributed to every Scottish Council. This was presented online in a live seminar and the recording of this, and the associated materials, are available online to form part of the training resources collated by the LGDO. For 2021 and beyond our OD (Organisational Development) service will be increasingly involved in and supported by the Digital Office on digital maturity initiatives. The focus of other areas of joint work include:

- Digital Telecare (AHSCP resource part of Digital Office's Technical Advisory Group);
- Involvement in Big Data (Quality improvement and Performance); and
- Security (Angus Council Security Officer on the Digital Assurance Board and PSN replacement working group)

## 7 Appendix 1

### 7.1 Digital Workplan update

### Digital Work Plan 2018 to 2020

The initial work plan and Financial Savings have been determined by the Angus Change programme and are summarised below.

Project	Scope	Benefits	Timing / Status	Next Target
PRPA (Process redesign and Process Automation) Phase 1 and 2	Redesign and automation of circa 20 linked/ dependant processes identified as high benefit in the following areas: Revs and Bens HR Redesign and automation of further circa 20 linked/ dependant processes. Outline benefits identified PIA (Privacy impact assessment) for each process/ process set	Financial savings Faster end to end customer experience/ internal efficiencies Less errors and failure demand	2018-2020 Revs and Bens processes implemented covering multiple scenarios/request types 4x high profile HR processes underway 26 additional automated COVID processes developed and live	<ul> <li>Phase 3 to continuously improve these to include every service withing the council. During 2021 these will include: more HR, more Revs Bens, and other high volume or more complex processes, along with the smaller processes that contribute to the running of these services.</li> <li>Also see BS processes</li> <li>PIA is integral to the design and implementation of projects and is led by the service area concerned.</li> </ul>
Customer Digital Capacity	Work with partners to improve digital participation and support those who are not digitally engaged Customer groups engagement in co design	Social inclusion/ economic advantage Accessibility/ usability/ increased take up of digital services Social Inclusion/ economic advantage	2018-2020 Accessibility assessment done by Shaw Trust and changes implemented	This is under continuous review and improvement.

Project	Scope	Benefits	Timing / Status	Next Target
			Co working with VAA and others	Projects within the scope of the Tay Cities Deal work to contribute to this, as well as redesign
			during pandemic	work within our own services. Work is co- ordinated through the Strategic Digital Board.
	Digital Connectivity projects: e.g. Craigowl , Full Fibre network, 100% broadband		Craigowl complete	
Digital Gaps and				
Contact Centre				
Replace CRM with CSP	Deployment of single forms/CSP product with modern, integrated system.	Enabling better customer support/reduced security risk/system alignment	Complete	More processes, better internal usage, result in less call backs
Webform Replacement	Replacement of legacy forms and further automation built in where feasible.	Accessibility/ Enabling/process efficiencies	Complete	Internal process to manage the transition
Webchat introduction	Delivery of webchat to allow assisted digital delivery.	Accessibility/Reduced avoidable contact/increased digital uptake Accessibility/	Implemented	
Report it	Delivery of reporting against assets. E.g. streetlights, roads.	Enabling/reduced avoidable contact/process efficiencies	Implemented	
My account enhancement	Customer view of their own data. Paperless billing.	Accessibility/Enabling/reduced avoidable contact/process efficiencies	Complete	>52,000 (almost every household) tied to school
Garden Waste Payment improvement	Addition of Direct Debit option.	Usability/Direct debit inertia/increased revenue Legal compliance/ Accessibility	Complete	meals
Webform updates	Review and update in line with GDPR legislation.	Accessibility/System	Complete	
Replace Victoria forms	Removal of Victoria Forms product in order to use Council integrated solution.	synergy/reduced revenue spend.	Partially complete	

Project	Scope	Benefits	Timing / Status	Next Target	
Business Support Review Digital Workplan	<ul> <li>Prioritised view of changes:         <ul> <li>required to streamline processes to reduce effort/ waste</li> <li>identified that could provide significant benefits via web</li> </ul> </li> </ul>	Financial savings Faster end to end customer experience/ accessibility/ internal efficiencies Less errors and failure demand	2018-2019 900 plus processes		
Communications and Engagement plan	Communication plan engaging Customer, staff and partners. Customer Insight sought and actioned from design phase to implementation	Engaged workforce/ Better customer experience	Q2 2018 onwards Less than hoped due to COVID related comms resource restrictions		
Digital Capacity Employee Digital Training Digital development Capability	"How to" training based on survey of current confidence levels and abilities. (Note number of other initiatives underway as part of workforce plan) Training/ skills development from experienced practitioners using specific Angus examples and developing reusable training material	Digitally competent workforce Appropriate skills for digital development	2018 onwards On going 2018 onwards On going (experienced team in place and delivering)	Digital maturity assessment started Q1 2021. Continued effort to co-ordinate awareness and ability of staff to use new tools. There is a Digital Skills working group which aims to address these gaps and co-ordinate effort across services.	
Digital Measures	All measures outlined in Digital strategy base-lined, updated and monitored with stretch targets refined as strategy progresses	Financial savings/ customer satisfaction/ economic advantage	Q2 2018 implemented	The digital measures used need to be refreshed. These should align with the renewed Scottish Government Digital Strategy document when it is made available.	
Future Capability review	Digital Opportunities to be reviewed and business cases developed inc. further AI, IOT and Big Data	Financial savings/ customer satisfaction/ economic advantage	2018-2020	Application and Interface review	

### 7.2 Technology Roadmap update

Extract from Technology Roadmap 2018- updated January 2021

1. Performance, Resilience & Capacity of Core Infrastructure

These projects are designed to improve IT infrastructure and services by increasing capacity to reflect an immediate need, or to allow extra capability to be available to adapt to changes in officer working arrangements and different patterns of demand on services. In addition to ensuring capacity, they will offer resilience by ensuring that single points of failure are reduced to a minimum where practical and are eliminated where the cost justifies the investment to reduce business disruption upon single failures.

Project Outline	Timescale	Benefits	Status	Next Target
Create resilient 1Gbps corporate network	Q2 2018	Ensure availability of core network Provide greater capacity to support agile work methods and greater	Complete	Current technical constraints prevent upgrading the core network link above current bandwidth. Core requirements going forward are dependent on strategic direction for storage and application migration to the cloud. Review of technical capability and strategic direction of data storage and application hosting. Q1 2022.
Create new radio infrastructure to improve core network links	Q2 2019	Increased resilience and capacity of internal network	Complete – Craig Owl and Dummies Hole / Water Tower	
Commission new wi-fi infrastructure and review office wi-fi network capability and product/supplier	Q4 2017 – Q4 2018	Increased coverage and capacity of wireless throughout offices	Phase 1 and 2 are complete	Phase 3 brought forward due to good progress on Ph1 and Ph 2.
Install new network infrastructure to allow mobile devices in secondary schools to go direct to the internet	Q4 2017 – Q1 2019	Higher capacity network with less contention between users Divergence from the corporate network offers opportunities to consider different technology and services	Complete	Possible bandwidth limitations with existing provision. Review required Q2 2021 to consider whether there is a need to upgrade.

Upgrade Netscaler load balancers for Citrix desktop provisioning	Q3 2018	Maintain resilience for Citrix desktop provisioning	Complete	
Implement additional Moonshot chassis to support Citrix desktop and application requirements	Q2 2018	Offer increased functionality for Citrix desktops, including Windows 10 and more demanding applications Deliver capacity and future expansion to support changes in working and agility	Complete	
Implement additional applications and desktops into Citrix environment	Q3 2018 - 2020	Reduce the need for desktop and laptop devices, allowing cheaper devices to be used which also require less configuration and maintenance	Windows 10, Office 365 and further applications deployed to Citrix	Dependant on application capabilities consideration underway to maintain Windows environment only
Replace all existing hypervisors and upgrade OS and support software to supported versions	2018	Maintain PSN compliance through supported server OS versions Deliver capacity required to host desktop services and applications	Complete	Migration off local data centre storage to cloud hosted storage to be investigated. (Applications / services migrated to cloud.)
Enable resilience and replication across data and communications centre	2018	Provide additional network capacity and ensure availability of core services in the event of major data centre outage	Ongoing. Due to completion of Craig Owl/Dummies Hole/Water Tower this is now able to proceed. Worked on by network engineers now with delivery of the networking piece by end January 2021.	Application resilience to be tested after the networking part is signed off.
Replace SAN hardware and disks for storage	Apr 2020	Reduced on-site data requirements and offer cost savings through reduction in data quotas	Support for existing SAN ends March 2022. Project initiated to look at replacement system. Which in turn forms part of a bigger review of data storage strategy. Initial recommendations due end Q2 2021.	Migration off local data centre storage to cloud hosted storage to be investigated. (Applications / services migrated to cloud.)

#### 2. Cloud Migration of Data and Services

These projects cover the migration of servers, data and services from the current position where they are hosted within the Angus data centre, to a position where they are running in the cloud on external hosted environments. This reduces the hardware and software purchase cost, administration and support, and reliance on other internal infrastructure to deliver these services.

Project Outline	Timescale	Benefits	Status	Next Target
New telephony solution to deliver cloud-based system with improved functionality at lower cost	Q1 2018	Reduce costs for calls and future equipment through the use of headsets instead of handsets Reduced administration of internal equipment as a cloud service Less reliance on telephone numbers, which move with the person and offers greater agility	Complete	April 2022 contact centre and corp ends consideration of MS Teams and true cloud based solution to enable virtual contact centre – re word
Audit of existing server hardware and replacement of physical servers out of warranty	On-going	Maintain physical server environment	ongoing	
Cost, design and migrate suitable cloud services for the non-hypervisor supported physical servers, based on prioritisation of business applications. Decommission of existing servers and rack space	Q3 2018 - 2020	Migrate internal server assets to reduce support and dependency on internal infrastructure for access Offer known and predictable costs based on usage	Server audit and migration is on hold to concentrate on Office 365 and Citrix to support home working	Oct 2021
Investigate options for moving Citrix desktops to the cloud	2019 - 2020	Consider opportunities to reduce management and support required to sustain and upgrade the internal Citrix	Initial investigation into general options, further work to take place in 2021	Nov 2021 decision due to contract renewal

Review of intranet requirements and implementation of new capability	Q2 2018 - 2019	environment. Also offers a subscription type licensing model More modern and capable environment to support the intranet information portal Deliver easier creation, publishing and viewing of employee information, accessible on any device type	Complete	
Upgrade CommVault software and audit data to recommend what/how much can be archived. Migrate recommended data to the cloud on a phased approach based on bandwidth required and time to perform	2018 - 2019	More predictable costs for backup through per usage pricing	Underway, due for completion Q1 2021	
Migrate users and mailboxes onto Office 365, decommission internal Exchange 2010 environment	Q2 2018 – Q2 2019	Cloud-based e-mail hosting offering improved availability and capacity No internal server infrastructure required to purchase and support Modern e-mail interface and features for end users	Migrated users and mailboxes onto Office 365	Decommission 2010 environment and exchange
Migrate users Office applications and data into Office 365	2019 - 2020	Reduce internal storage infrastructure requirements Take advantage of the latest version of Office applications, automatically remain up-to- date Offer new applications and opportunities for collaboration	Main Office applications updated, SharePoint and Huddle sites migrated to Office 365 SharePoint MS Teams deployed	Teams Q1 2021 and office applications and data can put in targets F drive direction

Migrate remaining SQL databases onto the cloud, dependant on the application strategy and business system	2018	and sharing through other Office 365 applications Reduce internal reliance on SQL databases, offering greater availability and flexible provisioning and costing Eliminate the need to upgrade or patch internal server infrastructure to comply with	ColdFusion application migration Part of application strategy. Decision on each separate one	
Prioritise and migrate relevant virtual servers to the cloud, based on migration programme	2018 – 2020	PSN Migrate internal server assets to reduce support and dependency on internal infrastructure for access Offer known and predictable costs based on usage	O365 prioritised over this target Approach aim to buy in cloud services	
Migrate desktop OS to Windows 10	On-going	Deliver an updated Windows operating system for client devices that is fully supported and regularly patched for new features, fixes and security issues. Ensures PSN compliance for the desktop OS	Windows 10 in use for all desktops, laptops and Citrix users.	Maintain a current supported version of Windows 10. Currently 1709 – intention is to deploy 20H2 version by end of Q2 2021. PSN requirement and due to the quick retiral of Windows 10 builds by Microsoft has made a rolling programme necessary.

#### 3. Innovation & Development of Digital Capability

These projects cover research into new IT capability and development of new and improved services to support the business. It includes the upgrade of existing capability and migration to cloud, but also delivers the functionality required to deliver better digital services and good information management.

Project Outline	Timescale	Benefits	Status	Next Target
Identify publishing and hosting requirements for Angus Alive and schools. Reduce existing web hosting and decommission archive web site	2018	Remove legacy server infrastructure from the DMZ Deliver a hosting capability for future web sites that offers high availability, easy publishing and accessibility across different device types	Corp maintain URL redirect server somewhere and some small schools' websites. Angus Alive now have their own hosted website off the council infrastructure.	PSN compliance
Extension/Renewal of CSP customer portal capability used to deliver digital service forms and workflows	Q3 2019	Continued capability to develop and deploy digital services Review and consideration of opportunities offered through the CSP national framework and	Underway. Agreement made with DCC and PKC to extend. Negotiating this agreement as a collaborative, TPC organising.	Report to be constructed and agreement sought to extend. Q2 2021.
Implementation of integration and process automation services to co-ordinate transactions and processes between business systems	2018	Delivers key capability that allows data and requests to be co- ordinated between systems and data stores, through a robust and flexible mechanism Provides capability to join services across business systems by automating application tasks	Integration work started , key priority for 2021	Further automation of processes and data manipulation. Continued development of capacity within IT and Digital to deliver this.
Implement contact centre system and web chat/bot technology to support digital services	2018 - 2019	Intelligent routing and resolution of service requests to reduce avoidable contact and increase self-service Consolidate contact sources and teams through improved contact centre capability Reduce cost to deliver digital services	Partially implemented	AI and Chatbot integration

Renewal of GIS	2019	Continued service of main user	Existing contract extended as	
intranet/internet capability		GIS toolset	GIS team structure, resources	
and client editing/routing		Opportunity to review	and priorities changed	
tools for spatial data		requirements		

#### 4. Security & Legislative Compliance

These projects include areas where security products and services are required to ensure the protection of user identities, data and devices, and to allow us to protect against and respond to cyber-attacks.

Project Outline	Timescale	Benefits	Status	Next Target
Investigate options and implement better identity management to offer SSO (Single sign-on)	2018	Simplified login procedures for users through a single login Reduced administration for support staff to reset passwords for different systems	1st Phase implemented - Complete	Implementation of 2FA authentication on identified systems and services.
Replace physical based two- factor authentication with virtual cloud-based solution	Q2 2018	Removal of cost to purchase physical tokens Easier use and administration of two-factor authentication	Complete	
Review internet logging and filtering capability	2019	Continued service with opportunities to consider new advances in threat detection and web content classification	Ongoing, perpetual activity	
Review anti-virus and malware protection capability	2020	Continued service with opportunities to consider new advances in threat detection and OS/application/data monitoring requirements	Ongoing	2021 as part of new build of Windows desktop we will move from Symantec to the built-in anti- virus managed through SCCM. Firewall / CASB are protected by Advanced Malware Detection

				systems and will continue to be on an ongoing basis.
Review and update security requirements and procedures to maintain PCI and PSN accreditation	On-going	Continued service and connectivity with other government services Demonstrate good practice and reduce risk of technical security incidents	Ongoing	Yearly accreditation will be required. 2022/23 PSN will be retired however accreditation to a new standard will be required. This has not been implemented yet but will be progressing in the next 12 months.