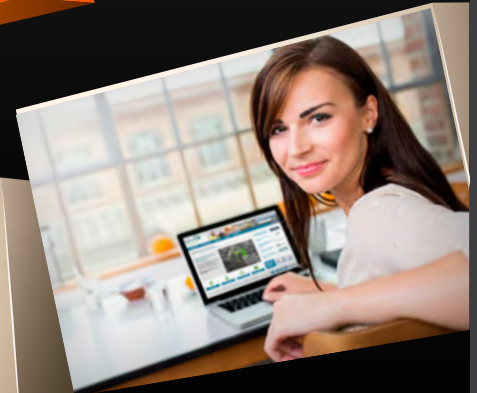


Our digital future

01
SEPA
online



03
Facilitating
effective
engagement



02
Sharing
environmental
information



04
Enabling
business
excellence





Digital technologies are changing the way we go about our daily lives, revolutionising how we work and communicate. The internet has radically altered how we buy goods and services, and social media has transformed our lives, bringing people closer together and creating a network of online communities.

As Scotland's principal environmental regulator, we must embrace these new opportunities to enhance our work to protect and improve Scotland's environment, and to ensure we are responding effectively to new demands and expectations placed upon us. *Our digital future* is about fusing digital solutions with our organisational transformation to ensure that our services are shaped to suit customer and stakeholder needs.

Digital technology provides a fantastic platform to help us engage with Scotland's communities and to involve them in our work. Many of today's environmental challenges, such as climate change or tackling poor air quality, are complex and multi-dimensional, and tackling them requires collaboration. New online tools allow people to come together and share information to tackle such challenges as never before.

We will actively encourage and support individuals, communities and businesses to become more involved in protecting their environment, and to help design and implement collaborative plans for tackling environmental issues. The move to a more digital future will facilitate better ways to collaborate with civic society, to share knowledge and evidence, and we have already worked hard to develop this 'citizen science' approach, and we see great potential for its further deployment.

To maximise the benefits of this, we must have the right digital infrastructure and services in place. *Our digital future* is our strategy to achieve this.



Our vision

We will use digital technology to:

- **improve environmental protection;**
- **enhance community engagement;**
- **help deliver sustainable economic growth.**

Our digital strategy aims to create the right digital space for us to provide services to our customers that:

- are easy to use;
- are fast and readily available;
- enables us to collect and share information;
- enables us to engage Scotland's people in what we do and helps us shape how we do it.

Introduction

We live in a digital age. One that is radically changing the way our customers - the people of Scotland – go about their daily lives. There is an increasing expectation that our services and information will be readily available using a range of formats, including social media.

To meet these expectations, we need to be able to provide customers with access to these services simply and easily through effective use of digital technology, and to provide appropriate digital support for users who genuinely need it.

This digital world is constantly changing; it provides us with new ways to connect and interact with our customers, and to deploy ground-breaking tools that enable us to better fulfil our purpose to protect and improve the environment.

There are many examples where we already use digital technology innovatively to provide more effective delivery of services and to enhance communication about Scotland's environment. Our innovative [flood warning service](#), for example, allows us to communicate flood event information directly to the public via their mobile phone. Meanwhile, the flagship [Scotland's Environment Web](#) (see below) is leading the collaborative development of new digital data visualisation and mapping tools to provide a one-stop-shop for information about Scotland's environment.

We are proud of these and other achievements, but the progress we have made is only the start of our digital journey. *Our digital future* sets out a framework that allows us to continue embracing new technology and ideas that enhance our customer focus, improve our intelligence about issues affecting Scotland's environment and help us to provide information in new ways that excite and encourage people to get involved.

We have to find the means to deliver these in a way that provides best value for money. We therefore need to make prudent investments and achieve greater efficiencies through the shared development of digital technology solutions and services with other public bodies. This strategy has been developed so that our approach is consistent with [Scotland's digital future](#).

This is our strategy - *Our digital future*.



Scotland's Environment Web

Scotland's Environment Website is a multi-agency [partnership](#) co-ordinated by SEPA, which provides access to environmental information held by environmental organisations. It provides users with a centralised hub to access trusted and authoritative environmental information from multiple sources. Users can:

- find information of interest quickly;
- search, discover, view, analyse, and interpret data;
- become engaged through the collection and contribution of data;
- interact and collaborate in dynamic and creative ways for informed decision-making;
- innovate and extend knowledge and insight.

We will continue to share data and skills to exploit web-based digital opportunities and enrich the website's content to enhance business performance, operational utility and policy relevance – and thereby benefit the environment, society and the economy.

Our approach

1 ONE VISION

We will use digital technology to:

- improve environmental protection;
- enhance public information and community engagement;
- help deliver sustainable economic growth.

4 FOUR STRATEGIC THEMES

In order to implement our vision, our strategy outlines a framework for delivery that is based on four themes.

SEPA online

- We will deliver services digitally first, involving users in their design.



Sharing environmental information

- We will make our data work for us, providing open access, where feasible.
- We will promote shared data, and services.



Facilitating effective engagement

- We will enable our customers to engage with us digitally.
- We will develop systems to enable communities to protect and improve their environment.



Enabling business excellence

- We will create a corporate digital culture with a digitally skilled workforce.
- We will manage and improve our data and ICT infrastructure.



6 SIX PRINCIPLES

Delivery of projects and initiatives relating to the four themes will be guided by the following overarching principles. Our digital services will be:

- *convenient* – they will be fast, simple and available across a range of formats;
- *resilient* – they will be designed to cope with changing circumstances;
- *green* – they will support our target to reduce greenhouse gas emissions;
- *cost effective* – they will deliver good value for money;
- *inclusive* – we will put appropriate assisted digital support in place for those who genuinely need it;
- *safe* – they will be designed and managed securely, in line with legal requirements.

Theme 1: SEPA online



We want our customers to be able to access our services quickly and easily, at a time that suits them. Time and money can be saved by making our services easier to use and by delivering them online.

We want many of our transactions to be self-service, using models similar to internet retailing and finance. Our online services will be integrated so that users have a single log in to access the range of transactions and interactions they have with us. Consistent design will mean that customers do not have to relearn how to use different services, saving time and improving clarity.

We want our digital services to be shaped by the needs of users and to be continually improved as we respond to what customers are telling us.



Key drivers for this theme

Scotland's digital future – it is the [Scottish Government's aspiration for Scotland's digital public services](#) to be customer focused, open but secure, collaborative and delivering best value for money.

Putting customers in control - customers now demand access to services which are always available, easy to use and online. Regardless of how complex a service may be to deliver, they require contact with us to be simple and convenient. This means we need to provide many services 24 hours a day, seven days a week, and for queries to be answered at the convenience of those using them.

Improving services for our staff – our staff are our most valuable asset and by delivering simple and fast systems for them to use, we can free them to work most effectively to protect Scotland's environment.



Our priorities - we will:

Deliver services digitally first, across a range of formats.

Involve users in the design of our services.

To achieve this, we will:

- create an online authorisation service that is easy to use and with transparent charging;
- enable users to influence improvements to our services, including assisted services where needed;
- work with technology and academic sectors to invest selectively to maximise value from our digital services;
- update core business processes to embrace technological developments;
- implement the MyGov single sign on to offer joined-up access with other public services;
- monitor our information for accuracy and security, ensuring that it is fit for purpose and conforms to legal requirements and standards;
- develop methods and tools that improve engagement in the development and delivery of our services.

Benefits

- Our services will be more convenient to use and easier to access.
- A single log in and personalised services.
- Savings made in time and money – for us and for users.
- Improved access to information about the environment.

Theme 2: sharing environmental information



We want to gather, use and share our information to allow us (and those whom we work with) to effectively protect and improve Scotland's environment. We want citizens and businesses to be able to easily access the information they need to make decisions.

By developing Scotland's Environment Web, we want to help households, communities and businesses find accurate and up-to-date information about Scotland's environment and the issues that matter to them.

We want to use open and linked data to build partnerships with other public bodies and private companies, using environmental services in order to leverage the potential of our data to develop new tools, products and services that meet public and private demands.

We also want to improve our monitoring and data analysis capability by using new technologies that will help us to identify and tackle environmental harms before they become serious problems.

Key drivers for this theme

The need to always improve our intelligence – we can only be a world class regulator if we have access to accurate, up-to-date evidence about Scotland's environment and the issues facing it. New technologies offer us opportunities to:

- monitor more widely and remotely;
- link data to modelling tools that give us greater insight;
- develop applications that enable the public to record and send us data that we can use to identify and tackle issues, including environmental crimes.

Open data – the [Scottish Government's Open data strategy for Scotland](#) seeks to create a Scotland where non-sensitive data from public services is recognised as a resource for wider societal use.

Supporting the economy through our data – sharing our data can support businesses to develop new and innovative applications and products that can add value to the information we hold. Sharing information also allows those businesses that need to use our data to secure it easily and often at no cost, meaning they are able to spend less time securing the information and more time using it to support their business needs.



Theme 2: sharing environmental information



Our priorities - we will:

Provide open access to our data wherever feasible.

Promote shared data and services, collaborating with public and private sector partners.

Make our data work for us.

To achieve this, we will:

- publish our data free of charge wherever appropriate;
- develop Scotland's Environment Web as a hub for environmental information;
- publish an open data publication plan detailing how we store and publish our key datasets;
- follow the principles of open data and actively promote the use of linked data;
- use our data to predict and proactively reduce environmental harm;
- support others to develop tools and products that use our data in new and creative ways;
- invest in new technologies to improve our environmental monitoring - gathering more data in less time and at lower cost;
- improve the quality of our data and metadata as a foundation of better data sharing.

Benefits

- Improving our monitoring capabilities.
- Open access to our data, where possible.
- Supporting the development of new products and services.
- Gaining added value from our datasets.
- Access and utilise datasets from our partners.

Theme 3: facilitating effective engagement



We want to develop our digital services to enable us to work more closely with communities. As a result, we want people to take an increasingly active part in helping us to protect the environment - for example by sending us evidence of pollution incidents or environmental crimes through their devices.

We want to help individuals and communities to be actively engaged in citizen science projects that use digital technologies to record changes in Scotland's environment, that we can use to amend and improve the services and responses we provide.

We want to encourage and enable communities to use our information, and as a result, be better informed about issues and changes in their local area and of how they and their immediate environment might be affected.

We want to use social media more extensively to provide real-time information directly to the public, keeping them informed about Scotland's environment and the steps we are taking to protect and improve it, and enable them to contact us more easily.

Key drivers for this theme

Public service reform - we are committed to playing our part in delivering the Scottish Government's programme of [public service reform](#) and to do this we need the right digital services and infrastructure in place.

Citizen participation - the digital revolution offers new opportunities for people to engage in decision-making and to be active participants in subjects that are of interest to them. We need to provide digital services that encourage and facilitate this participation, so more people can become more active in the custodianship of Scotland's environment.



Theme 3: facilitating effective engagement



Our priorities - we will:

Provide effective ways for our customers to engage with us.

Develop systems that encourage and enable communities to play an active part in protecting and improving their local environment.

To achieve this, we will:

- continue to develop Scotland's Environment Web as the trusted, 'one-stop-shop', for Scotland's environmental data;
- use digital services to encourage and enable wider participation in our consultations;
- develop systems and products that encourage and enable communities to protect their local environment;
- provide new digital tools that allow people to report environmental observations and events, including potential environmental crimes;
- increase our ability to provide real-time information to the public;
- continue to develop the information provided to the public.

Benefits

- Expands citizen science opportunities.
- Increases public involvement in our work.
- Helps communities to understand and value their local environment.
- Secures additional data to help protect the environment.

Theme 4: enabling business excellence



We want our staff to have the right skills to embrace the opportunities of the digital age and for them to be recognised externally for their motivation and skill in using digital technologies.

We need to deliver digital services which are resilient and secure, creative and innovative while also saving money and reducing our impact on the environment. Our transformational change programme will embrace digital technologies and drive efficiency and productivity for us and our customers. Our staff will embrace digital working, enabling them to be deployed flexibly and effectively as environmental challenges emerge.

We want to be recognised as being excellent at managing our information efficiently and effectively, meeting all our legal requirements and keeping personal information secure.

Key drivers for this theme

Improving efficiency – imaginative deployment of digital solutions can improve the efficiency and quality of our services, allowing us to do more with the resources we have, reducing the cost both to us and to those who use the services we provide.

Supporting change – we are implementing transformational changes to the way we are designed and function. These changes require novel solutions to new challenges, and digital infrastructure has an important role to play in supporting these functional and cultural changes that we are making.

Reducing environmental impacts – digital technology can help us (and those who use our services) to reduce their environmental footprint. Digital services can effectively reduce travelling, can enable us to monitor the environment remotely, and can help us to deliver services from fewer and smaller buildings.



Theme 4: enabling business excellence



Our priorities - we will:

Create a corporate digital culture and a digitally skilled workforce.

Use technology to enable our staff to be agile and mobile, able to access the information they need when they need it.

Manage our data and information efficiently and effectively.

Improve and upgrade our ICT infrastructure.

To achieve this, we will:

- improve our services by embedding digital opportunities into their design;
- train and develop our staff, ensuring they have the right skills to support our vision;
- improve our underlying ICT infrastructure, investing in energy efficient equipment to reduce emissions;
- support and implement the Scottish Wide Area Network (SWAN);
- consider greenhouse gas emissions in all digital decision-making;
- make our data and information available to staff working in the field;
- deploy communication technologies that allow our staff to work effectively together without the need to travel;
- manage data effectively: storing it only once, ensuring ownership is properly controlled and keeping metadata up-to-date.

Benefits

- Developing a digital culture across SEPA.
- Providing value for money by investing appropriately in our ICT infrastructure.
- Transforming our services by making best use of digital technologies.
- Improving the quality and control of our data.

Making it happen – delivering our digital future

Our digital future is the first step on a journey. Delivering the ambitions we have set will transform the way we deliver many of our services and make a real difference to how we engage with the people of Scotland. There are three additional components which are central to successful delivery of the steps we set out in this strategy: governance, implementation and partnership.

Governance

To oversee delivery of *Our digital future*, a governance structure is being created. It operates on two levels:

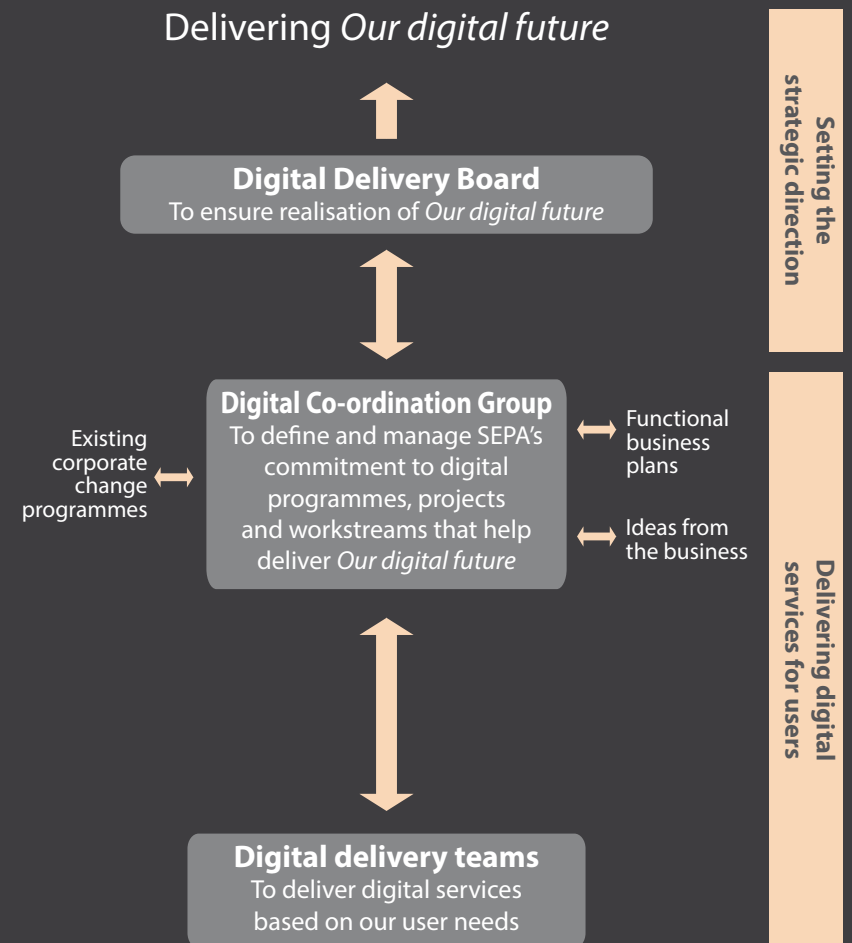
- **Digital Delivery Board**
High-level leadership and decision-making to ensure realisation of the strategy.
- **Digital Co-ordination Group**
A group of cross-portfolio staff to co-ordinate the portfolio of digital programmes, projects and workstreams.

Implementation plans

Each year the Digital Delivery Board will publish an implementation plan that:

- defines projects for the coming year;
- indicates projects expected over the next few years;
- reports performance for each priority.

By issuing this annually, the board can respond to any changes in global technologies while still working towards the vision of *Our digital future*. It also offers an opportunity to rebalance the mix of projects in order to prioritise specific areas of the strategy, if required. It is anticipated that current levels of expenditure on digital projects and IT infrastructure will continue across the lifetime of this strategy, with priority projects being delivered according to resource availability.



Making it happen – delivering our digital future

Partnerships

To succeed in our efforts, it is essential we work collaboratively with a wide range of partners including:

