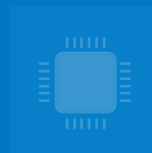


# Information and Communication Technology (ICT) Strategy

# 2017-2020



HEREFORD & WORCESTER  
**HWFR**  
FIRE AND RESCUE SERVICE

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## 2 Introduction

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### 2.1 PURPOSE

This strategy sets out how technology will support Hereford and Worcester Fire and Rescue Service's (HWFRS) core aim of providing our communities with sustainable, high quality firefighting, rescue and preventative services. We will

use a set of clear principles and targets as a framework and reference point for the further development of all aspects of ICT across the organisation.

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### 2.2 STRATEGIC AIM

HWFRS must keep pace with modern, user-oriented models of operating in order to address changes in the expectations of our workforce and communities. ICT is central to HWFRS's vision to support, enhance and transform how we work, whilst playing a major role in the shaping of our leadership and management. It will contribute to the overarching change agenda including the remodelling of the workforce and the drive toward greater community engagement and partnership working.

Pivotal to this notion is that we must move to a user-centric, data driven, operating model where ICT is available to support our workforce and communities when and where most appropriate. This will be facilitated by the delivery of a **modern ICT service that is resilient, effective and scalable**. In real terms that means our strategic aim is to transition to a hybrid model where our users consume the services that best fit their needs and the needs of the business, without being constrained by physical location.

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### 2.3 APPROACH

It was acknowledged from the outset that to be able to develop a cohesive strategy for ICT, focus would need to be given to understanding the needs of our firefighters and business users before considering technology solutions. As part of the Strategy development process, engagement with a cross section of our workforce has been undertaken to ensure that their feedback helps to shape the future direction of the ICT service.

Our HWFRS Strategy for ICT creates a framework for further development with clear deliverables, set out across 6 key development strands, to help achieve our strategic aims. The intention is that this Strategy lays the foundation for development over the next 3 years.

## 3 Principles

The approach that HWFRS take in the development of ICT will be governed by a set of guiding principles. These principles will permeate all aspects of

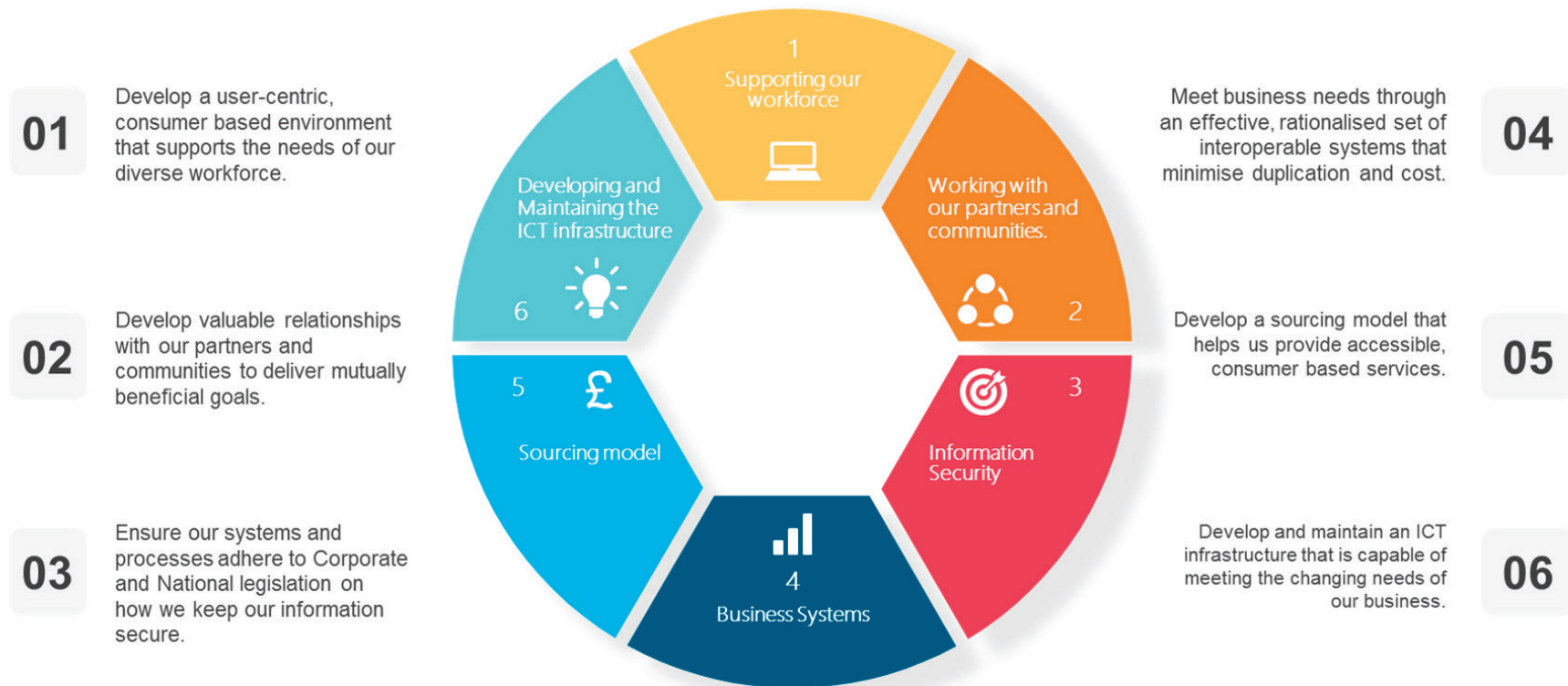
decision making, helping to add focus and direction to our strategic aim of delivering a **modern ICT service that is resilient, effective and scalable**.

1	<b>Alignment to Business Strategy</b>	The ICT service will be aligned with HWFRS's overarching business strategies, promoting a consolidated approach to address corporate objectives
2	<b>User driven</b>	Systems are designed on a consumption model, to provide easy to use services that can be accessed based on need rather than location.
3	<b>Best practice</b>	Systems, components and processes will take advantage of industry best practice and open standards wherever practical.
4	<b>Business agility</b>	The ICT Service will deliver a flexible solution that is correctly positioned to support our increasingly mobile workforce, whilst being agile enough to adapt to future changes in business requirements and working practices.
5	<b>Data driven intelligence</b>	Ensure that valuable information can be analysed from multiple sources through a consistent approach to data collection, integration and distribution.
6	<b>Remove duplication</b>	Identify and remove duplication of effort and system functionality, to provide faster access to more accurate information through a single version of the truth.
7	<b>Resilience</b>	Maintain a level of resilience in the ICT infrastructure that reduces the number of single points of failure across the service and removes the dependency on individuals.
8	<b>Collaboration</b>	ICT will be an enabler when working and sharing information with our partners. We will leverage our relationships with partner organisations to consume services that will both add value to HWFRS and provide cost efficiencies.
9	<b>Data Protection</b>	All systems, components and processes will maintain the required level of integrity and security to protect our data.
10	<b>Security and Governance</b>	Strong security controls and governance processes will ensure continuous compliance with local and national legislation. These controls will support, not obstruct, our workforce.
11	<b>Sustainable</b>	The design and maintenance of the ICT infrastructure and systems will be managed to ensure it delivers a cost-effective and sustainable solution.

## 4 Development Strands

Our HWFRS Strategy for ICT creates a framework for further development, and generates ideas and discussion about the way ICT should progress in order to support our workforce, engagement with partners and our communities. In order to move forward, we have identified six development strands to help us deliver a **modern ICT service that is resilient, effective and scalable**.

Each development strand has a Summary Statement of intent followed by a number of Targets. These Targets will become key priorities and actions in our ICT Strategic Implementation Programme.



# 4.1 Development Strand 1

## SUPPORTING OUR WORKFORCE

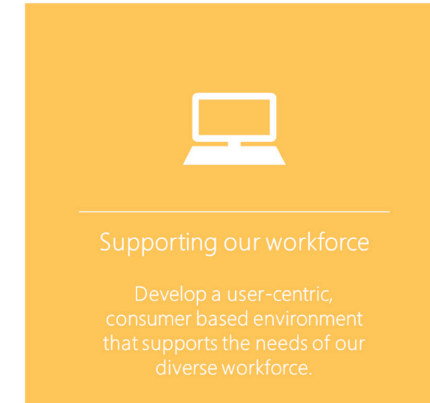
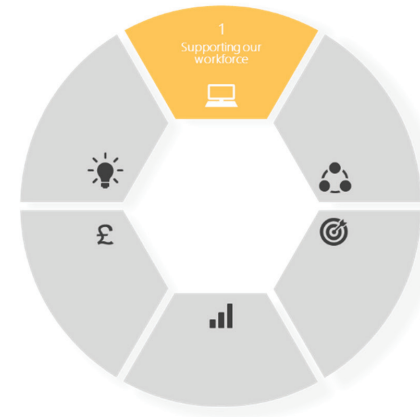
A core commitment in this strand is that all HWFRS staff have immediate and easy access to the digital resources they need, and that it supports their working in a versatile and effective manner.

Advances in ICT are rapid and constant, and have dramatically changed the manner in which our issues, challenges and problems are resolved by ICT-based solutions. For our increasingly mobile workforce, this new digital lifestyle creates opportunities for connectivity and productivity. We will endeavour to keep pace with this change by future proofing investment decisions in areas such as device/location agnostic systems and connecting the field with back office applications and, where applicable, directly to our communities.

We will introduce industry best practice processes to develop our understanding of business challenges and requirements, to maximise our return on investment in ICT. For example, more structured processes for working with colleagues to analyse functional needs before investment decisions are made.

Focused effort will be made on replacing the remaining onerous manual (paper-based) processes with more efficient digital resources that support productivity and help reduce duplication of effort. It will work to serve the Leadership Team and all staff in a supportive and informative way and will allow stakeholders to respond and receive information immediately.

An effective Professional Development Plan will be put into place that takes account of the changing nature of the ICT infrastructure and the needs of staff. Additionally, high quality digital resources will be made available to support the PDP plan.



### Targets

- Implement a hybrid cloud solution that takes advantage of best of breed systems. Focus initially on the consumption of Office 365 services for Exchange and SharePoint, followed by additional Unified Communications and collaboration tools, such as Skype for Business, Yammer and OneDrive for Business.
- Reduce manual or paper-based processes and develop solutions that promote digitised/automated workflows. E.g. expenses and vehicle inspections.
- Ensure that the ICT systems we provide are accessible across the full range of working locations and that appropriate connectivity (wired and wireless) is available across the estate.
- Develop a full training plan to ensure that staff are equipped with the skills to make the most out of the ICT services.

## 4.2 Development Strand 2

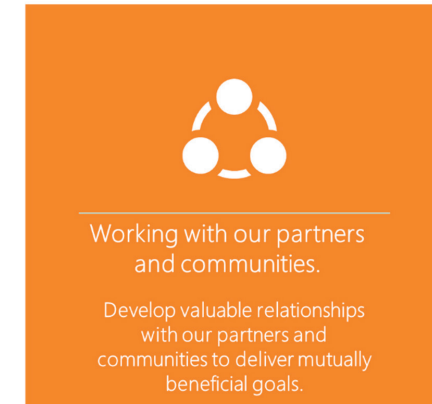
### WORKING WITH OUR PARTNERS AND COMMUNITIES

HWFRS is committed to working closely with its partners to deliver high quality services to our communities. Plans to share buildings, and potentially back office functions, will bring these working relationships even closer together and we will need to ensure that our decisions on ICT investment support our needs in this area.

We will develop strong reciprocal relationships to ensure that we do not re-invent the wheel to address issues that others have already resolved. In return, we will offer support by sharing our own experiences and contributing to wider digital strategies with our partners.

ICT also plays a vital role in working with and further developing our relationship with the wider community. Through technology, we will promote our key messages and encourage a positive attitude towards our activities.

We will use technology as a key enabler for a Communications and Marketing Strategy, to help deliver a clear, consistent message to our customers. As we develop our management of data, we will be able to better analyse our audience so that an appropriate plan can be put into place for the delivery of corporate information across the full range of media channels.



#### Targets

- Develop more efficient ways of sharing data with partner organisations, to reduce duplication of effort and increase the quality of data.
- Deploy a Wide Area Network that will support the immediate business needs for the SHQ transition to Hindlip, but is also best placed to support our new hybrid operating model.
- Explore potential for sharing/buying in expertise from partner organisations that will help expedite our own plans to improve our business processes and data quality.

## 4.3 Development Strand 3

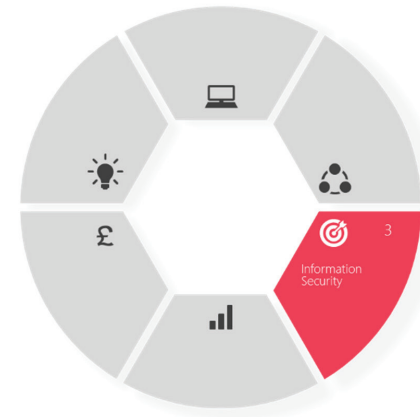
### INFORMATION SECURITY

HWFRS is committed to maintaining and improving security within the organisation and minimising its exposure to risks.

Sensitive information will be sufficiently protected against unauthorised access so that the integrity of our data can be maintained and we comply with our statutory, regulatory and legislative obligations. This will be balanced correctly, so that information is accessible to staff when required.

Business processes will be implemented to ensure that the confidentiality of our information is assured. These processes will adequately protect our data but will not be overly administrative or time consuming.

As a minimum, we will ensure compliance with the requirements for connectivity into the PSN, ESMCP and future ESN networks. In addition, and wherever feasible, we will aspire to be compliant with all aspects of the ISO 27001 Standard for Information Security Management.



#### Targets

- Ensure compliance with PSN and ESMCP. Formulate a robust plan to migrate safely to new ESN network.
- Continue to review and, where necessary, further develop the Business Continuity Plan to ensure that all areas of the service are considered and that plans are implemented to mitigate the key risks to service.
- Continue to undertake regular security assessment and penetration testing, to robustly test our security systems and processes. Ensure that remedial plans are developed to address any identified security risks.



## 4.4 Development Strand 4

### BUSINESS SYSTEMS

A structured approach to addressing business requirements is vital to an efficient ICT service. In this respect, we are committed to meeting business needs through an effective, rationalised set of core systems, that minimise duplication and operate free of infrastructure constraints.

We will group our activities so that critical, operational and non-critical systems are prioritised accordingly. Through further consultation with business users we will create logical groupings (based on usage) so that we maintain a minimum set of core systems to address common needs and, ultimately, remove duplication of functionality and reduce license costs.

It is important that our systems continue to deliver fit for purpose solutions to address business needs. We will undertake a full review of how are systems are used so that we can develop a target architecture that maximises our ability to meet the needs of our workforce, whilst providing managers with access to timely/accurate information.

System interoperability will be a key focus to ensure that information can be shared across systems, increasing automation and reducing the need for manual intervention. This integrated approach will help to remove silos and promote greater cross-function productivity.



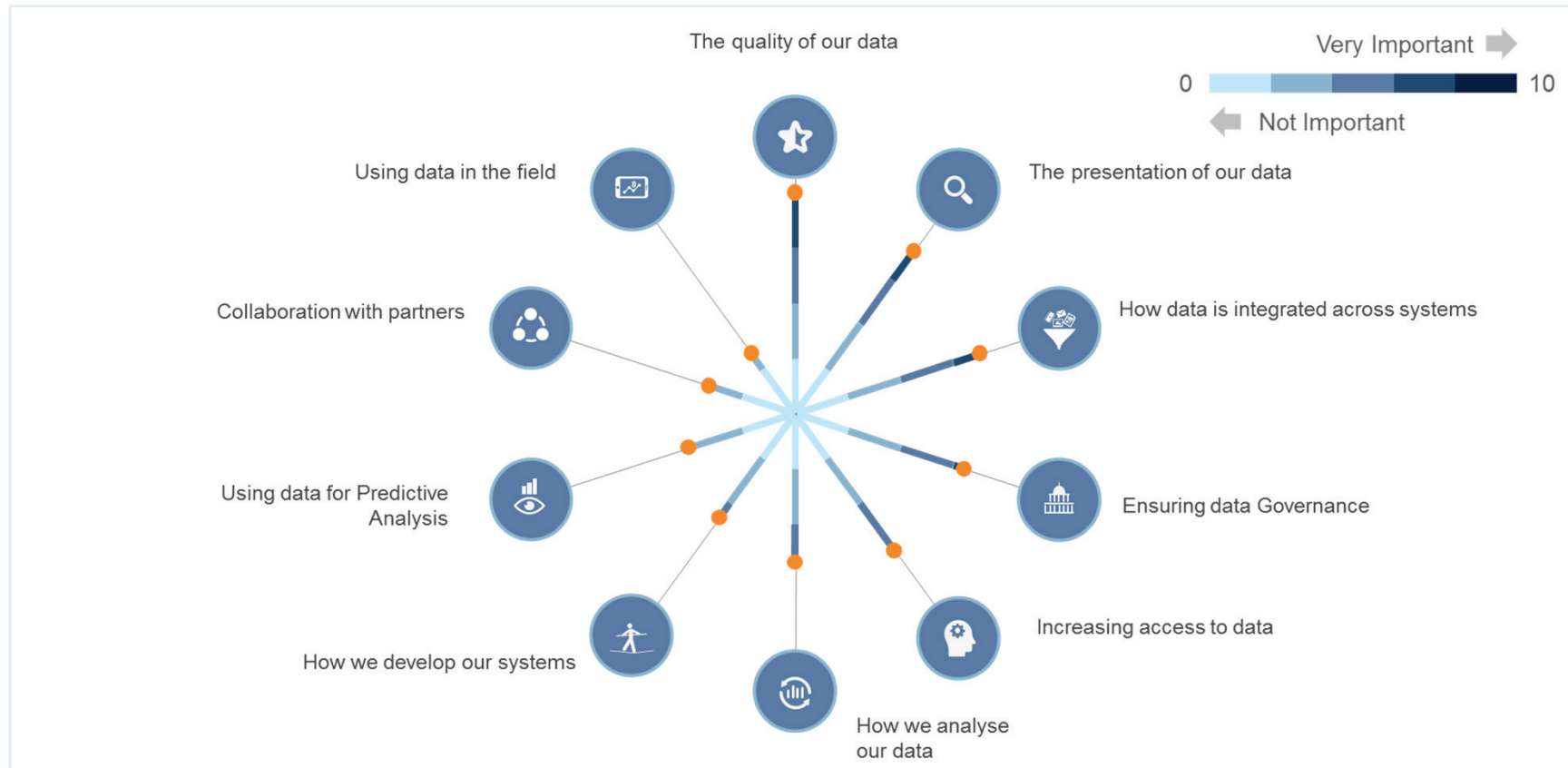

Business Systems

Meet business needs through an effective, rationalised set of interoperable systems that minimise duplication and cost.

#### Data Management

To address the continuing requirements for reporting and regulatory compliance, it is essential that we develop a rounded approach to the management of our data, in particular the increasing amount of information that is valuable across multiple business functions. Over the next 3 years, this data will be one of the key factors in enabling us to keep delivering high quality services to our communities. These Business Intelligence (BI) data streams will provide accuracy, clarity, and insights across the entire business. We will develop a fully articulated plan on how we will prioritise, collect, store, move, govern and share this data to help streamline our processes and deliver measurable increases in productivity.

It is acknowledged that data management is a broad term that by itself means little to our organisation. To clarify our priorities, the map below summarises a prioritised list of targets that we will focus on when developing our plan for data management. Once we have invested sufficient time to gain maturity in our approach to the more important themes, we will bring other areas into focus. As we progress, priorities and themes may interchange, subject to business need.



## Targets

- Introduce recognised Business Analysis processes so that future decisions in ICT investment follow a structured approach for ICT to business alignment.
- Undertake a full audit of the application estate to categorise functionality, identify opportunities for application rationalisation and streamline business processes. Ultimately, move to a model that maximises the features within a set of core systems.
- Develop a Data Management Strategy and architecture that promotes data driven intelligence, where important information is stored once and can be analysed across a range of channels. Once agreed, implement a plan to migrate data in line with the Data Management Strategy

## 4.5 Development Strand 5

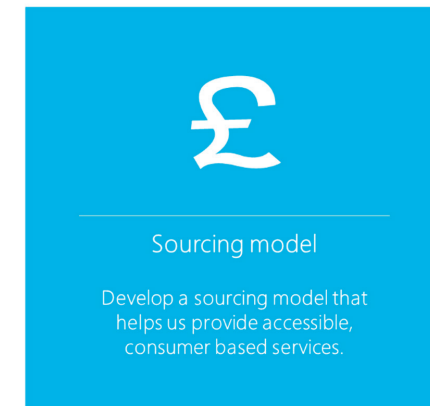
### SOURCING MODEL

We are committed to delivering best of breed solutions to meet our business requirements. To achieve this, we need to choose systems that are fit for purpose, which in turn means we cannot adopt a single supplier or a predominantly in-house delivery model. Our sourcing model will enable HWFRS to have access to external expertise to ensure our services develop and keep pace with a continuously changing technical landscape.

Where practical, we will always source industry standard/recognisable systems that offer technically mature products and are widely supported.

We will become more agile in our ability to consume services on demand to deliver business needs, moving away from complex and time consuming internal projects. However, areas of strategic value and decision making will remain in-house.

Our sourcing model will allow us to increase resilience and remove dependencies on individuals, freeing up internal resource for other ongoing transformation projects. A shift in emphasis to a consumer, user-centric model will increase productivity for our workforce and provide a more flexible working environment.

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Sourcing model

Develop a sourcing model that helps us provide accessible, consumer based services.

#### Targets

- Adopt a Hybrid model, moving appropriate services into the Cloud to reduce the on-premise footprint and dependency on individuals.
- Utilise more external expertise to deliver complex/time consuming change projects and free up internal resources.
- Choose technologies that offer product maturity and common standards over systems that require extensive bespoke configuration.

## 4.6 Development Strand 6


### DEVELOPING AND MAINTAINING THE ICT INFRASTRUCTURE

HWFRS will have a future-proof robust, stable, scalable infrastructure that meets the needs of a modern, mobile workforce.

HWFRS recognises the importance of developing a strategy to manage the day to day use of ICT. A long-term approach to support and maintenance will be implemented which will include the training of internal staff, technical support, hardware replacement and improvement. Additionally, the use of an ICT Champions model to supplement the technical support team will be explored.

The strategic transition to the virtualisation of services will enable HWFRS to reduce costs of hardware purchases and utilities (electric, space saving, air conditioning cooling requirements), whilst also reducing corporate carbon emissions.

Further development will be made to move closer to a complete Configuration Management System, that takes us beyond Asset Management. With accurate Configuration Management data, there are clearer opportunities to reduce complexity and costs, as well as the potential to reposition/modernise the infrastructure to enable future flexibility and greater compliance. By maintaining accurate technical information on applications and their relationships with other systems across the Service, we will be able provide a foundation on which to progress with other development strands, such as data management within Business Systems. It will also help us to reduce the dependency on individuals for support of business-critical applications.

**Developing and Maintaining the ICT infrastructure**

Maintain a modern ICT infrastructure that is capable of meeting the changing needs of our business.

#### Targets

- Implement the device replacement programme that refreshes the aged equipment in the field and increases productivity.
- Develop a plan to transition the data centre architecture so that it can be consolidated down as more services are moved to Cloud services.
- Upgrade the mobile estate so that it is aligned to the plan for delivering Unified Communications via the Cloud.
- Continued development of the Configuration Management System, to maintain accurate information on the ICT estate.

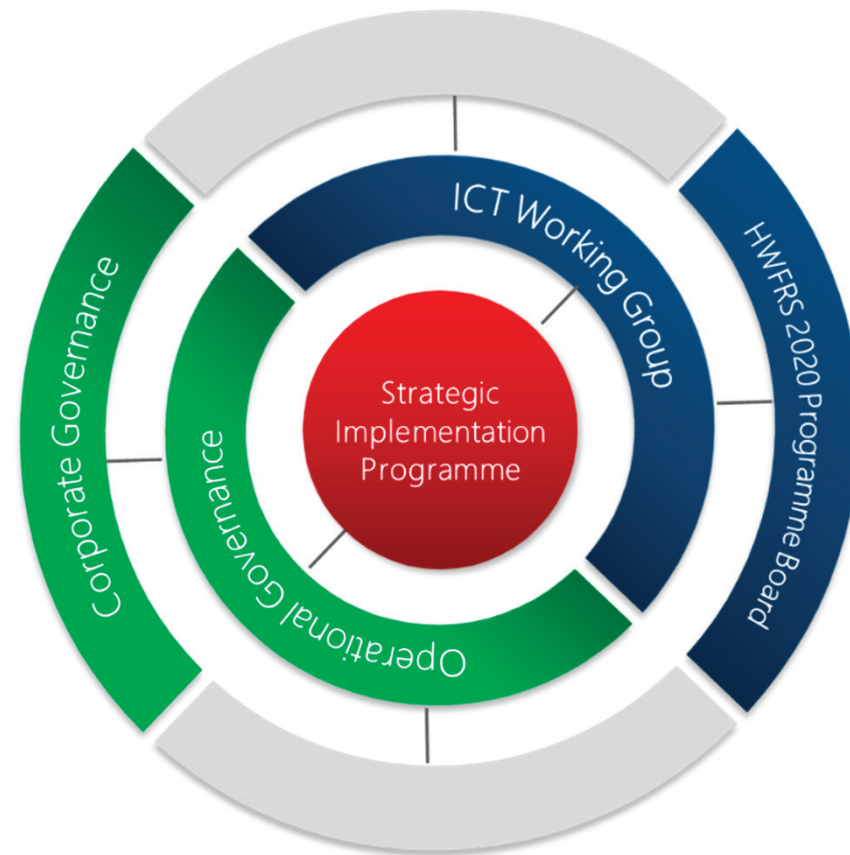
# 5 Governance

## DEVELOPING AND MAINTAINING THE ICT INFRASTRUCTURE

A Governance Framework will be adopted to ensure that informed decisions can be taken at senior level, enabling the Strategic Implementation Programme to be delivered. The HWFRS 2020 Programme Board will govern the programme, setting the overall direction, including the determination and ratification of the business objectives, future vision and the sequencing for delivering the components of the ICT strategy. Operational governance on a day to day basis will be delegated to an ICT Working Group, who will be accountable for the delivery of the Strategic Implementation Programme.

The ICT Working Group will also be responsible in ensuring that proposed systems adequately meet corporate obligations to legislative laws and will comply with the connectivity requirements for the relevant Government and Emergency Service networks.

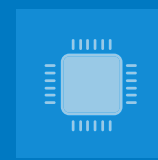
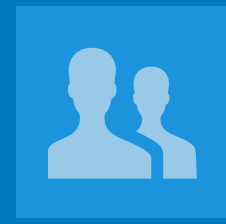
The ICT Working Group will ensure their plans are aligned with the other strands of the corporate strategy. The Group will use a combination of project management approaches to ensure quality of outcome and effective risk management. In the main, we will adopt a Prince2 model, leveraging the most appropriate tools without creating overly bureaucratic processes.



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