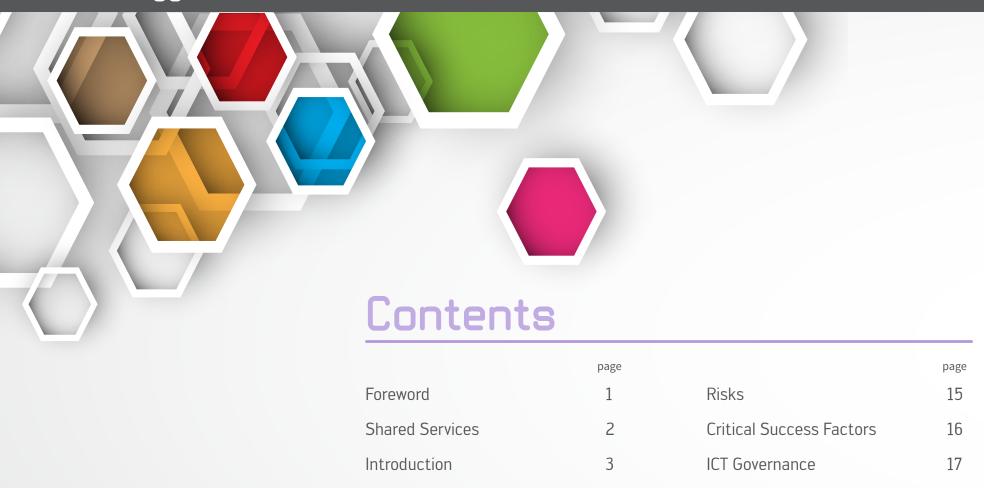
# ICT Strategy 2017 - 2021



Working with you to achieve more



## ICT Strategy 2017 - 2021



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To provide relevant Information Technology Services that, in terms of economy, efficiency and effectiveness, our customers regards second to none.

Context

Looking Back

Strategic Objectives



Ruth Hyde OBE
Chief Executive
Broxtowe Borough Council



Andrew Muter
Chief Executive
Newark and Sherwood
District Council



Allen Graham
Chief Executive
Rushcliffe Borough
Council

# Foreword

Broxtowe Borough Council, Newark and Sherwood District Council and Rushcliffe Borough Council entered into an ICT shared service agreement in July 2012

Employees rely on access to ICT equipment, systems and online information to perform their day to day jobs. Customers expect services to be online and available on an anytime and anywhere basis in addition to the traditional access channels of telephone and face-to-face.

The partnership are continually looking to achieve maximum value for money from their ICT investments. Connectivity solutions are key in supporting greater accessibility, flexibility and information provision. The increasing complexity of ICT solutions, their rapid evolution and the need to be agile in responding to organisational and customer needs and to partnership opportunities that reduce cost, increase resilience and improve quality requires a less traditional approach to ICT strategy moving forward.

The rationalisation of property assets at all partner sites has seen large logistical projects being delivered or in the process of being delivered. Reliance on ICT infrastructure and solutions to support an agile and flexible working culture is a significant part of this overall transformation.

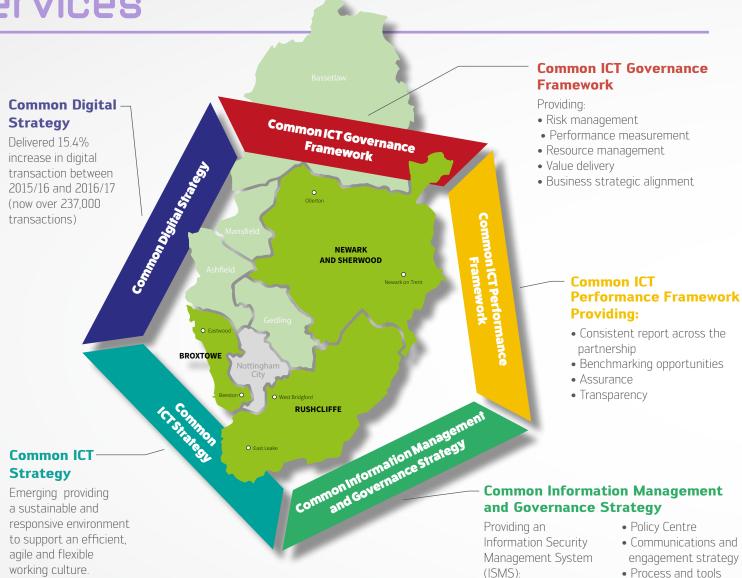
The success of this shared strategy depends on close partnership working. We will look for new partners and explore commercial opportunities. We will continue to explore opportunities that promote common software and hardware solutions and consequently deliver platforms that will provide the prospect of back office shared service.



Shared Services

The five common strategic elements presented in the graphic opposite have proven to provide a strong foundation for shared ICT service delivery. All three organisations are now at a similar maturity level in relation to the strategic delivery of each of these five common strategic elements.

The common ICT strategy document that follows has been developed following consultation across the entire partnership and will further promote and support good customer services along with a culture of agile and flexible working arrangements for employees and members.



• Training framework



# Introduction

## **Purpose**

This document sets out the Council's strategy for Information Communication and Technology (ICT) over the period 2017 to 2021.

The role of ICT is essential to the delivery of all of the Council's services and is fundamental to most business change programmes across the organisation.

While the strategy contains broad strategic objectives along with the rationale behind those objectives, including the benefits and deliverables that will be achieved it does not set out to provide a strict formula or action plan dictating the approach. An emerging strategy will therefore exist enabling an agile approach to operational delivery, taking advantage of new proven developments and partnership opportunities.

The ICT Strategy reflects the Council's mission statement and Corporate Strategy in promoting sustainability and efficient high quality services. The Council continues to use the following themes:

'People, Places, Prosperity and Public Services'

These themes help to frame the corporate strategic priorities and are used to illustrate the impact of four groups of strategic priorities:

- Homes
- The economy
- Safety and cleanliness
- Healthiness

In addition, there are number of corporate which will shape the way the Council's operates:

- The commitment to the Community Covenant and specifically the way it shapes the Council's approach to priorities around our lettings policy and support, advice and sign-posting activities
- The need to review central and support services as some activities are reduced or moved into other delivery vehicles
- The ability to increase the range of digital service delivery
- The scope to increase collaboration with neighbouring councils





The ICT Strategy defined within this document seeks to accomplish the following five part vision aligned with the Corporate Strategy, and the ICT mission statement of Economy, Efficiency and Effectiveness:

- 1 ICT as an enabler for **efficiency** savings and service improvements.
- Responding in a flexible and agile way to **customer** needs, with emphasis on digital by design / channel shift through automation and enabling of online and self-service.
- 3 Standardisation of strategies, policies, processes and technologies to enable good practice operation and partnership/shared service opportunities.
- 4 Modern architecture enabling efficient operation and supporting the agile/flexible working culture
- 5 Robust arrangements for **business continuity**, **information governance** and **security**.

economy, efficiency and effectiveness

### Corporate Strategy - Strategic Alignment

The five part vision for ICT set out above supports the Corporate Strategy in promoting cost effectiveness and excellence in front line service delivery.

In particular, the successful implementation of the ICT strategy will:

- Improve the efficiency of the Council by implementing new or improved methods of working that are either more cost effective (for example by reducing travel or reducing paper consumption) or by enabling employees to be more efficient with their time (for example by using agile/mobile technologies to maximise the presence of employees in their primary place of work). These efforts will also directly support a further corporate objective of the Council, which is that the environment will be protected and enhanced for future generations. Ensuring that the technology implemented reduced where possible the environmental impact is implicit and runs through the entire ICT vision and strategy.
- Encourage and facilitate partnership by creating shared good practice ICT strategies, policies, processes and the alignment of technologies and systems.
- Provide employees with the most appropriate ICT tools and processes to enable them to deliver cost effective and efficient customer focused services.
- Through efficient technology platforms support the Council's commercial services to enhance income generation.

- Through effective business intelligence, improve the information available to members and officers so that it is of a high quality, up-to-date, complete, presented in an appropriate format and is available at anytime and at any place, creating transparency and informing the Council's decision support system.
- Empower Nerwark and Sherwood's customers by providing them with greater accessibility to the Council's public and information services.
- Improve communications with customers, with other organisations and within the Council through effective and flexible electronic communication channels (anytime, anywhere).
- Maintain an effective and modern infrastructure which underpins all of the priorities and actions within the Council's key objectives; housing, business growth, environment, health and community safety.



## Context

### **National**

Key to the national picture is the austerity measures that were introduced before the previous strategy (2012 to 2016) and are set to continue beyond the end of this strategy document (2017 to 2021). A number of additional sources have been considered in the development of the five part vision including:

- Central government Transformation Strategy 2017 to 2020 (published 9 February 2017)
- Central government's UK Digital Strategy (published 1 March 2017)
- Central government's Digital Economy Bill 2016/17
- National Cyber Security Strategy 2016 to 2021 (published 1 November 2016)
- Government Digital Service (GDS) online resources
- LCIOC Standardise Simply Share Strategy 2016 (published 2016)
- LG Inform Mapping digital exclusion across the UK





### Local

Key to the local picture is alignment with the Council's published Corporate Strategy. The ICT Strategy should be read in the context of the Corporate Strategy and the underpinning Financial Strategy. As well as the above documents the five part vision has been informed by a number of other sources including:

- Consultation with ICT Shared Services CEO Steering Group
- Consultation with senior staff facilitated through the ICT
  Business Account Management meetings with Directors and
  Business Managers conducted throughout June and July each
  year across all partner authorities (Broxtowe Borough Council,
  Newark and Sherwood District Council and Rushcliffe Borough
  Council)
- Alignment with service based strategies
- ICT Services Mission Statement
- ICT Governance Arrangements
- ICT Shared Services Partnership Strategy
- Broxtowe Borough Council Corporate Plan
- Rushcliffe Borough Council Corporate Strategy

# Looking Back

### Development between 2012 and 2016

During the life of the last ICT Strategy (2012 to 2016) the following provides an example of what was achieved:

## IMPLEMENTATION OF NEW SYSTEMS

- Mobile Device Management (MDM)
- Web Filtering
- Encryption
- Enhanced Communications Solution
- Microsoft Office 2010 / 2013
- Environmental Health
- Document Management Solution
- Digital Platform
- Customer Relationship Management Solution
- Garden / Trade Waste
- Mobile Working
- Civil War Ticketing
- Civil War Web Site



#### **UPGRADING INFRASTRUCTURE**

- Disaster Recovery Upgrade
- Government Connect
- Storage Area Network (SAN)
- Network
- Multi Functional Devices (MFD)
- Two Factor Authentication (2FA)
- Firewall
- Windows 7 / 8.1
- Microsoft Server 2008 / 2012
- Members Secure Portal / Extranet
- Smartphones



## ENHANCED PARTNERSHIP WORKING

- Implementation and delivery of a common Digital Strategy
- Implementation and delivery of a common Information Governance Strategy
- Business intelligence support demand management and channel shift
- Common process, common policies, and common procedures
- Improved procurement and contract renegotiation

## Communications, Consultation and Engagement Strategy

Many of the communication, consultation and engagement elements of ICT service delivery are now embedded in the service culture across the ICT Shared Service.

The strategy depicted below makes explicit the activities that are delivered under each element in line with the Corporate Communications, Consultation, and Engagement Strategy.







### ICT Themes

This strategy consists of the following strategic themes:

- 1 Enabling efficiency
- Responding flexibly and with agility to **customer** needs
- Increase our ability to work in effective partnerships
- Modern architecture supporting efficient and agile working culture
- Robust arrangements for **business continuity**, **information management and governance** and **security**



These themes have been selected for;

- Their importance as key transformation drivers for the Council; and
- Their alignment to the Corporate Strategy and core strategies; and
- Their alignment with the five part vision for ICT
- Investigate Open Source alternatives to business software and specialist applications to promote value for money and cost effectiveness

### **Enabling Efficiency**

### **IMPACT**

Enabling the Council to redesign processes/
services to be more accessible and efficient,
producing better, quicker and more
consistent outcomes for customers. Using
Digital by Design principles to automate
business processes. Recognising employees
as a key organisational resource and
ensuring access to appropriate technology
and information to promote efficient
and effective working. Enabling financial
stability and the promotion of environmental
good practice by establishing appropriate
contractual arrangements.

### **BENEFITS**

Operational efficiency through the effective use of existing or new technologies. Reduced waste through automated processing and streamlined manual procedures taking opportunities to remove bureaucracy. Improved service delivery through operational consistency.



- Promote Digital by Design principles throughout the organisation.
- Review and exploit established technology to ensure greatest operational benefit being gained
- Capture efficiencies and lessons learned to avoid cost and effort
- Implement good practice from local or regional partners for proactive training and development





# Responding flexibly and with agility to customer needs

#### **IMPACT**

Improving responsiveness to ensure that customers experience consistent services through appropriate and modern access channels (web, telephony and face to face). To facilitate channel shift where appropriate by creating digital service that our customers view as their access channel of choice moving transactions away from face to face and telephony towards selfservice facilities via Internet, automated telephony and kiosk technologies. Helping the community to gain access to online services and investigating technologies which support community engagement.

#### **BENEFITS**

Improve customer experience with greater first line resolution and provide a consistent customer experience across services. Support customer's needs through assisted technology initiatives. Making services more accessible and offering the customer greater choice in how they contact us at what time and on what device. Enable a higher level of customer engagement resulting in stronger communities (e.g. electoral registration and e-newsletters).

- Expand channel shift programme targeting high volume, politically sensitive and socially important services to achieve 70%, 20%, 10% (or better) split of interactions (Web, Telephone, Face to Face respectively)
- Promote and encourage community engagement through modern technologies
- Help address the issue of digital exclusion due to age, education, income and health
- Expand access channels to include the use mobile web services as a means of delivering council services and increase the use of email and mobile text based services (SMS)
- Progress use of mobile technology subject to business case approval to pursue a quicker and better service to local people.



## ICT Strategy 2017 - 2021



# Increase our ability to work in effective partnerships



To grow the ICT share service partnership including more local and possibly regional partners. To continue the work to facilitate common policies, standards, systems and infrastructure to drive out cost and create opportunities for greater resilience, efficiencies and savings.

### **BENEFITS**

Improvements to service delivery through common processes. Increased flexibility/ resilience and opportunities to share resources. Alignment of procurement opportunities to achieve economies of scale.

- Pursue a cloud first approach (public, private or hybrid cloud deployment models) including implementing IAAS (infrastructure as a service) and SAAS (software as a service) where there is an economic case to do so promoting alignment of software, technologies and services
- Alignment of procurement opportunities and contracts to create savings
- Promote technology alignment (systems/ infrastructure/security)
- Promote procedural alignment (policies/ procedures/standards)



- Investigate shared service opportunities built on established modern technology and common policies procedures and standards
- Promote training across partnerships for common services
- Establish greater resilience through enabling flexibility across organisational sites

### Modern architecture supporting efficient and agile working culture

### **IMPACT**

Enabling the greater flexibility and agility of both employees and members through the deployment of appropriate technology including effective collaboration systems and tools. Support decision making through business intelligence by utilising of the Council's information assets. Promoting environmental good practice through reduction in for example the number of journeys undertaken and smaller asset footprint.

### **BENEFITS**

Ensures a modern work place that is flexible and agile to enable the Council to be responsive to organisational and customer needs. Provides relevant communications and collaboration tools to enables an efficient work place and one that is attractive to employees and partner organisations. Reduces the Council's environmental impact.

- Investigate the greater use of mobile technologies as these become more robust and suitably designed for a corporate environment
- Enhance systems to design in agility and flexibility
- Keep abreast of technologies and facilities within the district/ borough that can be utilised by employees further assisting mobile working





# Business Continuity, Information Management and Governance, and Security

#### **IMPACT**

Delivering robust and resilient safeguards ensuring ongoing availability of priority services and a means of recovery in the event of a disaster. Safeguarding the Council's data by ensuring compliance with all relevant legislative, financial and central government security standards. Improving maturity of the management and governance of information assets and delivering appropriate arrangements to ensure compliance with such as the General Data Protection Regulation (GDPR). Enhancing security to better address cyber security threat vectors Ensuring our information assets are effectively managed in line with all relevant legislation through the deployment of appropriate technical standards and solutions.

### **BENEFITS**

Ensures availability and continuity of services to our customers and the management of risk related to the authority's ICT assets. Ensure compliance with relevant legislation and good practice standards (e.g. ISO 27001)

- Maintain compliance with legislative, financial and central government security standards (i.e. PCI/DSS, GCS Code of Connection, GDPR), ensuring standards are applied in a proportionate way so as not to stifle our ability to deliver effective services
- Enhance arrangement for business continuity utilising mobile devices and homeworking arrangements
- Deliver full failover direct internet access (DIA) services in order to provide appropriate capacity for agile working environment (increased capacity DIA over IPVPN)
- Ensure compliance with relevant ISO standards (i.e. ISO 17799, 25999, 27001)
- Open data principles along with the transparency framework supporting and reducing Freedom of Information (FOI) requests
- Implement appropriate software/ procedures to support archiving and

- retention in support of the Information Management strategy
- Investigate the use of collaboration and information sharing tools including extended use of existing technologies to reduce paper based activities and storage
- Achieve compliance with Cyber Essential and enhance the organisational awareness in relation to the growing cyber threat vectors
- Ensure appropriate technology is deployed to offer resilience and capacity in the provision of a robust technical architecture





# Risks

The delivery of the ICT Strategy will be through a series of managed programmes and projects linked to the strategic components within the Newark and Sherwood Service Improvement (NSSi) Portfolio of projects and programme and will be subject to the established ICT governance arrangements (see page 17).



Risks associated with the implementation of this strategy will be reduced through the use of structured techniques for programme and project management. The methodology is described more fully in the ICT governance section.

### Some of the key risks associated with the delivery will be:

- funding constraints, if the funds identified in the NSSi Portfolio business cases are not forthcoming or at the appropriate time
- changes in scope which may impact on cost, quality, timescales and resourcing
- resource constraints associated with running significant concurrent programmes of work
- important and urgent organisational business priorities emerging which require significant ICT resourcing, necessitating the redeployment of ICT resources as priorities dictate
- the technical complexity and interdependencies inherent in the concurrent deployment of large technical projects
- cultural challenges associated with new ways of working, the use of technology and the desire for customised local solutions
- ensuring appropriate skills, support and training is in place to empower employees to deal with organisational changes





# Critical Success Factors

## Critical Success Factors and Resourcing the ICT Strategy

The successful implementation of this Strategy depends on maximising the value the Council achieves through its use of existing ICT systems, equipment, and human resources. In particular, the Council will aim to ensure that:

- the ICT strategy is embraced by the whole organisation and the delivery of action plans are facilitated by appropriate communications, skills development, training and the application of best practice;
- business change management is strengthened through clear governance by the corporate Newark and Sherwood Service Improvement (NSSi) Portfolio of projects and programmes;
- future investment plans give sufficient emphasis to Information and Communication Technology where significant investment has already been made.
- a corporate approach to information management and governance continues to be supported including the implementation of relevant standards (ISO 17799 – code of practice, ISO 27001 – ISMS standard);
- the digital by design strategy continues to be supported including the drive to manage demand and provide online and self-

- service facility that our customers view as their access channel of choice;
- the Automation and Enablement of key processes is achieved:
- taking the opportunity to develop further joint working or shared service initiatives with local authority/public body partners; and
- the issues of cyber security, physical or information security, disaster recovery and business continuity are given appropriate priority.

Recognising the importance of and the benefits derived from ICT, the Council has invested significant amounts in ICT. The likely levels of additional investment required for the period to March 2021 have still to be agreed and form part of the annual budget process.

# ICT Governance

### ICT Governance Arrangements

The portfolio of projects and programmes resulting from this strategy will be managed in accordance with the established governance arrangements; ICT governance is made up of five strands namely:

- risk management
- performance measurement
- value delivery

- strategic alignment
- resource management

### **RISK MANAGEMENT**

The ICT related projects that the Council implements are often expensive and delivered over a number of months, so it is important that sound risk management is in place both in managing projects and the day to day operation. Using the PRINCE2 project management methodology helps to mitigate the risks by enabling the Council to consistently work to identify the risks associated with a given project and regularly report on progress to the programme board.

### STRATEGIC ALIGNMENT

Key to achieving strategic alignment is good communication and a good relationship between ICT, Directors and Business Mangers. Regular Business Account Management Meetings facilitate this relationship. The aim is to ensure that ICT systems are only developed once a full understanding of appropriate business

strategies exists and that any investment is able to support the planned development of the business with the underlying objective of improved and efficient services delivered to customers.

### PERFORMANCE MEASUREMENT

In order to ensure that the ICT service delivers solutions on time and is able to support those solutions, a series of internal service level targets are in place. These targets are used to ensure openness and transparency exists. Monthly reports are sent to the Corporate Management Team (CMT) and are considered by the programme board.

### **RESOURCE MANAGEMENT**

Resource management covers the service in a number of areas. It is not only important to ensure that there is enough

ICT resource with the requisite skills (SFIA) to deliver the project management, the technical installations and the support of new systems / solutions but it is also essential that capacity exists within the service area to enable successful change/implementations to take place.

### **VALUE DELIVERY**

Once a solution has been delivered, ensuring that the organisation is realising the improvements and efficiencies that were highlighted in the business case supporting the original investment come under the strand of value delivery - Benefits realisation is reported on a monthly basis to senior management.



## ICT Strategy 2017 - 2021

# Newark and Sherwood Service Improvement (NSSi) Portfolio

The Newark and Sherwood Service Improvement (NSSi) Portfolio is part of the ICT governance framework and is used to ensure that there is a mechanism in place to manage the portfolio of ICT developments and service improvements.

## The Role of Corporate Management Team and ICT Services

The role of CMT and ICT Services is to ensure that the NSSi portfolio is effectively monitored, that the direction of travel of the ICT Strategy is monitored, that expertise is coordinated from all areas of the business aiding strategic alignment, that a communication channel is facilitated to ensure that all employees have the opportunity to engage and that resource can be utilised to deliver service improvement through business transformation and deployment of appropriate technologies.

# Business Account Management Meetings

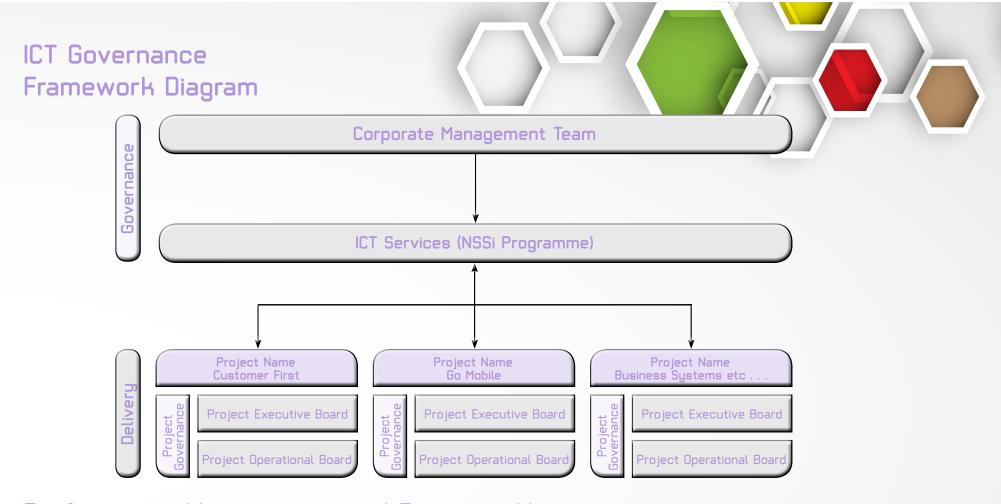
In order to maintain a close working relationship between the ICT function and the business, regular account management meetings are organised. These include annual meetings between the Chief Information Officer and ICT Manger with Directors and Business Managers.

### Portfolio Management

The NSSi portfolio and the reporting mechanisms associated with the programme (for example the NSSi Portfolio Highlight Report) ensure that openness and transparency exists. Using a simple to understand traffic light system (Red, Amber, Green (RAG) status) Executive Managers and the programme board can see immediately where issues exist and are able to react in order to apply the appropriate measures to address the circumstances

### Project Management

Risks associated with the implementation of any programme will be reduced through the use of structured techniques for programme and project management. PRINCE2 (Projects IN Controlled Environments) is a structured methodology for effective project management. PRINCE2 has been adopted corporately. ICT services and its contractors have used PRINCE2 successfully. PRINCE2 is not restricted for use in ICT related projects but is a generic methodology that promotes best practice in project management and as such all corporate projects benefit from this.



## Performance Management and Progress Monitoring

A number of measures are in place to ensure that regular performance management and progress monitoring is carried out.

The ICT management KPI report is produced monthly. This document contains details of security incidents, the number of calls received by the services desk, the percentage of responses achieved within the service level targets, the percentage of time the systems are available and the customer satisfaction survey results.

The NSSi Portfolio Highlight Report is produced monthly. The report is used to monitor progress giving full transparency to the state of all projects and programmes contained within the portfolio.

The business plan for ICT contains local indicators, which are monitored throughout the life of the programme. A percentage is recorded to indicate how much of the programme has been delivered.

# Consultation

### STAFF CONSULTATION

This strategy has been developed in consultation with ICT employees, Directors and Business Mangers as part of a consultation workshop activity included in the annual Business Account Management meetings.

Over 130 employees across all three organisations in the ICT Shared Service took part in the consultation. All service areas were represented and feedback was captured and has been used to inform the new ICT strategy.

### **CEO STEERING GROUP**

A consultation exercise was carried as part of the ICT Shared Service CEO Steering group. Feedback received from the Chief Executive has been fed directly into the new ICT strategy in terms of specific objectives and direction of travel.



# Glossary

CLOUD COMPUTING	<b>Hybrid Cloud:</b> may be established where several organisations have similar requirements and seek to share infrastructure so as to realise the economic and environmental benefits of cloud computing. This option may offer a higher level of privacy, security and/or policy compliance. In addition it can be economically attractive as the resources (storage, servers) shared in the community are already exploited and may have reached their return on investment.	
	<b>Public Cloud:</b> (or external cloud) describes cloud computing in the traditional mainstream sense, whereby resources are dynamically provisioned on a self-service basis over the Internet, via web applications/web services, from an off-site third-party provider billed on a utility computing basis.	
	<b>Private Cloud:</b> (or internal cloud) offer the ability to host applications or virtual machines in an organisation's (or partnership's) own set of hosts. These provide the benefits of utility computing – shared hardware costs, the ability to recover from failure, and the ability to scale up or down depending upon demand.	
GCSX	Government Connect Secure extranet is a central government facility providing a secure private Wide-Area Network (WAN) between connected Local Authorities and other public organisations.	
IAAS	Cloud infrastructure services, also known as 'Infrastructure as a Service' (IAAS) which delivers a server infrastructure environment as a service. Rather than purchasing servers, software, data-center space or network equipment the service is billed on a utility computing basis i.e. by the amount of resources consumed.	
ICT	Information & Communication Technology.	
ISO 17799	Information Security Management Code of Practice Standard	
ISO 25999	Business Continuity / Disaster Recovery Standard	
ISO 27001	Information Security Management System (ISMS) Standard	

# ICT Strategy 2017 - 2021

ITIL	ITIL® (the IT Infrastructure Library) is the most widely accepted approach to IT service management in the world. ITIL® provides a cohesive set of best practice, drawn from the public and private sectors internationally. It is supported by a comprehensive qualifications scheme, accredited training organisations, and implementation and assessment tools. The best practice processes promoted in ITIL® support and are supported by, the British Standards Institution's standard for IT service Management (BS15000). The standard includes the following components: -  • Service Management:  • Service Desk:	
	<ul> <li>Financial Management:</li> <li>Capacity Management:</li> <li>Continuity Management:</li> </ul>	<ul><li>Incident Management:</li><li>Problem Management:</li><li>Change Management</li></ul>
	<ul><li>Availability Management:</li><li>Configuration Management:</li></ul>	Release Management
IPVPN	Internet Protocol Virtual Private Network provided by Virgin Media. The provision of a network linking remote buildings, making up part of the WAN.	
PCI/DSS	Payment Card Industry Data Security Standards	
SAAS	Cloud application services or 'Software as a Service' (SAAS) deliver software as a service over the Internet, eliminating the need to install and run the application locally and simplifying maintenance and support.	







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