



**Cyfoeth
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Cymru
**Natural
Resources**
Wales

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Good Knowledge

Our Knowledge Management Strategy 2014 - 2016



FOREWORD

Our purpose is to ensure that the natural resources of Wales are sustainably maintained, enhanced and used, now and in the future

We are the principal adviser to the Welsh Government on the environment, enabling the sustainable development of Wales's natural resources for the benefit of people, the economy and wildlife with Sustainable Development as our central organising principle.

We are the largest Government sponsored body in Wales with some 2000 staff and an operating budget of £179m.

Our mission is to make the most of our natural resources to support a better future for our communities, economy and environment.

We manage 7% of the land area of Wales; protect important sites that make up 30% of Wales's land and water; maintain almost 2000 miles of flood defences and 550km of mountain bike trails.

Ceri Davies
Director, Knowledge, Strategy and Planning

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INTRODUCTION

Knowledge underpins the successful delivery of all our strategic objectives. Improving the ways in which we manage and share our knowledge is essential to improving our outcome and service delivery and helps support the credibility and accountability of our decisions and actions.

Our knowledge management strategy is relevant to all staff. Everyone in our organisation has a responsibility to value, capture, manage and share our knowledge and everyone's day to day activities will benefit from the adoption of effective knowledge management practices. With this in mind, our knowledge management strategy has been developed through consultation with staff across all departments, members of the Leadership Group and representative Board members.

We are a new organisation that brings together the functions of the Countryside Council for Wales, Environment Agency Wales and Forestry Commission Wales. A new knowledge management strategy is particularly important as we need to manage the transfer of knowledge assets and knowledge services from our founding organisations into our organisation and become responsible for new, higher volumes of data and information.

One of the benefits in bringing these 3 organisations into one organisation within Wales is creation of a newly combined knowledge base. It is essential that we have a knowledge management strategy that facilitates a new joined up approach that fits with our new identity and supports our new ways of working, such as the need to embed an ecosystem approach in all our activities.

This strategy defines our approach to knowledge management and outlines our knowledge management objectives and priorities for the next 3 years. It aims to be pitched at the appropriate level to meet the demands and constraints presented in a new organisation of our size (~2000 staff and an operating budget of ~£179m) and with our breadth of remit. It is designed to enable the delivery of the benefits and opportunities identified in the original business case for creating our organisation and to increase our potential to exploit existing assets.

Significant challenges that we must overcome in the lifetime of this strategy are the need to maintain service as we transfer knowledge assets for our legacy organisations and the need to balance increasing demand and expectations for knowledge management services at a time of resource constraint and unprecedented changes in external policy, legislation and technology. Collaboration, creativity, flexibility and innovation are vital in helping us to meet these challenges.

This strategy aims to create a solid foundation on which we can build our future. This level of transformation will take a number of years and the strategy will evolve as our new organisation evolves. The community that has been brought together in drafting the strategy will be vital in reviewing our knowledge management plan and priorities at intervals over the next 3 years

THE NEED FOR CHANGE

Why we need a Knowledge Management Strategy

Internal Strategy and Policy

Our Board and Executive Team quickly acknowledged the vital role that knowledge management plays in supporting and delivering our business activities. Key points to note are:

Welsh Government-Natural Resources Wales Framework

The Welsh Government-Natural Resources Wales Framework sets out the broad framework within which we operate and details the terms and conditions under which the Welsh Ministers provide grant in aid to us. It includes a specific shared outcome.

Outcome 7 - Supporting skills and knowledge

"We want everyone to have the knowledge and ability to make the best choices for future wellbeing and we will work to ensure that everyone is supported to reach their potential and to maximise both their own and Wales' future wellbeing, through high quality and effective people-centred services. We want the people of Wales to be able to take positive action to maintain, enhance and benefit from their environment, and we want to ensure that Wales benefits from high quality knowledge and evidence in relation to economic, environmental and social issues."

Business Plan

Our Business Plan for 2013-2014 includes a specific target to develop our knowledge management strategy and states that we will:

- be an integrated and evidence based organisation utilising a common knowledge base to inform all our work
- be transparent in our provision of information and proactive in our approach to knowledge transfer
- work collaboratively and not seek to replicate or compete with partners from the public or voluntary sectors and academia
- begin transition of data and information to Natural Resources Wales from legacy systems.

Corporate Plan for 2014 to 2016 ****TO BE UPDATED ONCE PLAN IS FINAL****

Our Corporate Plan for 2014 to 2016 includes a section dedicated to delivering 'Good Knowledge'. It defines Good Knowledge as

Gaining wisdom and understanding our natural environment and how we affect it – using evidence and applying learning from experience, so that we make good decisions

The Plan states that we need to become more inventive, efficient and effective in the ways we generate and use data if we are to work optimally within our budget. We need to share our information and evidence with others and work extensively in partnership, ensuring that we use the 'collect once, use many times' principle. We want to be an evidence-based organisation, making transparent and timely decisions for Wales, based

on our knowledge, evidence and experience, and underpinned by ecosystem approach thinking.

2 Indicators from the Good Knowledge section of the corporate plan are relevant to this knowledge management strategy:

- **Indicator 23:** We gather relevant environmental information and provide targeted advice and compelling evidence on the sustainable use of the natural resources of Wales.
- **Indicator 24:** We value knowledge and have good knowledge management practices

Board Sub-Groups

Our Board has established a Knowledge Group to focus on this area of work

External Context (Legislation and Policy)

Legislation

There are 6 European Directives and 14 UK domestic Acts and Regulations that govern the way we capture, manage and share our knowledge, some of which are specific to public sector organisations.

In summary this suite of legislative instruments boils down to three main areas:

- Information rights (a right of access and a right to privacy)
- Responsibilities in maintaining public records and official statistics
- Data standards and publishing services for spatial data

Some of the legislative instruments are in the process of review (e.g. Public sector Information Directive) or part way through implementation (e.g. INSPIRE Directive). One challenge we face whilst implementing this strategy is ensuring that our policies, priorities and deliverables remain appropriate through these changes in legislation. A full list of relevant legislation is available on our internal intranet (see Doing My Job, Knowledge Data and Information ([link](#)))

Policy

Our knowledge and information needs to be relevant to the development of new policy areas and be suitable to inform the development of new policy. The knowledge and information we require to deliver our role and remit in Wales usually has a wider policy context; recognising that many of our natural resources and ecosystems operate at a range of spatial scales. This means that the dependencies and partnerships at a UK, European and Global level are vital to ensure we have the right information to help us develop our knowledge and understanding of trends and impacts both within Wales and those that are influenced by Wales.

Knowledge management itself is a fast growing policy area. In recognising that good knowledge management is a critical business activity, Knowledge and Information Management is one of 24 Civil Service professions.

Other relevant policy areas that present us with both opportunities and challenges include:

- Open Data, transparency, accountability
- Knowledge and information economy
- Big data and linked data
- Crowd sourcing, citizen science, big society and localism
- Digital preservation / digital archaeology
- Evidence based policy
- Digital agenda – digital by default

How we intend to align with these policies has been incorporated into the development of this strategy and plan.

Context in Wales: Working with Welsh Government

Our knowledge, expertise and information form part of the wider knowledge base in Wales. It is vital that we play our part in the wider networks of knowledge operating in Wales.

We will be working in partnership with Welsh Government to develop a shared evidence agenda for Wales. We will also be working in partnership with Welsh Government to help develop and contribute to the environmental information hub for Wales that was announced in 2013.

Following the referendum on law making powers in 2011, Welsh Government is entitled to propose Bills within 20 fields of policy. Those relevant to our functions include

- Agriculture, fisheries, forestry and rural development
- Environment
- Sport and recreation
- Water and flood defences

Changes to legislation may result in the need for us to develop new areas of knowledge. It is also vital that our knowledge is used to inform the development of new legislation.

Policy relating to public administration is also a devolved matter and any changes in this area may impact on our knowledge management practices.

Welsh Government's current Knowledge and Information Management Strategy runs from 2012 to 2015 and Policy relating to transparency and public access to information is defined in Welsh Government's Code of Practice on Access to Information. Our knowledge management strategy has been informed by these the Welsh Government strategy and Code.

SCOPE AND DEFINITIONS

This strategy focuses on how we manage our knowledge and information. This section presents a definition of knowledge management and definitions for relevant knowledge terms.

What is Knowledge Management?

Transforming our knowledge into 'Good Knowledge'

Knowledge management focuses on creating the right environment to “enable individuals, teams and the entire organisation to collectively and systematically create, share and apply knowledge to better achieve their objectives”¹. At its most basic level knowledge management is about enabling users to discover knowledge assets and to work together to arrive at the most appropriate decision or actions. Specifics include

- Knowing what knowledge assets we have access to (knowledge inventories and search and discovery skills),
- Assuring and managing those assets over time
- Understanding how they relate to each other and how they can be used (tagging assets and profiling users or activities)
- Being able to collaborate and create communities that share and combine knowledge and assets (open standards, accessibility and building communities of practice)

This strategy is focussing on managing our knowledge and considers 3 main themes required to create an environment that is 'Good for Knowledge'

- Culture, Leadership and Governance
- Policies and Processes
- Enabling Technology

What is Knowledge?

The word "knowledge" takes on a variety of meanings. It is not the definition that is important but rather the outputs and outcomes of the process. On a practical level, we need a common understanding of terms used within our organisation to create a common understanding and help implement our knowledge management strategy.

Knowledge²

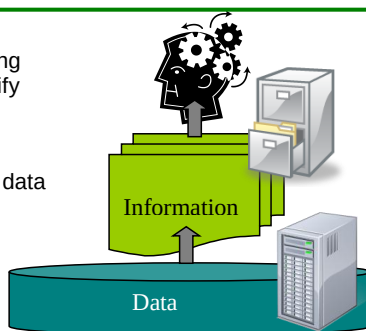
What is known by a person or persons; it involves interpreting information received, adding experience and context to clarify the insights the information contains

Information²

Produced through processing, manipulating and organising data to answer questions. (*structured*)

Data²

Numbers, words or images that have yet to be organised or analysed to answer a specific question (*unstructured*)



¹ Ron Young, CEO/CKO Knowledge Associates International

Explicit knowledge

Knowledge and evidence that is captured, recorded and codified and is stored as data and information in documents, databases, images etc.

Tacit knowledge

Intuitive non-codified knowledge and know-how which is rooted in context, skills, experience, practice and values. It includes 'recordable' knowledge that is yet to be captured as explicit knowledge and un-recordable intellect/knowledge stored in people's (and teams) heads.

Embedded knowledge

Knowledge that is embedded (accessed, used and captured) in processes, organisational culture, routines, and IT application and does not need to be captured or entered separately.

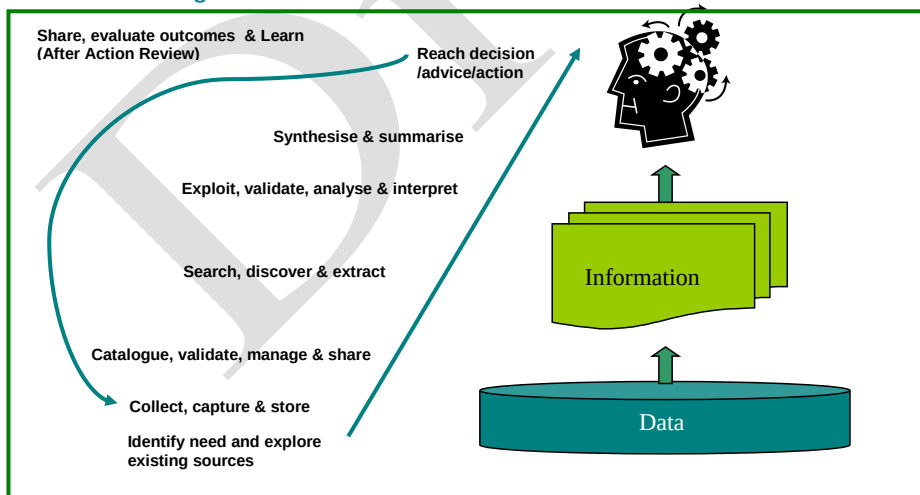
Record³

Information or data created, received and maintained as evidence and information by an organisation or person, in fulfilment of legal obligations or in the transaction of business. We are a public records body and have an obligation to manage physical and electronic records

Evidence

Evidence is fit-for-purpose information used to support decisions in developing, implementing and evaluating policy, operations and services.

The Knowledge Process

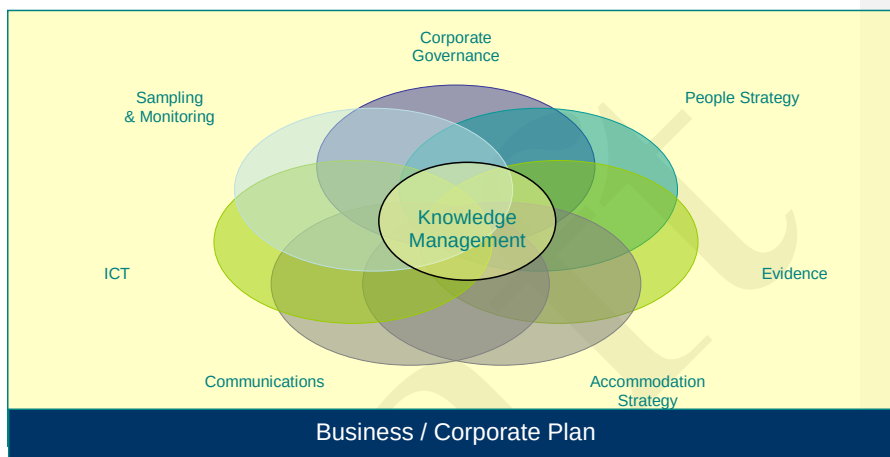


²Information Matters, Cabinet Office and Knowledge Council Draft strategy:

³BS ISO 15489, definition of a record published in 2001 and used by the National Archives

ALIGNING WITH OUR OTHER STRATEGIES

Knowledge management is a cross cutting activity and affects delivery of all our strategies and plans. Delivery of our knowledge management strategy helps deliver all aspects of our corporate and business plans and has specific overlaps with other organisation strategies.



Below is a summary of the main activities where there is overlap or a dependency between our knowledge management strategy and other key internal strategies

Evidence Strategy

- Defines evidence priorities which help us to value our knowledge assets and focus knowledge management activities on priority assets

Sampling and Monitoring Strategy

- Defines our knowledge, data and information requirements to meet our monitoring needs and reporting priorities

Corporate Governance

- Information Governance, and our policy on access to information
- Implementing an internal governance structure that will support implementation of the knowledge management strategy including mandatory knowledge management roles

Communications Strategy

- Internal and external online collaboration tools, policies and guidance
- Data and information publishing and download services through the web site

ICT Strategy

- Delivers IT infrastructure, systems and tools that
 - help manage our digital data and information assets
 - enable collaborative working both between offices and with external partners (video, voice, text and collaborative editing tools)

People Strategy

- Developing a knowledge people plan (skills and capacity)
- Building a knowledge management culture through our core values and assessment in the annual staff survey
- Supporting staff to develop professional qualifications and to be members of their profession

Accommodation Strategy

- Creates office environments that encourage collaborative working
- Delivers storage facilities for physical data and information assets

VISION AND GUIDING PRINCIPLES

Our Vision for Knowledge Management

We value knowledge and apply good knowledge management practices to achieve our objectives and outcomes:

Our culture, systems and technology enable individuals, departments and the entire organisation, collectively and systematically, to create, share and apply knowledge in an efficient and user friendly way⁴

Our Guiding Principles

The UK Knowledge Council has defined a set of information principles for UK public sector bodies to subscribe to⁵. Our guiding principles amalgamate the Knowledge Council principles and other relevant public sector information principles⁶ with our specific needs and will be used to embed good knowledge management into all our activities.

(See Annex 1 for additional detail and descriptors for each principle).

- Principle 1 We value our knowledge and expertise and ensure that our knowledge assets are known, captured, owned and adequately resourced
- Principle 2 Our knowledge base is relevant, focussed on our outcomes and continually enhanced to meet new policy challenges. We capture learning gained from our experience of the decisions made on our evidence or advice
- Principle 3 Our knowledge is effectively and efficiently managed and governed throughout its lifecycle to enable exploitation, ensure legal compliance and maintain integrity
- Principle 4 We adopt established standards to enable our data and information assets to be linked, exploited and re-used
- Principle 5 We actively collaborate and share our knowledge and expertise internally and externally to support the knowledge economy; to reach the best action or decision and to understand the outcomes and value of our work.
- Principle 6 We proactively publish and share public data and information in a timely manner and customers can access information that we hold about them. Where there is a cost to our customers, we will be clear about when, where and why fees will be charged

⁴ Ron Young, CEO/CKO Knowledge Associates International

⁵ Information principles: HM Government December 2011

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/85987/Information_Principles_UK_Public_Sector_final.pdf

⁶ Open data principles, Data Protection Principles, Open Standards Principles.

STRATEGIC OBJECTIVES

This strategy sets out our strategic intent. It is recognised that some of the objectives described here are aspirations and delivery of these may extend beyond the lifetime of this strategy. We also face a number of risks and challenges that may impact on the delivery of this strategy. The risks and challenges are outlined in annex 2.

1. We will create a culture that values knowledge and applies good knowledge management practices and be recognised internally and externally as leaders in knowledge management services in Wales and further afield.
2. We will be compliant with information legislation and our obligations as a public records body through effective governance and leadership.
3. We will recognise knowledge management as a core profession and we will continually develop the necessary skill sets and capacity, for both central services and for staff throughout the organisation, to support and exploit current and future knowledge management processes.
4. We will use our knowledge base to understand the outcomes and value of our actions, to help identify evidence gaps and to inform priorities for our evidence strategy. Our knowledge management priorities will be driven by our statutory duties and priorities identified in our evidence strategy and corporate plan.
5. We will have a culture of collaboration and knowledge sharing both within and beyond Wales. We will check for existing knowledge and information and utilise external sources to supplement our knowledge rather than capturing or creating the same evidence ourselves. Staff and stakeholders will work together to share knowledge, understanding and expert opinion, to add value to our explicit knowledge base and reach the best decision or action.
6. We will capture, store and share our knowledge and we will have processes in place that minimise the loss of knowledge when staff change roles, move location or leave our organisation
7. We will know what knowledge, records, data and information we hold and why, where and how we hold it. Staff and stakeholders will be able to discover and access the data and information that is available via our organisation (internally and externally).
8. We will deliver information to staff and stakeholders in a way that meets their needs; informs actions, policy and decisions and meets our statutory duties, whilst protecting restricted content. We will work with users to understand how our staff, customers, stakeholders, communities and the public need to view and use our knowledge.
9. We will actively manage our records, data and information assets and seek continuous improvement in our knowledge management systems, processes and procedures to create efficiencies and increase our effectiveness.
10. We will be operating independently from Environment Agency and Forestry Commission, other than services that are negotiated as enduring services or part of our future collaborative working.

DELIVERING THE OBJECTIVES

Target deliverables have been identified for each of the 10 strategic objectives and form the basis of our high level plan that will deliver this strategy. As we are a new organisation and we will be experiencing a high level of change and transition in the timescale of this strategy, this plan will be reviewed at 6 monthly intervals. The risks and challenges are outlined in annex 2

The deliverables have been grouped into 2 themes

- culture, leadership and governance;
- policy process and procedure

Technology targets will be delivered through the ICT transition programme. ICT deliverables highlighted in developing the knowledge management strategy have been passed to transition for consideration in the next revision of the ICT plan or strategy

Theme 1: Culture Leadership and Governance

Culture, values and governance

We will create a culture that values knowledge and applies good knowledge management practices and be acknowledged internally and externally as leaders in knowledge management services in Wales and further afield.

Action Ref	Description of Target Deliverable	Lead Directorate ⁷	Milestone
1.1	Staff value our knowledge. Adoption of the overarching knowledge management principles and policies are built into the core values for all our staff and staff survey to create a joined-up knowledge management culture.	ODPM	Dec 2014
1.2	A knowledge community is established that is both formal and informal and operates at all levels of the organisation to help ensure knowledge management developments and priorities are business led and helps to implement the knowledge management strategy	KSP	Jun 2014
1.3	Our knowledge management strategy and relevant supporting strategies (e.g GI strategy) are managed, communicated and implemented	KSP	Jun 2016

We will be compliant with information legislation and our obligations as a public records body through effective governance and leadership.

Action Ref	Description of Target Deliverable	Lead Directorate	Milestone
2.1	Mandatory roles and responsibilities are clearly defined, identified and built into contribution statements of relevant staff and work plans for relevant teams and directorates.	G&C	Jun 2014
2.2	Distributed knowledge management champions and other roles and responsibilities that support local delivery of knowledge services, are clearly defined, identified,	KSP	Dec 2014

⁷ KSP = Knowledge Strategy and Planning; ODPM = Organisational Development and People Management; G&C = Governance and Communications; ICT = F&CS = Finance and Corporate Services

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	embedded in the business and built into the contribution statements of relevant staff and team plans		
2.3	Information governance, security framework, and policies, standards and procedures are written and implemented	G&C & KSP	Dec 2015

Skills and capacity

We will recognise knowledge management as a core profession and we will continually develop the necessary skill sets and capacity, for both central services and for staff throughout the organisation, to support and exploit current and future knowledge management processes.

Action Ref	Description of Target Deliverable	Lead Directorate	Milestone
3.1	Knowledge management skills and capacity requirements assessed.	ODPM	Dec 2014
3.2	Gaps identified and a knowledge management people plan produced and implemented to address priority gaps.	ODPM	Dec 2016
3.3	Staff in key knowledge management roles and are trained and skilled to meet their needs and can access relevant development resources to maintain the level of expertise required for their role	ODPM & G&C	Dec 2014
3.4	A training programme and guidance is produced to develop generic knowledge management skills for all staff	KSP & ODPM	Dec 2015
3.5	Establish & maintain links with the Civil Service Knowledge and Information Management Profession (either directly or through Welsh Government)	KSP	Apr 2014

Priorities and outcome measures

We will use our knowledge and information to understand the outcomes and value of our actions, to help identify evidence gaps and to inform priorities for our evidence strategy. Our knowledge management priorities will be driven by our statutory duties and our priorities identified in the evidence strategy and corporate plan.

Action Ref	Description of Target Deliverable	Lead Directorate	Milestone
4.1	Our knowledge base is managed in a way that facilitates our strategic intent for reporting and enables reporting against corporate plan outcomes, state of the environment and other reporting obligations	KSP	Dec 2016
4.2	Our project management processes will include an after action review (AAR) phase to support our ability to gain understanding and establish an organisational learning culture. AAR is adopted as a normal working practice and embedded in our culture	G&C	Tbc
4.3	We will create a set of criteria for valuing our data and information assets so that we can take a risk based approach to prioritising and invest our effort in managing assets that are of high organisation value. This will be aligned with the criteria used to prioritise evidence collection	KSP	Jun 16

KSP = Knowledge Strategy and Planning; ODPM = Organisational Development and People Management; G&C = Governance and Communications; ICT = F&CS = Finance and Corporate Services

Collaboration and communities of practice

We will have a culture of collaboration and knowledge sharing both within and beyond Wales. We will utilise external sources rather than capturing or creating the same evidence ourselves. Staff and stakeholders will work together to share knowledge, understanding and expert opinion, to add value to our explicit knowledge base and reach the best decision or action

Action Ref	Description of Target Deliverable	Lead Directorate	Milestone
5.1	Staff actively share knowledge and information and work collaboratively in support of our business strategy and staff know what information can be shared and what needs to be restricted	ODPM	Dec 2015
5.2	Communities of practice are developed and supported to enhance our 'collective' knowledge and expertise and facilitate joint working and knowledge exchange with internal and external stakeholders	G&C	Dec 2015
5.3	Collaborative working with strategic 'knowledge management' partners is reviewed and developed or maintained where they provide an external context or enhance delivery of our knowledge outcomes and objectives	KSP	Jun 2015
5.4	Staff are able to become members and engage with relevant professional bodies and are supported to develop necessary professional skills and qualifications	ODPM	Ongoing
5.5	We will have efficient and effective systems and processes for disseminating and exchanging records, data and information internally and externally.	KSP	Dec 2016
5.6	Data exchange agreements with external partners are centrally managed	KSP	Sep 2014
5.7	We will share our knowledge through the Welsh Government Environment Information Hub and data.gov.uk	KSP	Dec 2014

Theme 2: Policy, Process and Procedure

Knowledge capture, storage and sharing

We will capture, store and share our knowledge and we will have processes in place that minimise the loss of knowledge when staff change roles, move location or leave our organisation

Action Ref	Description of Target Deliverable	Lead Directorate	Milestone
6.1	Capturing knowledge becomes a normal part of working routines and is embedded into our business activities, and the IT systems that support business activities; reducing the requirement for knowledge capture and documentation when staff move or leave	KSP	Jun 16
6.2	Process for assuring, capturing and transferring valued knowledge when staff move role, move location or leave our organisation is in place	ODPM	Mar 14
6.3	Business requirements for electronic records data and information storage is specified	KSP	Sep 14

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6.4	Appropriate storage and archive facilities are secured for physical media	F&CS & KSP	Dec 15
6.5	Staff know where to store records data and information and how to store them	KSP	Dec 15
6.6	We will have defined corporate file structures (file plan / taxonomy) for our records, data and information with permission structures that define and manage search, discovery and access and a process to maintain them	KSP	Dec 14
6.7	Appropriate digital archive storage solutions are identified and a digital continuity plan created	KSP & Transition	Dec 16
6.8	Staff obligation to capture knowledge is incorporated into our core values.	ODPM	Dec 14
6.9	Staff are given clear guidance on when, where and how they can share records, data and information internally and externally	G&C & KSP	Dec 15

Cataloguing, search and discovery

We will know what knowledge, records, data and information we hold and why, where and how we hold it. Staff and stakeholders will be able to discover and access the data and information that is available via our organisation (internally and externally).

Action Ref	Description of Target Deliverable	Lead Directorate	Milestone
7.1	Simple to use, searchable catalogues for data assets are available internally and externally	KSP & ICT & Transition	Dec 15
7.2	Searchable catalogue or inventory for documents and records assets are available internally and externally in line with our publication scheme	G&C & ICT	Dec 15
7.3	Simple to use, searchable staff directory that includes knowledge and skills	ODPM	Dec 15
7.4	Central search and discovery guidance and support service	KSP	Dec 16
7.5	Searchable Library catalogue	KSP	Mar 14
7.6	Corporate thesaurus/tagging system;	KSP	Jun 15
7.7	Data and information discovery services are delivered to the public and stakeholders through our web site and portal using open standards where they exist	G&C & Transition	Mar 15

User experience and information delivery

We will deliver information to staff and stakeholders in a way that meets their needs; informs actions, policy and decisions and meets our statutory duties, whilst protecting restricted content. We will work with users to understand how our staff, customers, stakeholders, communities and the public need to view and use our knowledge.

Action Ref	Description of Target Deliverable	Lead Directorate	Milestone
8.1	We will know what knowledge, records data and information our staff need to use in their day to day work and deliver it to them in the way they need it.	KSP	Mar 16
8.2	A suite of new information products that are designed to	KSP	Mar 16

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	support the ecosystem approach, natural resources management planning and other statutory or business functions		
8.3	We will create a spatial view and way in to our data and information assets and the capture of spatial information (location) is embedded into business processes	KSP & Transition	Mar 15
8.4	We will create a view and way in to our knowledge data and information assets based on our external customers and embed the capture of customer requirements into business processes	KSP & Transition	Dec 16

Managing knowledge assets

We will actively manage our records, data and information assets and seek continuous improvement in our knowledge management systems, processes and procedures to create efficiencies and increase our effectiveness

Action Ref	Description of Target Deliverable	Lead Directorate	Milestone
9.1	We will define measures of success for knowledge management (describing what a good knowledge organisation should be). We will map our baseline against these measures and use this to drive future improvements in service. (a knowledge management maturity model)	KSP	Mar 15
9.2	New retention schedule and programme of disposal agreed for our records, data and information assets	KSP	Dec 15
9.3	A review of current data and information standards that are applied internally and how they are implemented and audited. An inventory of relevant standards published to help meet statutory or industry definitions and standards and maximise the potential for re-use and data combining	KSP	Dec 16
9.4	Knowledge management processes reviewed and re-designed to create efficiencies are defined and implemented	KSP & Transition	Dec 16
9.5	Realise savings in the procurement of reference data through once for Wales or once for UK data acquisition agreements	KSP	Dec 14
9.6	We will have a map of our data and information assets, how they relate to each other and how they flow into and through our organisation. Results for legacy bodies are used to design appropriate data model, processes and flow to support business functions	KSP	Jun 14
9.7	Our policies and procedures (appropriate for the size and scale of our operations)	KSP	Dec 15
9.8	We will work with ICT and transition to implement the suite of tools required to improve the efficiency and effectiveness of our knowledge management and to provide a business steer for ICT developments	KSP ICT Transition	Dec 15

Becoming an independent organisation

We will be operating independently from Environment Agency and Forestry Commission, other than services that are negotiated as enduring services or are part of our future collaborative working.

Action Ref	Description of Target Deliverable	Lead Directorate	Milestone
10.1	Data and information migrated from legacy bodies, based on business need, completed. Assets are catalogued and validated as they are migrated and security and governance requirements met	Transition	Mar 15 (EA) After 2016 (FC)
10.2	Knowledge transfer for the 2 Service Level Agreements (SLAs) that supports the management and use of data and information including statutory reporting functions will have been completed	Transition	Feb 15
10.3	Assistance and advice for knowledge transfer provided to lead officers for all SLAs	Transition	Dec 14
10.4	Data flow mapping of legacy data and information is completed to ensure business continuity as assets are transferred and to advise on transition to our new systems	KSP	Jun 14
10.5	Legacy EA and FC data acquisition agreements that are not currently agreed with us will be identified and re-negotiated	KSP	Dec 14

RESOURCING IMPLEMENTATION

Implementing the strategy will involve working in different ways. As we are a new and evolving organisation, we will need to continuously review our priorities over the life of this strategy in response to emerging challenges and process efficiencies. Consequently, the work programme set out above is likely to change.

The timescales and milestones set out in this strategy are based on what we know now. Based on current working practices and a comparison with resource allocated to this area in similar organisations we are operating at under capacity if we were to replicate like for like. However, Action 3.1, developing our people plan for knowledge management and Action 9.4, a knowledge management process review, will identify where efficiencies can be gained, and will inform our assessment of affordability and the next phases of implementation.

Our target deliverables and early milestones are prioritised to focus effort on creating a foundation on which we can build good knowledge management practices.

We will be facing increasing resource pressures over the life of this strategy. Successful implementation will be dependent on our ability to

- review and create efficiencies in our existing knowledge management processes
- reinvest resource associated with services provided by the Environment Agency and Forestry Commission
- invest in automation and new technologies which will create efficiencies and drive down the costs of implementation

- gain efficiencies and cost savings through working in partnership with Welsh Government, Defra and our sister agencies throughout the UK

Delivery will be challenging and the transitional activities may require interim invest to save resource. To succeed we will need to balance our opportunity to re-design our knowledge processes with the pressures and risks associated with the transfer of knowledge management services from our legacy bodies into our organisation. The risks and challenges to be faced in delivering the strategy are outlined in Annex 2.

ROLES AND RESPONSIBILITIES

Our knowledge management strategy is relevant to all staff (operational and all central and corporate services). Everyone in our organisation has a responsibility to value, capture, manage and share our knowledge and everyone's day to day activities will benefit from the adoption of effective knowledge management practices. Certain key roles and responsibilities are vital to the successful delivery and governance of our knowledge management activities. These are outlined below.

Key Central Roles

The following central roles are vital to the successful governance and delivery of our knowledge management activities. These will be specified and explained in more detail in our information governance policy.

- Accounting Officer – Chief Executive
- Senior Information Risk Owner
- Chief Information Officer
- Departmental Security Officer
- Departmental Records Officer
- Data Protection Officer
- Knowledge management lead - link to Welsh Government Head of Profession

Distributed roles that are embedded in Departments

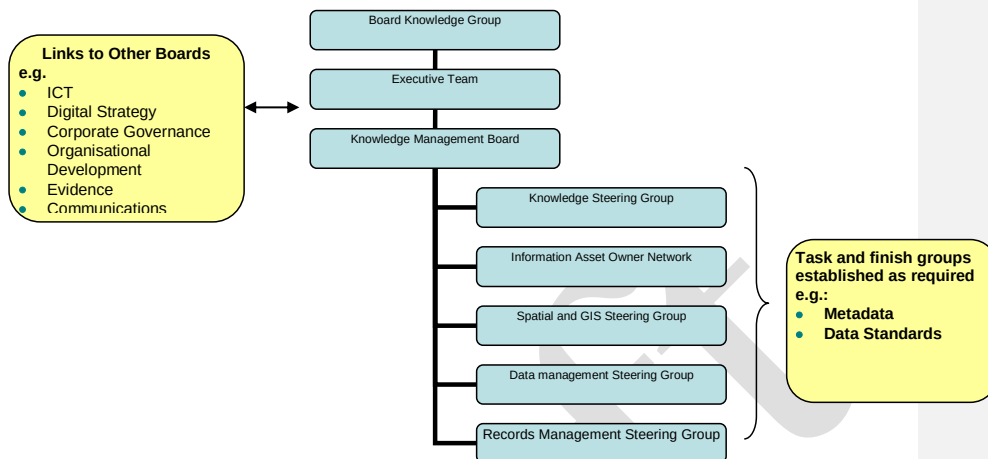
The following embedded roles are vital to the successful governance and delivery of our knowledge management activities within Departments. These will be specified and explained in more detail in our information governance policy

- Knowledge Champions
- Information Asset Owners
- Records Management roles
- Data Management roles

Working across and with our Departments

Knowledge management is a cross cutting and enabling activity. In managing activities across departments and to help focus our effort on the right priorities that deliver our outcomes, a network of relevant boards, steering groups, networks or task and finish groups will be formed. Below is an outline of a start up, structure. As we are a new organisation this may change over the term of the strategy.

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ANNEX 1 GUIDING PRINCIPLES

This document presents a set of guiding principles for Natural Resources Wales that will be used to embed good knowledge management into all our activities. Our guiding principles amalgamate the Knowledge Council principles and other relevant public sector information principles⁸ with our specific needs and will be used to embed good knowledge management into all our activities. The term knowledge, in this document includes data, information, records and the knowledge, skills and expertise of our staff.

Principles Overview

- Principle 1 We value our knowledge and expertise and ensure that our knowledge assets are known, captured, owned and adequately resourced
- Principle 2 Our knowledge base is relevant, focussed on our outcomes and continually enhanced to meet new policy challenges. . We capture learning gained from our experience of the decisions made on our evidence or advice
- Principle 3 Our knowledge is effectively and efficiently managed and governed throughout its lifecycle to enable exploitation, ensure legal compliance and maintain integrity
- Principle 4 We adopt established standards to enable our data and information assets to be linked, exploited and re-used
- Principle 5 We actively collaborate and share our knowledge and expertise internally and externally to reach the best action or decision and to understand the outcomes and value of our work
- Principle 6 We proactively publish public data and information in a timely manner and customers can access information that we hold about them

Supplementary detail and descriptors

Principle 1 We value our knowledge and expertise and ensure that our knowledge assets are known, captured, owned and adequately resourced

- Our knowledge is valued as a corporate asset that is captured, recorded, protected, shared and exploited
- Knowledge assets are owned and catalogued and their value to the organisation is known
- Adequate capacity and budget are secured to deliver our knowledge management priorities and exploit knowledge assets

Principle 2 Our knowledge base is relevant, focussed on our outcomes and continually enhanced to meet new policy challenges. . We capture learning gained from our experience of the decisions made on our evidence or advice

- Effort is invested in managing knowledge assets that are confined to corporate need; others are archived or disposed of, as appropriate.
- We improve, evolve and grow our knowledge and expertise in response to statutory duties and

⁸ Open data principles, Data Protection Principles, Open Standards Principles,

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other priorities identified by us and Welsh Government and through organisational learning, innovation and creativity • Knowledge is captured in a way that ensures that it is valid, reliable, timely, relevant and complete • Location and customer information is embedded in all knowledge capture
Principle 3 Our knowledge is effectively and efficiently managed and governed throughout its lifecycle to enable exploitation, ensure legal compliance and maintain integrity
• Knowledge assets are captured, acquired and stored once but accessed and used many times (internally and externally) • Knowledge assets are actively managed according to their associated level of risk and value to the organisation; those that need to be restricted or protected are stored securely to avoid inappropriate loss or exposure • Knowledge assets ownership and accountability is clear and managed • The quality and standards of our knowledge assets are defined according to organisational need and adhere to common standards • The integrity and accessibility of our data and information assets are maintained over time and long term datasets are assured or archived in an appropriate place of deposit • Technology and tools are exploited to help improve access, efficiency and effectiveness and to automate knowledge management processes • Our knowledge management practices are governed to comply with information legislation • Relevant skills are continually developed to deliver our knowledge management priorities and exploit knowledge assets • We will work with others to identify and agree relevant external leads for knowledge activities and avoid duplication of effort
Principle 4 We adopt established standards to enable our data and information assets to be linked, exploited and re-used
• We know the quality and standards of our data and information assets and, taking a risk based approach, adopt common standards where they exist • We release our data and information in formats that facilitate exchange, re-use and the ability for them to be interrogated, linked and combined
Principle 5 We actively collaborate and share our knowledge and expertise internally and externally to support the knowledge economy; to reach the best action or decision and to understand the outcomes and value of our work
• We have a culture of working in collaboration both internally and with external stakeholders to share explicit and tacit knowledge • We share and encourage the exploitation and re-use of knowledge assets to add value and support the knowledge economy • Knowledge assets are shared at the resolution of capture and in a timely manner unless there is a good business or legal justification to restrict or delay access
Principle 6 We proactively publish public data and information in a timely manner and customers can access information that we hold about them. Where there is a cost to our customers, we will be clear about when, where and why fees will be charged
• Knowledge assets defined as public assets are published in a timely manner unless there is a good business or legal reason to delay publication • Knowledge assets defined as public assets are proactively published as open data unless there is a good business or legal justification to restrict public access • The public and customers can access the information we hold about them • We protect knowledge assets of a sensitive nature on behalf of our customers

ANNEX 2 RISKS AND CHALLENGES

This strategy sets out our strategic intent. We face a number of risks and challenges that may impact on the delivery of this strategy. Some of the challenges are also opportunities and will realise benefits if we are able to meet them. In order to mitigate against the risks and to help address the challenges the plan will be reviewed and updated at 6 monthly intervals. .

- Dependency on being underpinned by high performing and responsive IT services
- The need to assure and maintain access to data and information assets whilst we transfer them from our legacy bodies
- The need to ensure business continuity whilst we move data and information assets from legacy body infrastructure to our infrastructure
- Growth in the volume and complexity of data and information that is available to us and requires careful management both under normal business activities and through transition and transfer of assets from legacy organisations
- The potential for non-compliance with Public Records Act, INSPIRE Directive, PSI Directive and other legislation due to capacity and capability constraints and whilst we implement changes as we move through transition
- The need to balance increasing demand and expectation for knowledge management services at a time of resource constraint. We need to build capacity and capability in order to support the level of change and transition in ICT to ensure that the content is properly captured, managed and exploited, getting more from our existing knowledge base in terms of wider application
- Requirement to develop new ways to combine, analyse and present our knowledge assets to support the ecosystem approach, natural resource management planning and other new ways of working
- The need to be able to adapt to unprecedented levels of change in external policy, legislation and technology
- The need to ensure that vital knowledge and understanding is maintained or passed on as roles change or staff move or leave our organisation through transition and internal change processes
- Ensuring that knowledge transfer is addressed in the managed handover of all new lead co-ordination roles where EAHO/FCGB functions transfer to Wales
- Building our new knowledge culture and embedding knowledge in our core values