

# Shaping the Future of IS and ICT in SNH: 2014 - 2019

## SNH's IS/ICT Vision

*"We will develop the ICT infrastructure to support the business needs of our customers. Our ICT infrastructure and IS/GIS solutions will support "anywhere, anytime" working for staff, enabling a national service to be delivered locally to customers. Where our customers expect to transact with us on-line for services at a time and place convenient to them, we will aim to deliver appropriate solutions. IS/ICT services will be greener, will cost less to provide and maintain, and will be more resilient. We will make appropriate use of cloud services, where the business case is sound, to provide data, applications and desktop applications. We will share with Government and other public bodies in line with defined business needs and ensure that our IS/ICT workforce are skilled and professional."*

## 1. Introduction

### Context

1.1 This document sets out the Scottish Natural Heritage (SNH) strategy for delivering Information Systems (IS) and Information and Communications Technology (ICT) services to SNH. It supports SNH's Knowledge and Information Management Statement 2012 - 2015 (KIMS) and is aligned with the Central Government Sector ICT Strategy<sup>1</sup> which in turn was informed by the National ICT Strategy<sup>2</sup>. Our IS/ICT Strategy shares many of the key headings with these documents, so as to reinforce their alignment.

### Purpose

1.2 The key aim of this document is to support SNH in securing the value in Scotland's natural assets and to provide better online public services for a more successful Scotland.

1.3 This strategy outlines:

- the overarching strategic aims, vision and principles aligned with the aims set out in SNH Strategy and Priorities 2012 to 2015 (the Corporate Strategy) and the objectives as defined in SNH's Corporate Plan 2012 – 2015;
- the steps that IS Services should take to ensure that this document is aligned with the SNH's KIMS and SNH's Change Requirement;
- a summary of SNH's key requirements as detailed in the above; and

---

<sup>1</sup> Scotland's Digital Future: Delivery of Public Services Central Government Strategy (February, 2013)

<sup>2</sup> Scotland's Digital Future: Delivery of Public Services (September, 2012)

- a description of the key measures of success.
- 1.4 The overall lifespan of the aims, vision and principles of this strategy will be five years. The document will be reviewed every year during that period to ensure that it continues to support the organisation's strategic requirements.

## **2. Strategic Aims & Vision – Our ambition and what success will look like**

2.1 Our vision (as summarised at the front of this document):

- Enable SNH to become more influential by providing both internal and external customers with secure, easy to use, on-line transactional systems and easy access to information about Scotland's nature and landscapes;
- Reduce the carbon footprint of our ICT while at the same time enabling organisational carbon reduction by the development and deployment of carbon saving technology;
- Safeguard our ICT knowledge and capability ensuring that SNH staff have access to and are encouraged to maintain and enhance their skills through appropriate training and development;
- Provide and consume shared services with other organisations in order to reduce duplication and cost for SNH and across the public sector. We will share before we buy or build these services;
- Enable SNH to “work smarter” through creative use of technology, creating an “office without walls” and enabling SNH staff to work anywhere and anytime;
- Implement flexible systems and modern technologies that are more responsive to evolving business needs and which will support shared services across public bodies.

2.2 When we are successful:

- our customers, including partner organisations, business and staff, will find our services simpler and easier to access and use;
- we will have avoided duplication and wastage, saved money and removed barriers to data sharing, in line with the McClelland<sup>3</sup> review;
- our systems and services will be accessible from multiple types of device from various locations; and
- our services will continue to meet evolving business needs, be shared, and provide value for money.

---

<sup>3</sup> Review of ICT Infrastructure in the Public Sector in Scotland by John McClelland CBE, Scottish Government 2011

### **3. The Drivers - Why we are doing this**

3.1 The range of services offered by SNH is diverse and delivered to a wide range of stakeholders. In addition, SNH is operating in a wide and diverse sector, covering 144 public bodies at the time of writing. The public sector is going through much change and many of the external drivers detailed below reflect this.

#### **Internal Drivers**

3.2 SNH has the corporate vision to become “smaller, smarter and more influential”. As highlighted in the KIMS, achieving this will require systems that allow staff to work more efficiently, have easy access to accurate information to support evidence-based decisions, and to speak with authority.

- **Smaller:** Our systems must allow staff to be more efficient. Our staff will need to work more flexibly and so our systems will need to be intuitive and easy to learn.
- **Smarter:** SNH is expected to make decisions based on accurate scientific evidence and up-to-date business information. Our systems need to provide easy and reliable access to all relevant information with appropriate support for its interpretation and to interface with it securely.
- **More Influential:** All our communications must reinforce SNH’s reputation as the authority on the natural heritage of Scotland, increase awareness of our work to the enable us to influence policy and achieve our objectives.

3.3 SNH is expected to set an example, demonstrating good practice in **greening** the workplace and ICT has an important role to play in contributing to this objective.

3.4 **Meeting the needs of SNH** – IS Services will be business-led taking its direction from the SNH Strategy and Corporate Plan and working towards the requirement set out in the KIMS. We will be focussed on the requirements and priorities defined by the Business Improvement Board, supported by the Technical Assurance Group. This will ensure that the investment in IS/ICT is strategic and enables the achievement of SNH’s goals. The SNH Business Plan will provide the framework for consistent in-year resource allocations and priorities for deliverables.

3.5 IS/ICT also directly support delivery of the Change Requirement (becoming smaller, smarter and more influential) as framed by the six **Improvement Themes** – reducing fragmentation, sharpening local service delivery, increasing joint working, better staff deployment, enhancing information management and cost effective asset management.

## External Drivers

3.4 External drivers include the McClelland review and the National and Central Government strategies referenced in paragraphs 1.1 and 2.2 above.

3.5 Other key drivers include:

- Making public services more accessible, faster, simpler, and joined up;
- Reducing costs to make funding go further; and
- The National Performance Framework Outcomes:

## 4. Strategic Principles – The what and the how

4.1 Our strategy embraces the core principles as set out in the Central Government Sectoral Strategy. For SNH, these translate to the following:

- **Customer Centric** – we will work with our internal clients to design SNH's services around the citizen, business, partner organisation and internal customer with on-line, digital solutions being the first preference. We will aim to make these shareable, re-usable, integrated and low maintenance, backed by appropriate business cases;
- As described in the KIMS, **data and information**, both internal and external, will be managed securely and made accessible within and between organisations, while respecting privacy and meeting legislative requirements;
- Our **technologies** will be drawn from a wide range of sources and providers, including open source, with a high emphasis on interoperability and open standards and achieving best value for money;
- Our **ICT workforce** will be expert and highly skilled. We will work with the education sector to create student placements and other opportunities;
- Our **shared services** approach will ensure that, in preference to buying or building solutions, we collaborate with other organisations wherever practical;
- Our **ICT leadership** will encompass working closely with our core internal business clients to ensure optimal deployment of ICT and the realisation of the opportunities that ICT affords; and
- Our **procurement** approach will endeavour to utilise Government Frameworks, explore opportunities for new frameworks and recognise the innovative capabilities of Scottish SMEs.

## **6. Governance - how accountability will be managed**

- 6.1 IS will be governed by the SNH Management Team. The current arrangement is that this will be facilitated through the assurance provided by the Business Improvement Board (BIB) including the adoption of the vision described in this document.
- 6.2 All ICT and IS projects will be bid for in the same way as any other projects in SNH. Once approved by the Programme Managers, the BIB provide assurance that IS developments are co-ordinated and coherent.
- 6.3 Business-led projects with an IS/ICT component will be assessed by the Technical Assurance Group (TAG) who provide technical assurance to the BIB.
- 6.3 All the ICT infrastructure projects will be governed by a single project board, the IT Implementation Programme (ITIP).
- 6.4 Business-led projects with an IS/ICT component will generally be project managed by business managers and IS/ICT support will be provided to Project Boards as appropriate.
- 6.5 A separate Action Plan based on the Strategic Principles in Section 4 will be devised and monitored as required by ITIP.

## **7. Where we are now**

- 7.1 We have a talented and highly skilled pool of professionals working within the IS Services Unit. They have implemented a solid foundation with many excellent business-owned applications running on an infrastructure which will be upgraded to be stable and future-proofed. Our geographic information systems are also excellent and we will continue to work with our clients and external partners to ensure that they remain so.
- 7.2 We have adopted a strategy of technology alignment with the Scottish Government and other Sectoral partners to facilitate the opportunities for sharing and collaborating. In addition, we have worked with the Knowledge and Information Management Unit and sponsors from within SNH to devise IS/GIS tools to allow SNH to function more effectively and efficiently.
- 7.3 We provide a flexible, agile service, able to react quickly and effectively to emerging requirements.
- 7.4 We maintain an outward focus, are well informed and have good connections within the public sector and ICT communities in Scotland.
- 7.5 Wherever possible we also seek to identify opportunities to save money and improve the value for money that SNH gets from its IS/ICT investment.

- 7.6 We have sought to reduce the carbon cost of our IS/ICT and to operate in a green manner.
- 7.7 We believe that our approach aligns well with the Scottish Government's ambitions as well as addressing SNH's requirements:
- our virtualised infrastructure and Storage Area Networks will achieve more efficient use of our investment in storage and computing power and potentially enable our servers to host other organisations applications. In addition, it should facilitate a move to cloud computing in the future;
  - we are aligned to Scottish Government core business applications (Oracle database and eBusiness Suite, Objective eRDMS) but have the added capability of full e-Business Suite integration;
  - we are already partnered with other public sector organisations in the development and use of shared applications and are actively engaged with others in the further development of more shared and hosted applications;
  - we fully utilise government framework contracts for WAN and telephony provision and we are signed up to be early adopters of the Scottish Wide Area Network (SWAN);
  - our externally-facing Corporate Applications Gateway now affords secure transactions for external customers;
  - we are an active participant in the Scottish GI community and remain heavily involved in the Scottish Spatial Data Infrastructure (SSDI);
  - our externally facing GIS applications include the provision of INSPIRE compliant data view and download services for partner organisations; and
  - the data and information that we hold on Scotland's nature and landscapes is already available to citizens, with much more on the way, through SEWeb and our provision of the geographic Land Information Search (LIS) tool for SEWeb.

## **8. SNH's Requirements for the next 2 years**

- 8.1 SNH's information management requirements are defined in the KIMS and informs our technical architecture. Business projects requiring IS resources are captured in the i-Bids system and assessed by the Business Improvement Board, the Technical Assurance Group and Programme Managers. IS Services will continue to be business-led in this way and will respond to the priorities that emerge from this process including:
- 8.2 **New Ways of Working** – we will implement solutions that deliver “any time, any place, anywhere” ways of working. We aim to ensure that people in SNH can “work without walls” with facilities to access the systems, applications and information they need to do their job whether they are in the office, in the field, at home, or on the move. This will be achieved through virtual desktop, video conferencing and mobile applications;
- 8.3 **Refresh of the Corporate Data Model** - the corporate data model defines the repository where data from our bespoke and internally developed applications reside. The design of the data tables was set down more than a decade ago.

It is no longer current and if we are to gain greater leverage from our data resources our data must be stored in a manner which allows the effective redistribution and sharing of our information, both internally or externally. We will review the corporate data model and identify relational links between applications to improve internal and external interoperability;

- 8.4 **Natural Heritage Data, Evidence, Knowledge and Business Information** - we will ensure that the information the organisation needs can be securely stored, managed, retrieved and made accessible. We will be directed by the KIMS. This will be achieved through business applications such as the electronic records and document management system, geo.store (our data store for our geographic information), the eBusiness Suite and the large object repository;
- 8.5 **Strategic Property Review (SPR)** – we will support this work and other co-location projects. We will achieve this by sharing ICT infrastructure wherever possible, promoting flexible ways of working such as soft-phones as required and supporting the use of personal devices where appropriate. We will continue to seek out wider shared services opportunities for ICT with other organisations.
- 8.6 **A Quality Service Provider** - we will provide SNH, our partners and the public with a quality service and monitor this through the Corporate Services survey. To achieve this we will need the right people in the right jobs with the right skills.
- 8.7 **Green ICT** – we will lead by example, re-doubling our efforts to introduce green ICT operations whilst demonstrating how ICT can be used to reduce an organisation’s carbon footprint. We will achieve the former by looking at the opportunities for sharing data centres and cloud computing and the latter through provision of improved video-, tele- and web-conferencing and other services that reduce the need for travel.

## **9. Measures of Success**

Measure	
1. New Ways of Working	Email and other services as defined by our customers available from a choice of devices from most locations at least 20 hours per day.
	An application deployed for data capture in the field.
2. Refresh of the Corporate Data Model	Corporate Data Model fully refreshed.
	Refreshed Corporate Data Model signed off by KIMU.
3. Natural Heritage Data, Evidence, Knowledge and Business Information	Achieve the objectives and targets set for IS by Project Boards for the

deployment and maintenance of business solutions.

Work with KIMU to overcome the barriers to data sharing where required.

#### 4. Strategic Property Review

Achieve the ICT objectives for SPR projects and seek shared services opportunities.

Continue to seek out wider opportunities for sharing ICT services.

#### 5. A Quality Service Provider

Our customers will like the services we provide as supported in the ratings and comments received in the bi-annual Corporate Services survey.

Provide value for money for our investment in IS/ICT and achieve agreed savings.

#### 6. We will be Green

Reduction in the overall carbon footprint of the organisation.

Reduction in travel enabled by appropriate use of video-, web- and tele-conferencing.