

Digital Public Administration factsheet 2020

United Kingdom

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1 Country Profile

1.1 Basic data

Population: 66 647 112 inhabitants (2019)

GDP at market prices: 2 523 312.5 million Euros (2019)

GDP per inhabitant in PPS (Purchasing Power Standard EU 27=100): 105 (2019)

GDP growth rate: 1.4 % (2019) **Inflation** rate: 1.8 % (2019) **Unemployment** rate: 3.8 % (2019)

General government gross debt (Percentage of GDP): 85.4 % (2019) General government deficit/surplus (Percentage of GDP): -2.1 % (2019)

Area: 247 763 km² Capital city: London

Official EU language: English

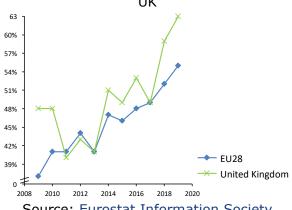
Currency: GBP

Source: Eurostat (last update: 26 June 2020)

1.2 Digital Public Administration Indicators

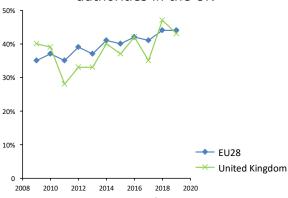
The following graphs present data for the latest Generic Information Society Indicators for the UK compared to the EU average. Statistical indicators in this section reflect those of Eurostat at the time the Edition is being prepared.

Percentage of individuals using the Internet for interacting with public authorities in the



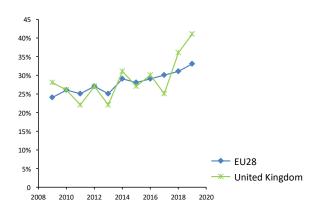
Source: Eurostat Information Society Indicators

Percentage of individuals using the Internet for obtaining information from public authorities in the UK



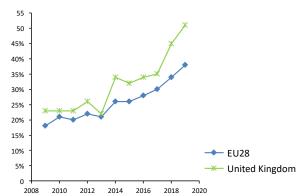
Source: Eurostat Information Society
Indicators

Percentage of individuals using the Internet for downloading official forms from public authorities in the UK



Source: Eurostat Information Society Indicators

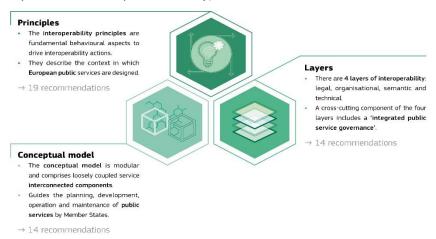
Percentage of individuals using the Internet for sending filled forms to public authorities in the UK



Source: Eurostat Information Society Indicators

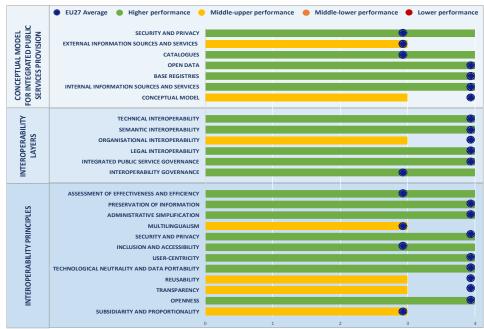
1.3 Interoperability State of Play

In 2017, the European Commission published the European Interoperability Framework (EIF) to give specific guidance on how to set up interoperable digital public services through a set of 47 recommendations. The picture below represents the three pillars of the EIF around which the EIF Monitoring Mechanism was built to evaluate the level of implementation of the EIF within the Member States. It is based on a set of 68 Key Performance Indicators (KPIs) clustered within the three main pillars of the EIF (Principles, Layers and Conceptual model), outlined below.



Source: European Interoperability Framework Monitoring Mechanism 2019

For each of the three pillars, a different scoreboard was created to breakdown the results into their main components (i.e. the 12 principles of interoperability, the interoperability layers and the components of the conceptual model). The components are evaluated on a scale from one to four, where one means a lower level of implementation, while 4 means a higher level of implementation. The graph below shows the result of the first EIF Monitoring Mechanism data collection for UK in 2019. It is possible to notice an overall good performance of the country, with particularly positive results within the second scoreboard (Interoperability layers). The areas of improvements are concentrated within the first scoreboard and are related to principle of reusability, multilingualism, transparency and subsidiarity and proportionality.



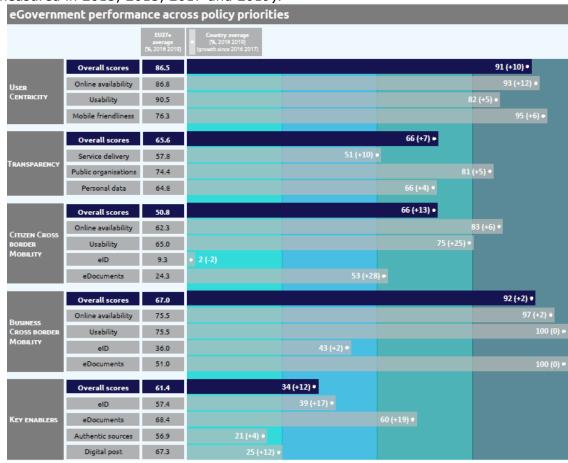
Source: European Interoperability Framework Monitoring Mechanism 2019

1.4 eGovernment State of Play

The graph below is the result of the latest eGovernment Benchmark report, which evaluates the priority areas of the eGovernment Action Plan 2016-2020, based on specific indicators. These indicators are clustered within four main top-level benchmarks:

- User Centricity indicates the extent to which a service is provided online, its
 mobile friendliness and usability of the service (in terms of available online
 support and feedback mechanisms).
- **Transparency** indicates the extent to which governments are transparent about (i) the process of service delivery, (ii) the responsibilities and performance of public organisations and (iii) the personal data processed in public services.
- **Cross-Border Mobility** indicates the extent to which users of public services from another European country can use the online services.
- **Key Enablers** indicates the extent to which technical and organisational preconditions for eGovernment service provision are in place, such as electronic identification and authentic sources.

The 2020 report presents the biennial results, achieved over the past two years of measurement of all eight life events used to measure the above-mentioned top-level benchmarks. More specifically, these life events are divided between six 'Citizen life events' (Losing and finding a job, Studying, Family life, all measured in 2012, 2014, 2016 and 2018, and Starting a small claim procedure, Moving, Owning a car, all measured in 2013, 2015, 2017 and 2019) and two 'Business life events' (Business startup, measured in 2012, 2014, 2016 and 2018, and Regular business operations, measured in 2013, 2015, 2017 and 2019).



Source: eGovernment Benchmark Report 2020 Country Factsheets



2 Digital Public Administration Highlights

Digital Public Administration Political Communications

In September 2019, the Government Digital Service (GDS) unveiled a shared ambition built collaboratively with departmental Digital Data and Technology (DDaT) leaders, a 2030 Vision for government that is trusted, joined up and responsive to user needs. Its mission is to ensure that government continues to innovate and make use of the rapidly evolving digital landscape to deliver the world's best digital public services. The roadmap underpinning our 2030 Vision provides an emerging direction for the new leadership of the soon to be appointed Government Chief Digital Information Officer, as it leads GDS and the DDaT function, to help departments tackle the next phase of digital transformation.

The Online Harms White Paper sets out the government's plans for a world-leading package of online safety measures that also support innovation and a thriving digital economy. This package comprises legislative and non-legislative measures and will make companies more responsible for their users' safety online, especially children and other vulnerable groups. This will go to full consultation in Spring 2020.

Digital Public Administration Legislation

Accessibility Regulations 2018 came into force on 23 September 2018. These regulations require all UK public sector websites and mobile applications to meet accessibility standards and publish a statement detailing how accessible they are. All public sector websites published on or after 23 September 2018 must be accessible and have an accessibility statement before going live. Public sector websites published before 23 September 2018 must be compliant by 23 September 2020. Mobile applications must meet the regulations by 23 June 2021.

Digital Public Administration Governance

The Rt Hon Michael Gove was appointed Chancellor of the Duchy of Lancaster on 24 July 2019. He was also appointed Minister for the Cabinet Office on 13 February 2020.

Lord Agnew was appointed Minister of State at the Cabinet Office and Her Majesty's Treasury on 14 February 2020 replacing Oliver Dowden. Lord Agnew will have oversight for the Government Digital Service.

Oliver Dowden CBE was appointed Secretary of State for Digital, Culture, Media and Sport on 13 February 2020. He was previously Paymaster General and Minister for the Cabinet Office from 24 July 2019 to 13 February 2020, and Parliamentary Secretary at the Cabinet Office from 9 January 2018 to 24 July 2019.

Caroline Dinenage was appointed Minister of State for Digital and Culture in the Department for Digital, Culture, Media and Sport on 13 February 2020.

Digital Public Administration Infrastructure

Gov.UK Verify allows individuals to prove who they are when accessing online public services in the UK. With GOV.UK Verify, users set up an account with a certified private sector identity provider, who checks their identity. The user can then use that to assert their identity every time they access a government service. There is more information about GOV.UK Verify above, and updates are regularly published on the blog. GOV.UK Verify service is continuously improved in order to support departments' transformation plans. In addition to continuing with the rollout of GOV.UK Verify across central government, the wider applications for GOV.UK Verify for secure citizen identity verification in both the wider public and private sectors are also explored.

Government Gateway can also be used for authentication for some online services, particularly by businesses.

The UK digital identity scheme GOV.UK Verify met the September 2018 deadline for compliance with the EU eIDAS Regulation, allowing certain EU digital identity schemes to be accepted to access online UK public services in scope of the Regulation. The GOV.UK Verify meets also the requirements for a 'notified' identity scheme set by the eIDAS Regulation.



3 Digital Public Administration Political Communications

3.1 Specific political communications on digital public administration

New Government Transformation Strategy

In February 2017, the UK government launched a new Government Transformation Strategy 2017 to 2020. The government strategy aimed to strengthen the UK's digital capabilities and build upon the successes of the 2012 Government Digital Strategy.

This new stage in the UK's government digital strategy rests on three main components:

- **transforming whole citizen-facing services** to continue to improve the experience for citizens, businesses and users within the public sector;
- **full department transformation** affecting complete government organisations to deliver policy objectives in a flexible way, improve citizen service across channels and improve efficiency;
- internal government transformation though it might not directly change citizen-facing services, it is vital for government to collaborate better and deliver digitally-enabled change more effectively.

The aim of this strategy is to transform the relationship between citizens and the State - putting more power in the hands of citizens and being more responsive to their needs. It is structured around five objectives:

- delivering world-class digital services and transforming the way government operates in a modern and efficient way;
- growing the right people, skills and culture;
- building better workplace tools, processes and governance;
- making better use of data;
- creating shared platforms to speed up transformation.

The strategy stated clear priorities up to 2020 for each of the five objectives, and in addition includes expectations for government beyond 2020.

The strategy is supported by the Government Digital Service (GDS) which enables and assures government digital initiatives. The GDS's role is to:

- set the appropriate challenging standards for government digital technology and support the increased digital capability of government by identifying, curating and sharing best practices
- strengthen the digital, data and technology communities across government setting professional standards and standardising approaches to recruitment, retention, pay and career development
- act as a centre of digital expertise (including exploring new ideas and developing prototypes) and make sure this expertise is deployed effectively.
- build, continually improve and operate products and services that the rest of government can rely on
- provide targeted digital, data and technology expertise (from GDS, departments or external sources) to other government organisations as support for critical projects
- provide assurance for digital projects through spending controls, service assessments and in collaboration with the Infrastructure and Projects Authority (IPA).

UK Digital Strategy

In March 2017, the UK Digital Strategy 2017 was launched and published by the Department for Digital, Culture, Media and Sport. The strategy focused on building an

economy that works for everyone and making sure that wealth and opportunity are spread across the country. It means building a nation that stands tall in the world and is set up to succeed in the long term.

As suggested by the name, this digital strategy is for the whole of the UK and is comprised of seven strands:

- connectivity Building world-class digital infrastructure for the UK;
- digital skills and inclusion Giving everyone access to the digital skills they need;
- the digital sectors Making the UK the best place to start and grow a digital business;
- the wider economy Helping every British business become a digital business;
- a safe and secure cyberspace Making the UK the safest place in the world to live and work online;
- digital government Maintaining the UK government as a world leader in serving its citizens online;
- data Unlocking the power of data in the UK economy and improving public confidence in its use.

The strategy is a framework developed in partnership with industry to deliver successful sectorial policies. This digital strategy is therefore a first statement in an ongoing conversation between digital businesses and government: as the UK government develops its industrial and digital strategies, they will continue to build on that conversation and to strengthen their support. To facilitate this, the Secretary of State for Culture, Media and Sport will convene a forum for government and the tech community to work together to support the growth of the UK digital economy.

The strategy for delivery of the Digital Strategy is via the following pillars:

- science, research and innovation, where they must become a more innovative economy, and do more to commercialise our world-leading science base to deliver growth across the UK;
- skills, where they must help people and businesses to thrive by ensuring everyone has the basic skills needed in a modern economy; by building a new system of Technical Education to benefit the half the population who do not go to university, boosting STEM skills and numeracy, and raising skill levels in lagging areas;
- infrastructure, where they must upgrade our performance on digital, energy, and transport infrastructure, and must better align central government infrastructure investment with local growth priorities;
- supporting businesses to start and grow, where they must ensure that businesses across the UK can access the finance and management skills they need to grow; and create the conditions to enable firms to invest for the long term;
- procurement policy, where strategic government procurement can drive innovation and enable the development of UK supply chains;
- trade and inward investment policy, where government policy can help boost productivity and growth across our economy including by increasing competition and helping to bring new ways of doing things to the UK;
- affordable energy and clean growth, where they need to ensure that they both keep costs down for businesses, and secure the economic benefits of the transition to a low carbon economy;
- sectoral policies, where they must both build on our areas of competitive advantage, and help new sectors to flourish, in many cases challenging existing institutions and incumbents;
- spreading growth across the country, whether it is investing in key infrastructure projects to unlock growth, increasing skill levels, or backing local innovation strengths, the Industrial Strategy will create a framework to build on the particular strengths of different places and address factors that hold them back;

 creating the right institutional framework. In some places and sectors there may be missing institutions which they could create, or existing ones they could strengthen: be they local educational institutions, trade associations or financial networks.

Digital Charter

The Government's Digital Charter was published on 25 January 2018. It set the direction for the UK to become the best place to start and grow a digital business as well as the safest place in the world to be online. The Charter brought together a broad, ongoing programme, which will evolve as technology changes. Current priorities include online harms, liability, data and artificial intelligence ethics and innovation, disinformation and cybersecurity. In 2019 the Charter has not been modified.

Strategies and policies in the devolved administrations

The devolved administrations of Scotland, Wales and Northern Ireland have their own particular approaches to eGovernment policy.

Scotland

Scotland's Digital Future Strategy of 2011 outlined the steps required to ensure Scotland is well placed to take full advantage of all the economic, social and environmental opportunities offered by the digital age.

Four themes were defined:

- **connectivity**: Scotland's Digital Future: Infrastructure Action Plan outlined the government's commitment to a world-class, future-proofed infrastructure that will deliver digital connectivity across the whole of Scotland by 2020. So far, over GBP 240 million of public sector funding has been committed to taking forward the Infrastructure Action plan;
- **digital public services**: Scotland's Digital Future: Delivery of Public Services Strategy provided a framework into which strategies developed by sectors align NHS Scotland; Local Government; and central government, i.e. the Scotlish government, its agencies and non-departmental bodies including the police and fire services, universities and colleges. A summary of progress on each of the Sectoral Strategies can be found here;
- **digital economy**: the report Scotland's Digital Future Supporting the Transition to a World-leading Digital Economy: Emerging Findings April 2013 was published on 7 May 2013. The report explored the public sector's approach to promoting Scotland's digital economy and provided initial outputs from the review of business support programmes. On 22 May 2013, an additional GBP 7 million in funding was announced to take forward the recommendations in the report and complement the resources that are already in place within enterprise and skills agencies;
- **participation**: the digital participation strategy was laid out in a National Framework for Local Action.

In 2017, the Scottish Government published a study called Realising Scotland's Full Potential in a Digital World: A Digital Strategy for Scotland. It described plans for ensuring that digitisation is at the heart of everything – delivering inclusive economic growth; reform of public services; preparing children for the workplace of the future; tackling inequalities and empowering communities.

Significant progress has been made since 2011:

- the Digital Scotland Superfast Broadband (DSSB) programme achieved its initial target of delivering access to fibre broadband to 85% of premises in Scotland;
- the Community Broadband Scotland (CBS) has helped extend broadband access to over 1 400 premises;
- the percentage of adults using the internet increased from 73% to 82%;
- broadband access at home amongst social housing tenants increased by 20%.

The 2017 actions aimed to, in general:

- support digital transformation across the wider economy;
- support growth in the digital sector;
- re-design Scotland's digital public services;
- enable change and innovation through data;
- transform the public sector;
- build a digital government;
- deliver high quality connectivity across the whole of Scotland;
- build a digitally-skilled nation;
- promote diversity in digital;
- support people and communities through social changes; and
- promote digital inclusion and participation.

Wales

The Digital Wales Strategy is structured around five fundamental objectives:

- **inclusivity**: Digital Wales will contribute to making Wales a more inclusive, sustainable and prosperous society. Making sure everyone can enjoy the benefits of technology is a key part of that;
- **skills:** Information and communication technology (ICT) skills will be part of children's education, and technology will be used to improve teaching methods and learning. Beyond schools, the government will ensure that everyone in Wales can acquire the basic skills and confidence to get online and use digital technologies. The government will also help train people in more specialist skills for industry;
- economy: Digital Wales will support Welsh companies to network with research departments to create and commercialise new digital technologies. Digital Wales will help more Welsh companies to exploit these developments to innovate, grow and access new markets, especially in the creative industries, ICT and tourism sectors;
- **public services:** Digital Wales will make more digital public and government services, to foster an easier access for everyone by increasing their efficiency and convenience. Through effective use of technology, citizens will be able to better exploit these services and to maximise the use of resources.
- **infrastructure:** to deliver all the benefits of digital technology, the government set the ambitious goal of ensuring that everyone in Wales would have access to Next Generation Broadband (at least 30Mbps) starting from 2015. At the same time, the government actively worked to improve mobile and wireless coverage across the country.

Northern Ireland

The Digital Northern Ireland 2020 (DNI) initiative stands to reap considerable benefits in terms of both economic and social uplift as a result of the advanced communications capability which has been and continues to be deployed. The initiative will focus on the following categories of opportunity:

- business opportunities in and across various business sectors;
- community and social opportunities across a range of areas;
- a number of key strategic projects which, if realised, would significantly enhance Northern Ireland's position as a Knowledge Economy;
- opportunities for FDI by significant players across major business areas, including the ICT and digital technology areas.

The Northern Ireland (NI) Digital Economy Action Plan 2013-2014 identified a number of challenges, as well as specific actions in order to tackle them. These are:

 Connected Digital Economy Catapult: providing a world-class centre of expertise in the digital economy, to support the rapid commercialisation of cutting-edge technologies with the potential to have a global impact;

- systems new digital media business systems: developing visual effects capabilities and work processes to allow audiences to be reached across multiple platforms;
- value frictionless commerce: making it easier for traders and their customers to establish a relationship online;
- value valuing and pricing digital assets: developing ways to agree value and price;
- data uses of environmental data: enabling the commercial exploitation of the rich UK collection of environmental data to provide practical decision support tools for industry - joint programme with resource efficiency team and shown in both areas;
- data establishing clean data supply: continuation of the LinkedGov project;
- data digital technologies for health: enabling companies to understand what impact they could have to help deliver more efficient and effective health systems and to connect with the providers. They may consider the following areas: early diagnosis, prevention and better treatments;
- places & people enterprise and employee information systems: helping businesses to establish secure, resilient and reliable connections with their staff working remotely;
- places & people location-based services: helping businesses to engage with their customers in their "here and now" context;
- places & people local media systems: developing a marketplace for information and services of local interest;
- **IC tomorrow**: developing innovation for small digital businesses through a programme of small business support contests;
- **supporting and developing clusters**: developing innovation for small digital businesses through two Launchpad competitions: Creative North-West and Cyber South-West.

3.2 Interoperability

The Digital Service Standard and Technology Code of Practice

The Digital Service Standard and Technology Code of Practice are the UK government's standards for creating and running digital services. Both documents align with the recommendations and principles of the European Interoperability Framework. Specifically, both documents include points on the use of open standards to improve interoperability of services and technology components. The Technology Code of Practice and the Service Manual include detailed guidance on using open standards. The GDS Open Standards Board follows the CAMMS process and the Open Standards Board assesses standards. They are then mandated for use. As part of the spend controls process, they insist that all new technology has to comply with mandatory open standards. All open data must also be published in open formats. The country has joined a number of open standards bodies and development organisations to enable better understanding of how they can promote standards. They regularly present workshops and write blog posts encouraging standards. The Open Standards Board has also selected 14 mandatory open standards for use in government technology.

The Technology Code of Practice and the Digital Service Standard state that understanding user needs is a core requirement of building and running any government digital service.

They state that open standards should be used to increase compatibility with all stakeholders and give users a more consistent experience when using government services online. They also state that using open standards will help service providers becoming locked into a specific piece of technology or supplier.

The Government Digital Service assures that open standards are used wherever possible through service assessments and the spend controls process.

The Service Standard requires all services to thoroughly "evaluate tools and systems". Service teams are asked to assess and choose the appropriate technology to meet user and organisation needs. This is assessed in a formal service assessment at alpha, beta and before going live. For example, for a live assessment, service teams will be asked to:

- describe the tech stack changes they made during beta and why
- describe the development toolchain changes they made during beta and why
- explain how they're continuing to get value for money from the systems they chose and bought at beta
- explain or demonstrate how they'll check if the service is healthy
- explain the support arrangements that they've set up for live
- explain any decisions they've outsourced and why they chose to do this

All government documents should be published in an open format (ODF or HTML5) to ensure that proprietary software is not needed to interact with government. All websites must be tested in 11 popular web browsers.

3.3 Key enablers

3.3.1 Access to public information

Fourth Open Government National Action Plan

The UK's fourth Open Government National Action Plan 2019-21 (NAP) was published on 28 May 2019, and builds on the previous plans released on September 2011, September 2013, and May 2016.

As one of the first eight founding governments of the Open Government Partnership (OGP), the UK published the first National Action Plan (NAP) for 2012-2013 in September 2011. In October 2013, it was followed by the second National Action Plan (2013-2015) which benefited from an extensive consultation with civil society during the development of the plan via the OGP UK Civil Society Network. The third National Action Plan, which includes new commitments from the Northern Ireland executive, the Scottish government and the Welsh government, introduced reusable unique identifiers to the UK's published government grants data and central procurement data, making the use of data and public money more controllable and transparent.

The UK fourth NAP further increases public participation and helps delivering transformative solutions. It sets out 8 commitments. These include, but are not limited to: the sharing of information on grant schemes and awards with government departments in a standardised and scalable way; the opportunity for citizens and businesses to express their views on the Government's Digital Charter and share best data practices; and a space for deliberation and discussion about sustainable Open Government policies and practises through specific working groups and summit discussions. Overall, the new NAP strengthened access to information and public accountability.

The fourth NAP was developed in dialogue with the UK Open Government Network (OGN), a coalition of active citizens and civil society organisations committed to making government and other public institutions work better for people.

The UK's fifth National Action Plan for 2021-2023 will be launched in 2021. It is being developed in collaboration with the UK's Open Government Network.

3.3.2 eID and Trust Services

GOV.UK Verify eID scheme notified under eIDAS

In August 2018, the UK pre-notified GOV.UK Verify, a nationally-issued eID scheme based on a federation of private identity providers, and became a fully notified scheme in May 2019. This enables people residing in the UK to use their GOV.UK Verify credentials to access public services in other Member States. This makes cross-border interactions easier and more secure for UK-based people. The mutual recognition of eID schemes across Europe is mandated by Regulation (EU) No 910/2014 on electronic identification and trust services for electronic transactions in the internal market (commonly known as the eIDAS Regulation).

3.3.3 Security aspects

National Cyber Security Strategy 2016-2021

The National Cyber Security Strategy 2016 to 2021 laid out the government's plan to make Britain secure and resilient in cyberspace. In order to realise this, the following objectives will be achieved: defend, deter and develop. Additionally, the government will pursue international action and will develop relationships with new partners to build their levels of cyber security and protect UK interests overseas, including NATO, EU and UN. A total of GBP 1.9 billion will be invested over the next five years to transform significantly the UK's cyber security.

Online Harms White Paper

The Online Harms White Paper sets out the government's plans for a world-leading package of online safety measures that also supports innovation and a thriving digital economy. This package comprises legislative and non-legislative measures and will make companies more responsible for their users' safety online, especially children and other vulnerable groups. This will go to full consultation in Spring 2020.

The Digital Charter

The Digital Charter is a rolling programme of work to agree norms and rules for the online world and put them into practice. In some cases, this will be through shifting expectations of behaviour; in some we will need to agree new standards; and in others we may need to update our laws and regulations. Our starting point will be that we will have the same rights and expect the same behaviour online as we do offline.

Code of Practice for providers of online social media platforms

The statutory Code of Practice has been published by the Secretary of State for Digital, Culture, Media and Sport in accordance with Section 103 of the Digital Economy Act 2017.

The Code sets out actions that the government believes providers of social media platforms should take to prevent bullying, insulting, intimidating and humiliating behaviours on their sites. This code of practice does not affect how illegal or unlawful content or conduct is dealt with. It is directed at providers of social media platforms but is also relevant to any sites hosting user-generated content and comments, including review websites, gaming platforms, online marketplaces and the like.

3.3.4 Interconnection of base registries

No political communication has been adopted in this field to date.

3.3.5 eProcurement

No political communication has been adopted in this field to date.

3.4 Domain-specific political communications

Government Digital Inclusion Strategy

The Government Digital Inclusion Strategy set out how government and partners from the public, private and voluntary sectors work together to increase digital inclusion. This means helping people to become capable of using and benefiting from the internet.

In November 2015, the team responsible for this strategy moved to the Department for Culture, Media and Sport (DCMS) from the Cabinet Office's Government Digital Service, as part of a Machinery of Government change. The team now sits within the Digital Economy Unit. Following the team's move, the focus has slightly shifted from Digital Inclusion to Digital Engagement. This reflects a reframing of the policy as primarily a motivational engagement issue.

The Digital Engagement Team has been working to develop new delivery priorities and work areas. The Council will replace the current governance structure of the Sub-Group (to represent government departments) and Delivery Board (to represent non-government organisations), combining members from public, private and voluntary sectors and chaired by the Minister for Culture and Digital Economy. The Council will oversee a number of tasks and groups that will tackle various key issues for digital engagement. Areas for focus are still under development but might involve targeted work with customer groups or wider work to support and encourage people to engage digitally.

The 2014 actions in the Digital Inclusion strategy were about addressing the barriers that have stopped people going online until now and backing initiatives that will make things better. Key progress to date is listed below:

- an Exemplar Services and Identity Assurance policy paper has been developed by the Government Digital Service. This looks to gauge the level of difficulty of a selection of online tasks that would require digital skills to complete
- the UK government through BEIS has been involved in providing support for basic digital skills since 2010, with some GBP 36 million provided to help over 1.5 million individuals gain the basic digital skills needed to allow them to access employment and education opportunities and the wider benefits of being digital
- Civil Service Learning (CSL) has worked to improve the digital capabilities of civil servants: implemented online digital learning resources free on CSL website, publicised the Digital Friends initiative via the CSL website, and looked to set up a task and finish group with cross civil service representation to populate a renewed digital curriculum
- departments have worked hard to ensure their staff have the correct digital capabilities. Across government departments, digital weeks/fortnights have been introduced, along with digital ambassadors and Digital Friends initiatives
- to date, 91 organisations have signed up to the Digital Inclusion Charter and collaborate with government to deliver the Digital Inclusion Strategy. The Digital Inclusion team has worked with these stakeholders to develop products such as the cross-sector Digital Inclusion Outcomes Framework and initiatives like Digital Friends which promotes informal sharing of basic digital skills. The Digital Engagement team has a coordination role in facilitating multi-sector partnerships. The programme of work is continuously evolving. Departments have been partnering with various organisations to deliver outcomes. DWP, for example, has worked with Barclays Digital Eagles and EE Techy Tea Parties. With government coordination, BT and Barclays have partnered to provide free Wi-Fi to over 70 libraries and community centres
- departments have been partnering with various organisations to deliver outcomes. DWP, for example, has worked with Barclays Digital Eagles and EE

- Techy Tea Parties. Outside government, BT and Barclays have partnered to provide free Wi-Fi to libraries and community centres
- the definition of "basic online skills" used for 2014 data (the ability to: send and receive emails, use a search engine, browse the internet, and fill out an online application form) has now been revised, re-termed "basic *digital* skills" and an updated set of measures has been developed. This broader definition of basic digital skills includes five tasks: managing information, communicating, transacting, problem-solving and creating
- work has been completed by departments to support SMEs in developing digital skills and knowledge. The "Small Business Digital Capability Programme" was established to help increase digital skills amongst businesses by supporting them to take action and do more online. BEIS published an evidence review of digital support available "igital Capabilities in SMEs" to provide information on types of businesses who are and are not using technologies and the reasons why; the level of eCommerce among SMEs and plans for engaging with digital technology in the future
- government is committed to supporting voluntary and community groups to address their organisational needs. For example, it is currently running a GBP 20 million fund to support small to medium sized charities to deliver change and secure and enhance their services. Applicants have been supported to lead the development of change plans and that haven't specified area of focus. However, many organisations are expected to focus on addressing capability needs such as digital
- government is also working to increase cross sector volunteering, by encouraging more businesses to allow their staff to volunteer. This will allow charities to access a wide range of professional skills to build their capabilities. Digital is an area that has significant potential, with a number of excellent cross sector partnerships already underway
- a "Digital Inclusion Outcomes Framework" has been developed by the Digital Inclusion Research Working Group. It is a single, flexible template for benchmarking and tracking digital inclusion in the UK and evaluating digital inclusion activities locally. It aims to evidence the wider economic, health and social benefits of digital inclusion.

3.5 Emerging technologies

Artificial Intelligence review

In 2017, the United Kingdom began conducting a new Artificial Intelligence (AI) review led by GDS, in partnership with the Office of Artificial Intelligence, to look at how government could use artificial intelligence, automation and data in new ways to drive public sector productivity and produce economic benefits. The review included technology background, a summary of opportunities, the challenges for using AI in transport, and recommendations as to how government could support AI in transport.

The Government Data Science Partnership

The Government Data Science Partnership is a collaboration between the Government Digital Service (GDS), the Office for National Statistics (ONS) and the Government Office for Science (Cabinet Office). It was formed to help government realise the potential of data science and to support the development of skills and tools to kickstart greater take-up across departments and agencies (including the Data Science Accelerator).

Data Science Accelerator Programme

The Data Science Accelerator is a capability-building programme which gives analysts from across the public sector the opportunity to develop their data science skills (also

linked to the Government Data Science Partnership). They do this by working on real business challenges with the support of experienced mentors. This initiative has trained over 150 people across 67 government & public sector organisations to date. There are five Data Science Accelerator hubs across the UK, in London, Newport, Bristol, Sheffield and Newcastle.

Innovation Strategy & AI Guide

In June 2019, the UK published the Government Technology Innovation Strategy. This marks the first step to coordinate efforts with emerging technologies in government. The Strategy sets out how we can establish the foundations in the public sector so that innovation through emerging technologies can thrive.

The Strategy discusses the foundations under three themes: People; Process; and Data and Technology

- under People, the Strategy addresses how we can recruit and retain specialist professions as well as upskilling our current staff. It also looks at how we can develop leaders who build empowered, multidisciplinary teams and encourage experimentation and proportionate risk-taking in the Civil Service
- under Process, the Strategy discusses how we can ensure that government's procurement and business case processes promote innovation using emerging technologies
- under Data and Technology, the Strategy looks at how we can increase access to useful data and modern, flexible technology components and platforms.

In June 2019, we also published the first guide to using artificial intelligence in the public sector, jointly with the Office for AI. This offers decision-makers in government a practical guide to understand whether AI might be an effective solution to their policy challenge and if so, how to use it appropriately and ethically.

GovTech Catalyst

Launched by the Chancellor in November 2017, the GovTech Catalyst is a £20 million, three-year programme that funds private sector innovators to solve public-sector challenges. Public sector organisations are invited to submit challenges they think might be solved by innovative use of emerging technologies. The programme has three rounds, during each of which five public sector challenges are selected and launched as competitions to the market. All 15 challenges have now been founded.

Data Science

GDS continues to work on developing and deploying data science into government services and operations and building data science capability and data literacy. This can be seen through initiatives such as the establishment of the Government Data Science Partnership, a joint project between the Office for National Statistics (ONS), GDS and the Government Office for Science (GO-Science).

The partnership developed an award-winning Data Science Accelerator scheme (Future Policy Award 2018) with nearly 200 analysts now trained across the UK, with regional hubs based in London, Manchester, Newcastle, Newport, Sheffield and Taunton.

This is a capability-building programme that gives analysts from across the public sector the opportunity to develop their data science skills. It is supported by the Government Digital Service (GDS), the Office for National Statistics and the Government Office for Science and Civil Service analytical professions (statistics, economics, operational research and social research).



4 Digital Public Administration Legislation

4.1 Specific legislation on digital public administration

Digital Economy Act 2017

The Digital Economy Act 2017, announced in the Queen's Speech in May 2016, implemented a number of government commitments on the digital economy. Despite the fact that the UK stands out as a well-connected nation (over nine out ten homes and businesses are able to access superfast broadband), the Act aimed to put in place the foundation for leading the way in the digital economy. The Act had five main objectives:

- fast broadband and support for consumers;
- enabling digital infrastructure;
- protecting intellectual property;
- government digital services; and
- protecting citizens in the digital world.

4.2 Interoperability

No legislation has been adopted in this field to date.

4.3 Key enablers

4.3.1 Access to public information

Re-use of Public Sector Information Regulations

The Re-use of Public Sector Information Regulations 2015, which came into force on 18 July 2015, implements into UK law the European Directive 2013/37/EU of the European Parliament and of the Council of 26 June 2013 on the re-use of public sector information (PSI Directive).

Freedom of Information Act

The Freedom of Information Act 2000 (FOIA) received Royal Assent on 30 November 2000 and came fully into force on 1 January 2005. It provided clear statutory rights for any member of the public to apply for access to information held by bodies across the public sector, together with a strong enforcement regime. A new Information Commissioner's Office and an Information Tribunal, with wide powers to enforce the rights created, were established by the Act, along with a duty imposed on public authorities to adopt a scheme for the publication of information. The legislation applies to a wide range of public authorities, including parliament, government departments, local authorities and other entities in England, Northern Ireland and Wales. Scotland had a specific Freedom of Information (Scotland) Act 2002, which made provision for the disclosure of information held by Scottish public authorities.

4.3.2 eID and Trust Services

Electronic Signatures Regulations

The Act was completed by the Electronic Signatures Regulations 2002, which implemented in UK law the European Regulation on electronic identification and trust services for electronic transactions in the internal market on a Community framework for electronic signatures (Regulation No 910/2014).

4.3.3 Security aspects

Data Protection Bill

The Data Protection Bill was introduced to the House of Lords on 13 September 2017. It replaced the Data Protection Act 1998 with a new law that provided a comprehensive and modern framework for data protection in the UK, with stronger sanction for malpractice. In particular, it set new standards for protecting general data, in accordance with EU's General Data Protection Regulation (GDPR).

Digital Economy Act

Among other things, the Act aimed to: make provision about electronic communications infrastructure and services; provide for restricting access to online pornography; make provision about protection of intellectual property in connection with electronic communications; and make provision about data-sharing. With its adoption, the Act replaced the Digital Economy Act from 2010.

4.3.4 Interconnection of base registries

UK Registries

The United Kingdom's base registries are grounded in separate pieces of legislation, pertaining explicitly to the activities of each specific base registry. It is equally important to mention that the national registries in the UK, as well as the laws regulating their activities, pertain mostly to England and Wales, while Scotland and Northern Ireland keep their separate records defined by their laws.

Person Registry

The Births and Deaths Registration Act 1953 defines the Person Registry, known in the UK as the General Registry. The Act states that births and deaths shall be registered in the registry of the sub-district in which the event occurred. Furthermore, the legislation explicitly states which persons are qualified to register the birth or death of the person concerned. Additionally, the Act sets out the maximum length of time within which the life event must be officially registered. In the case of births, the maximum time for proper registration is three months from the day of birth, while for deaths the maximum time for registration is 12 months from the date of death.

Vehicle Registry

The Vehicle Registry is regulated by the Vehicle and Driving Licences Act 1969. The Act does not define the registry as such. However, it provides users with rules and requirements about the licencing, registration and vehicles construction, the payment of duties, drivers licencing, and related matters.

Business Registry

The Business Registry's principal legal provision is the Companies Act 2006. Amidst a large number of provisions, the Companies Act states the requirements for the registration of a company as well as the effects of the registration on the company. The principal information required for registration of a company includes the company's name, location, type of company and whether it is to be private or public. The law also states which registry will enter and keep the information of the company, which is most commonly the registry of the sub-district in which the company is located. The most relevant effect of registering a company pertains to making the body corporate capable of exercising all the functions of a company incorporated in the registry.

Land Registry

The Land Registry is regulated by the Land Registration Act. The Act contains rules and provisions about the information included in the registry, the form in which information included in the registry is to be kept, and the arrangement of that information. Furthermore, the law states who is in charge of the registry as well as how the conduct of business in the Land Registry is to be carried out.

4.3.5 eProcurement

Public Contracts Regulations

The use of electronic means in the public procurement process is regulated by the Public Contracts Regulations 2015 (Statutory Instrument 2015 No.102), which came into force on 26 February 2015. It implemented European Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC. The regulations applies to England, Wales and Northern Ireland. Corresponding legislation for Scotland was included in the Public Contracts Regulations (2012) and in supplementary public procurement legislation available on the website of the Scottish Executive. The relevant European Utility Contracts Directive (2004/17/EC) regarding procedures of entities operating in the water, energy, transport and postal services sectors, was implemented by the Utilities Contracts Regulations 2016 for England, Wales and Northern Ireland and the Utilities Contracts (Scotland) Regulations 2006 (Scottish Statutory Instrument 2006 No. 2) for Scotland.

eInvoicing

Currently there is no legislation in place for eInvoicing in the United Kingdom. Nevertheless, it is recommended (not mandatory) for economic operators for submitting, and central, regional and local contracting authorities for receiving and processing.

4.4 Domain-specific legislation

Electronic Commerce Regulations

Electronic Commerce Regulations 2002 transposed into UK law the majority of the provisions of the EU Electronic Commerce Directive (2000/31/EC) on certain legal aspects of information society services, and electronic commerce in particular, in the internal market.

The Electronic Commerce Regulations (Extension)

This is a supplementary regulation to ensure that eCommerce Regulations apply to the legislation which was amended by the Copyright and Related Rights Regulations 2003. These also apply to the eCommerce Regulations to the Performances Order 2003 and the Copyright Order 2003.

4.5 Emerging technologies

No legislation has been adopted in this field to date.



5 Digital Public Administration Governance

5.1 National

5.1.1 Policy

Cabinet Office

The Cabinet Office holds overall responsibility for the government's efficiency and reform agenda, with the overarching purpose to improve government function. eGovernment resides in the Cabinet Office under the political responsibility of the Minister for the Cabinet Office. The Minister for Implementation in the Cabinet Office is responsible for eGovernment.



The Rt Hon Michael Gove MPChancellor of the Duchy of Lancaster & Minister for the Cabinet Office

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Source: https://www.gov.uk/



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Lord Theodore Agnew

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Minister of State for Digital and Culture

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Source: https://www.gov.uk/

Government Digital Service

The Government Digital Service was established in response to Martha Lane Fox's report, "Directgov 2010 and beyond: revolution not evolution", as the central team in Cabinet Office in control of the overall user experience across all digital channels. Responsibilities of the GDS include:

- running the GOV.UK website the best place to find government services and information;
- working with the rest of government to make public services simpler and better;
- building cross-government platforms like GOV.UK Verify a way to confirm users are who they say they are;
- working to ensure government data is good data and more usable for all;
- helping departments make better-informed decisions when they need to buy technology;
- helping departments provide their staff with better value technology that is more of a tool and less of a barrier.

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Source: https://www.gov.uk/

5.1.2 Coordination

NHSX a joint organisation for digital, data and technology

On 19 February 2019, the Department of Health and Social Care (DHSC) announced the creation of NHSX, a joint unit between DHSC, NHS England and NHS Improvement. It is tasked with driving forward digital transformation and delivery across the health service. It will be similar to the creation of GDS, bringing together all the levers of policy, implementation and change for health for the first time.

NHSX will be working closely with GDS and other central government functions to learn from what they have done and ensure there is continued alignment with the Digital, Data and Technology Profession across government.

GDS will be able to assist NHSX in developing guidance and standards in line with the Digital Service Standard and the Technology Code of Practice, and for any technical advice in areas such as common platforms and components (e.g. Pay and Notify), capability and skills, emerging technology, spend controls, and procurement.

5.1.3 Implementation

Technology Leaders Network

The Technology Leaders Network was established in October 2013 to lead technology across government, ensuring that government is equipped with the right technology to deliver great digital services.

The network is run by the Government Digital Service and is made up of a Departmental Technology Leader from each main government department, plus Technology Leaders from each of the Devolved Administrations. Technology Leaders and Digital Leaders are expected to work closely together.

Digital Leaders Network

The Digital Leaders Network was established in early 2012 to drive forward the digital agenda across government. The Network is run by the Government Digital Service and is made up of a departmental Digital Leader from each main government department, plus Digital Leaders from each of the Devolved Administrations. Technology Leaders and Digital leaders are expected to work closely together.

Data Leaders Network

The Data Leaders Network was established in 2015 to ensure that departments' approach to the use and management of data properly enables the delivery of government policy and operational objectives. The Data Leaders Network meets monthly.

5.1.4 Support

No responsible organisations have been reported to date.

5.1.5 Interoperability coordination

Government Digital Service

The body in charge of interoperability activities for the UK is the Government Digital Service, which is part of the Cabinet Office.

5.1.6 Base registry coordination

Registry Design Authority

The Registry Design Authority is the body in charge to ensure the realisation of an interconnected environment between registries. It became necessary to incorporate this idea into the initial phase of designing the registry. As a part of Government Digital Services (GDS), the Registry Design Authority is charged with guaranteeing that registries accurately reflect the interconnectedness of government data. In doing so, the Authority has to determine which registries get built, which implies also defining where the new registry will be placed within the linked ecosystem of registries, establishing whether the registry data constitutes a "minimum viable dataset" and ensuring that data kept is accurate and up-to-date so that it is considered good enough to build services, as well as determining which part of government is best placed to run the new registry.

Department for Business, Energy and Industrial Strategy

The Business and Land Registries belongs to the Department for Business, Energy and Industrial Strategy and handles business and land data accordingly. The land registry serves as an excellent example to demonstrate the gathering of data from local offices, which are then made available through the Land Registry's portal. The Land Registry in the UK registers ownership of property and as such is one of the largest property databases in Europe. It has 14 offices, with its head office in Croydon. It is self-sufficient regarding funding, as it receives no government funding, but rather finances its operations from registration and search fees. Each local office has an Area Manager, a Local Land Registrar, an Operations Manager and an Integrity Manager, while the national office is headed by the Chief Land Registrar.

Department of Transport

The Vehicle Registry belongs to the Department of Transport and handles vehicles data.

Revenue Department

The Tax Registry belongs to the Revenue Department and handles Tax data. The registry governance is mostly carried out through Chief Registrars, who are the heads of the particular registries, as well as agencies in charge of maintaining it. The Tax Registry, which is maintained by Her Majesty's Revenue and Customs, is divided into four operational groups: Personal tax, Benefits and Credits, Business tax and Enforcement and Compliance.

5.1.7 Audit

National Audit Office (NAO)

The NAO is an independent body in charge of scrutinising public spending on behalf of parliament. It audits the accounts of all government departments and agencies, as well as a wide range of other public bodies, and reports to parliament on the economy, efficiency and effectiveness with which government bodies employ public money to perform their duties and provide services. Over the past years, the NAO has published several reports related to eGovernment or to departmental ICT projects. Government spending, including eGovernment, is also inspected by the Public Accounts Committee (PAC) of the House of Commons. As with the NAO, the PAC has published several reports in recent years related to eGovernment, or specific IT projects.

Office for Budget Responsibility

The Office for Budget Responsibility was formed in May 2010 to carry out an independent assessment of the public finances and the economy for each pre-budget and budget report. It has four main roles: to produce forecasts for the economy and public finances; to judge progress towards the government's fiscal targets; to assess the long-term sustainability of the public finances; and, to scrutinise the Treasury's costing of budget measures.

5.1.8 Data Protection

The Information Commissioner's Office

The Information Commissioner is an independent supervisory authority in charge of enforcing and overseeing legislation in data protection/privacy and freedom of information. The Commissioner has a range of duties, including the promotion of good information handling and the encouragement of codes of practice for data controllers regarding the collection and processing of personal data. The Information Commissioner directly reports to the parliament. Three regional offices were established in 2003 as a direct response to the devolution process in Northern Ireland, Scotland and Wales.

5.2 Subnational (federal, regional and local)

5.2.1 Policy

Ministry of Housing Communities and Local Government (MHCLG)

The MHCLG is in charge of regional and local eGovernment policies. It promotes community cohesion and equality, as well as the responsibility for housing, urban regeneration, planning and local government.

Public Service Leadership Group - Wales

The Public Service Leadership Group provides leadership for collaboration, driving the pace of improvement in services for Welsh citizens. Chaired by the Minister for Local Government and Communities, the group focuses on ways to improve efficiency and stimulate innovation across public services.

Office of the Chief Information Officer (OCIO) - Wales

OCIO is responsible for leading and co-ordinating the strategy and design for the use of information technology across the public sector. It also manages IT quality assurance and governance.

Delivery and Innovation Division (DID) - Northern Ireland

The Delivery and Innovation Division in the Department of Finance and Personnel provides a range of specialist business services to Northern Ireland's civil service, which include eGovernment policy, strategic programmes, business consultancy and ICT shared services. DID is an amalgamation of the former eGovernment Unit, Business Development Service and Public Service Improvement Unit. The Division also offers customer-facing telephony and online services to the citizens of Northern Ireland.

5.2.2 Coordination

Ministry for Housing Communities and Local Government (MHCLG)

The MHCLG is tasked with coordinating local eGovernment efforts. Among the goals promoted through eGovernance is decentralisation, local government transparency and the promotion of the Capital and Assets Pathfinder Programme.

5.2.3 Implementation

Local Councils

Local Councils are responsible for the implementation of eGovernment projects within the framework of their competences, including crime, education, employment, citizen rights, health and tax benefits.

5.2.4 Support

Ministry of Housing, Communities and Local Government (MHCLG)

Formerly known as Department for Communities and Local Government (CLG), the renamed Ministry intends to give councils broader powers to serve their communities and improve local areas. Support is being given on how best to take this forward.

Local Government Improvement and Development

Local Government Improvement and Development supports improvement and innovation in local government. It works by supporting councils in developing good practice and partnerships, through networks, online communities of practice and web resources.

Society of IT Management (SOCITM)

SOCITM is the professional association for ICT managers working in and for the public sector. SOCITM offers networking and peer support, professional development, and access to research and consultancy on a wide range of policy and technology issues. It is a significant provider of ICT and eGovernment support to local authorities.

Local Government Association (LGA)

The LGA represents all local authorities in England and Wales. It supports local authorities' efforts to meet the challenges set, to deliver responsive services to their communities and places significant emphasis on the role of eGovernment in delivering this vision.

Customer First - Scotland

At local government level, the "Customer First" programme delivers a number of services that support the Scottish government. Managed by the Scottish government and Scottish local authorities, it aims to deliver enhanced public services by re-designing them around customers' needs.

5.2.5 Interoperability coordination

No responsible body has been reported to date.

5.2.6 Base registry coordination

GOV.UK Registers

GOV.UK Registers provides structured datasets of government information to help users build services on a high-quality data infrastructure.

Register register

In GOV.UK Registers, there is the Register register that keeps the list of GOV.UK Registers. The UK Government is shortly about to launch the API store which will map all registers, a section of other data sets and APIs across government. They are currently working on their data standards, relating to tabular data and unique identifiers, to improve interoperability between data sets. The Government Data Standard will allow more data to be interoperable by allowing easy access to data in spreadsheets through using consistent schemas and tagging. This will allow government data sets to speak to each other and should also enhance the benefits/transformation that our open data publishing brings, while also enabling more strategies like Tell Us Once (a DWP initiative) to be successful across government.

5.2.7 Audit

Local audit framework (replacing the Audit Commission)

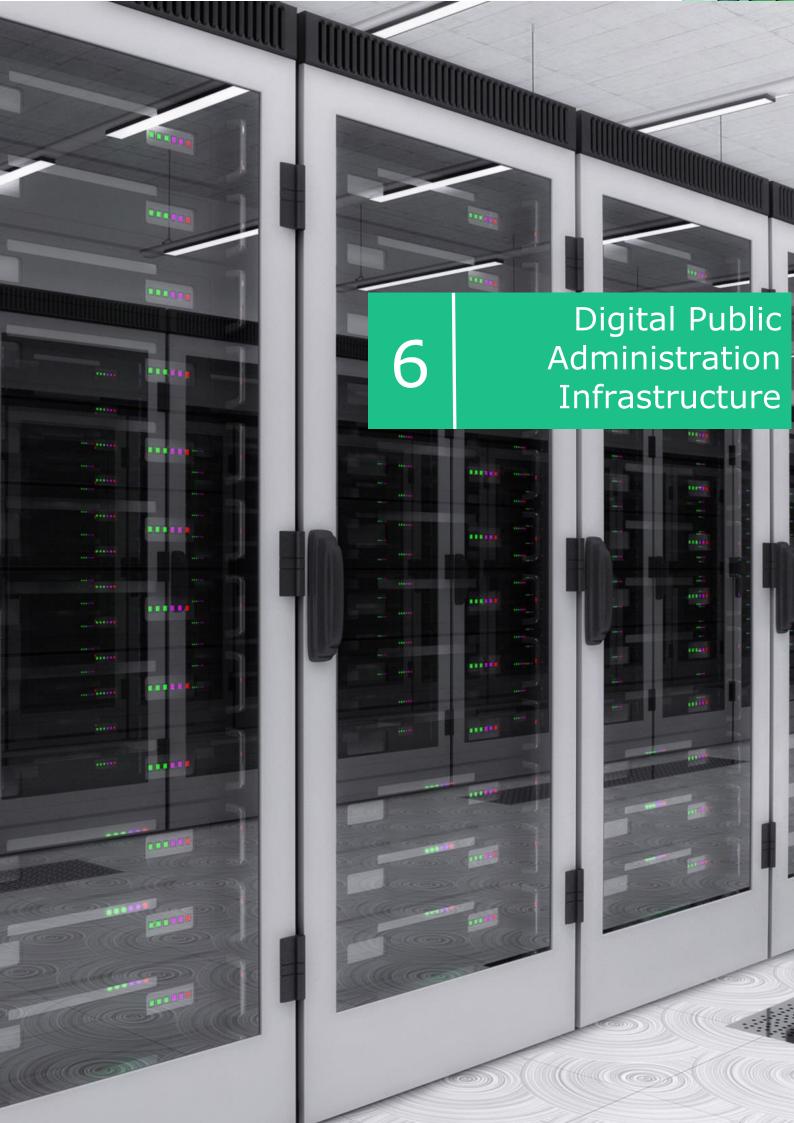
Following the closure of the Audit Commission, a new local audit framework came into effect from 1 April 2015. The Audit Commission was replaced by Public Sector Audit Appointments Ltd, the National Audit Office, the Financial Reporting Council and the Cabinet Office. More information about the transfer of functions of the Audit Commission is available here.

Prior to April 2015, the Audit Commission was appointed for this function as a public corporation set up in 1983 to protect the public purse. The Commission was appointing auditors to councils and other local public services in England and overseeing their work. It was also offering public bodies help to manage financial challenges by provision of authoritative, unbiased, evidence-based analysis and advice. The Commission also ran the National Fraud Initiative (now assumed by the Cabinet Office), which conducts data matching exercises to assist in the prevention and detection of fraud.

5.2.8 Data Protection

All Departments and organisations

General Data Protection Regulation (GDPR) and the Data Protection Act 2018: All departments and organisations are responsible for their own implementation of the act.



6 Digital Public Administration Infrastructure

6.1 Portals

6.1.1 National Portals

GOV.UK

GOV.UK is the website for the UK government. It provides people and businesses in England and Wales with easy and effective digital access to all public services and related information. The site it maintained by Government Digital Service.

The site became available in 2012 and provides a single point of access to HM government services, replacing Directgov and Business Link, as well as the individual websites of hundreds of government departments and public bodies. Over the last 7 years, technology and user expectations have changed. GOV.UK will not continue to rely on a reactive engagement with users, but it will shift to an offering that is proactive. On a consent-based model, it will inform users of things they need to do, helping them understand the things they may not realise are relevant to them, guiding them through complex life events and getting them to the next stage in their task. There is a vision and a plan to transform GOV.UK, and a model for how to do this is being developed.

Data.gov.uk

As a result of the National Action Plans, the United Kingdom launched a beta version of its Open Data Portal in 2010, data.gov.uk, which is a catalogue service which makes non-personal UK government data available as open data. Data.gov.uk covers 20 971 government datasets from 1 357 central and local government entities. The catalogue also acts as the delivery mechanism for the implementation of the INSPIRE geospatial directive and provides the means to citizens to request data that has not been made public yet.

Digital Marketplace

The Digital Marketplace is the single place that all public sector organisations can use to find cloud-based services, specialists who can work on digital projects and physical data centre space.

The Digital Marketplace is an online platform that all public sector organisations can use to find and buy cloud-based services (e.g. web hosting or site analytics), suppliers who can help deliver digital projects (e.g. providing expertise in areas such as design, development, product management and user research) and physical data centre space for high security and legacy systems that aren't ready to be migrated to a cloud system.

Through the Digital Marketplace, GDS and the Crown Commercial Service (CCS) are transforming the way the public sector buys digital and technology services, making it simpler, clearer and faster to buy what it needs.

The Digital Marketplace provides a fair and transparent way for suppliers of all sizes to offer their services to the UK public sector. The process of applying to become a supplier has also been made simpler and faster so more businesses of all sizes can work across the public sector, creating new jobs and economic growth.

Total sales have reached GBP 5.87 billion in the last three financial years (April 2017 - March 2020) and are continuing to grow. Of this total, GBP 2.35 billion, 40% by value and 80% by volume, have been with SMEs.

GOV.UK Verify

GOV.UK Verify is the safe and secure way for citizens to prove who they are online. It's designed to ensure that citizens and services can be confident their identity is protected. To date, citizens who create a Verify account are able to quickly and easily access 22 government services. These include services such as Check your income tax, get your State Pension, report a medical condition that affects your driving and Sign your mortgage deed. Currently, over six million people have created a Verify account to perform over ten million secure transactions with government.

GOV.UK Pay

GOV.UK Pay is a secure payment service that is easy to integrate with and designed to meet the Digital Service Standard. It was launched in September 2016 and makes it easy for people to pay government securely online, reducing the time and hassle of doing business with government, and removing the need for government to buy or build payment systems multiple times.

GOV.UK Notify

GOV.UK Notify went live in July 2016 with the aim of making it easier for people working in central government, a local authority, or the National Health Service (NHS) to keep citizens updated through text messages, emails or letters. The main objective is twofold: on the one hand, people shall not need to call government; on the other hand, government should be able to reduce the amount spent on contact centres. At the moment, GOV.UK Notify is used by 2112 services in the UK.

GOV.UK Design System

GOV.UK Design System is a way to bring together resources (components, styles and patterns) from across GDS and government into one place, so it's easier for service teams across government to access what they need to build user-centred digital services. GDS has also been building a cross-government community of Design System users and contributors who will help to maintain and develop it.

Performance Platform

The Performance Platform collects and visualises performance data about government services for the use of businesses and citizens.

Government Gateway

The Government Gateway is the website used by businesses and citizens to register for online government services, both at the national and local level. Services on the Government Gateway are gradually being moved to replacement systems.

Excellence Gateway portal

The Excellence Gateway is a complete national online service for practitioners at all levels in the learning and skills sector in England. It provides practical help for improving daily work and aims at promoting innovations in teaching and learning. Furthermore, this portal enables practitioners to share both professional knowledge, as well as examples of effective practice with other users.

6.1.2 Subnational Portals

No infrastructures in this field have been reported to date.

6.2 Networks

Public Services Network (PSN)

The Public Services Network (PSN) is the government's high-performance network, which helps public sector organisations work together, reduce duplication and share resources. It provides a single, more capable and open network, which enables government to safely share services and collaborate in more efficient and effective ways. PSN currently connects some 600 organisations across government, including central government departments and every local authority and council across England, Scotland and Wales.

PSN connects to the NHS N3 network and replaces a number of legacy government networks including the Government Secure Intranet (GSi) family, the Criminal Justice Extranet (CJX) and the Police National Network (PNN). Customers can buy PSN and other network services from a range of qualifying providers on the Network Services Framework.

Since responsibility for PSN moved to GDS, the team has been working on ways to make things simpler and clearer for both customers and suppliers in the PSN community. The team is currently testing a new compliance process, developed with the PSN community, which will maintain PSN's security while making it easier for users to exploit the commercial, strategic and operational advantages of a secure, resilient, multi-supplier network. Additionally, the team is looking at ways of ensuring information can seamlessly travel from one end of PSN to the other and simplifying connectivity, which will ensure everybody who regularly uses public sector data can communicate and work together. This includes schools, doctors' surgeries, pharmacies, emergency services, hospitals and charities large and small.

Government Secure Intranet (GSi)

The GSi are a legacy family of networks comprised of the Government Secure Intranet (GSI), the Government Connect Secure Extranet (GCSx) and the Government Secure Extranet (GSX). These networks provide a secure and reliable connection to the Internet, file transfer and search facilities, directory services, web publishing and email both within the GSi community and over the Internet.

These networks were offered by the Crown Commercial Service (formerly the Government Procurement Service and before that "Buying Solutions") and delivered through a partnership with Vodafone (originally Cable and Wireless) under the GSi Framework (2008 to 2011) and latterly the GSi Convergence Framework (GCF) (August 2011 to August 2015). Customers used the GCF Framework to transition from their GSi network to the Public Services Network (PSN), and chose from a range of PSN service providers in the process. Beyond August 2015, GCF customers continue to consume some core services through the GCF framework for the duration of their individual contracts.

Trans European Services for Telematics between Administrations

The UK uses the Trans European Services for Telematics between Administrations (TESTA) network as the main cross border infrastructure to communicate digitally among the EU agencies, institutions and Member States.

6.3 Data Exchange

Find Open Data

The Find Open Data service helps people find and use open government data and supports government publishers to maintain data. It works towards the commitment in the 2017 Government Transformation Strategy to "improving data discovery tools for

users both within and beyond government". The UK has released tens of thousands of central government, local authority and public body datasets to help build products and services. At the time of writing, there are currently 2 000 people accessing datasets published by 2 000 publishers.

Open Standards Board

The Open Standards Board works with the Cabinet Office and is accountable for transparent selection and implementation of open standards. The GDS Open Standards team has been successful in ensuring that government departments publish datasets in open formats. The Open Standards Board has approved 14 data standards to ensure as wide a range of data as possible is presented as "open data". In the last quarter, GOV.UK recorded over 1 million downloads of files in an open data format.

Performance Platform

The Government is committed to collecting and publishing operational performance data. The Performance Platform covers over 780 high-volume services which have gone through service assessments and are therefore required by the Digital Service Standard to publish their performance data. As well as supporting decision-making across government, the Performance Platform has contributed to the UK's leading position on international open data rankings and the ability of external actors to hold government to account. GDS is refreshing the platform to include data on all the channels through which citizens access services (rather than just online channels) and to bring the platform into line with recent technical and design standards.

Standards Hub website – Open standards

The Standards Hub website enables the public sector, industry, academics and other interested parties to help the UK government to select standards for software interoperability, data and document formats in government IT. These support the implementation of the open standards principles and are applied across government to make services better for users and cheaper to run.

'GovTalk' website – eGovernment policies and standards

The technology code of practice (policy and guidance) is available on the GovTalk website.

For projects to proceed they must meet the elements described in the technology code of practice, part of the Service Design Manual. The code of practice includes instructions on open data, open standards, cloud services, networks, and hosting. It also provides links to government platforms for publishing, identity verification, performance monitoring and procurement.

Viewing government documents

The government documents format standards set out the document file formats that are expected to be used across all government bodies. Government will begin using formats that will ensure that citizens, businesses, and government officials will be able to use the applications that best meet their needs when they are viewing or working on documents together.

Once departments have adopted these open standards:

- citizens, businesses and voluntary organisations will no longer need specialist software to open or work with government documents;
- people working in government will be able to share and work with documents in the same format, reducing problems when they move between formats; and
- government organisations will be able to choose the most suitable and costeffective applications, knowing their documents will work for people inside and outside of government.

The selected standards, which are compatible with commonly used document applications, are:

■ HTML5 for viewing online through a browser; and PDF/A must be used for static versions of documents produced for download and archiving that are not intended for editing. These can be PDF/A-1 or PDF/A-2.

Government Service Design Manual

The Government Service Manual aims to help government teams create and run great digital services that meet the Digital Service Standard. The Digital Service Standard is a set of 18 criteria used to check whether a service is good enough for public use.

6.4 eID and Trust Services

GOV.UK Verify

Gov.UK Verify allows individuals to prove who they are when accessing online public services in the UK. With GOV.UK Verify, users set up an account with a certified private sector identity provider, who checks their identity. The user can then use that to assert their identity every time they access a government service. There is more information about GOV.UK Verify above, and updates are regularly published on the blog. GOV.UK Verify service is continuously improved in order to support departments' transformation plans. In addition to continuing with the rollout of GOV.UK Verify across central government, the wider applications for GOV.UK Verify for secure citizen identity verification in both the wider public and private sectors are also explored.

Government Gateway can also be used for authentication for some online services, particularly by businesses.

The UK digital identity scheme GOV.UK Verify met the September 2018 deadline for compliance with the EU eIDAS Regulation, allowing certain EU digital identity schemes to be accepted to access online UK public services in scope of the Regulation. The GOV.UK Verify meets also the requirements for a "notified" identity scheme set by the eIDAS Regulation.

Global system for checking the fingerprints of visa applicants

Completed in January 2008, the system currently covers visa applications from 133 countries, approximately 75% of the world's population. Biometric cross-checks with UK databases have helped the Home Office identify several cases of identity fraud.

Employee Authentication Service (EAS) project

EAS is a cross-government project which enables authorised public employees to access sensitive information safely and securely. It is an example of how the re-use of existing technology can contribute to significant cost savings to central and local government.

6.5 eProcurement

Digital Marketplace

The Digital Marketplace, along with the Crown Commercial Service, is an online platform that public sector organisations can use to find and buy cloud-based services, digital project suppliers, and physical data centre space. The Upcoming Global Digital Marketplace Programme, funded by the FCO's Global Anti-Corruption Programme to reduce international corruption and corruption in public procurement is one of the UK government's international priorities over the coming years.

In 2016/17, frameworks available through the Digital Marketplace contributed towards CCS delivering GBP 725 million in savings, including commercial benefits for taxpayers. In 2015/16, Digital Marketplace contributed to GBP 521 million in savings.

Through the Digital Marketplace, launched in November 2014, GDS and the CCS are transforming the way the public sector buys digital and technology services, making the whole process simpler, clearer and faster.

The Digital Marketplace provides a fair and transparent way for suppliers of all sizes to offer their services to the UK public sector. The process of applying to become a supplier has also been made simpler and faster so more businesses of all sizes can work across the public sector.

The service has given small and medium-sized enterprises (SMEs) better access to the public sector and has helped drive supplier competition.

The Digital Marketplace has a symbiotic relationship with the GDS Spend Controls Team, ensuring the correct approach to market is used, and thereby saving departments time and money.

Crown Commercial Service

The Crown Commercial Service (CCS) (formerly the Government Procurement Service and before that "Buying Solutions") brings together policy, advice and direct buying; providing commercial services to the public sector and saving money for the taxpayer. The Crown Commercial Services are responsible for the management of the procurement of common goods and services, improvement of the supplier and contract management across government, increase in savings for the taxpayers by the centralisation of the buying requirements for common goods and services and bringing together of smaller projects, as well as leading the procurement policy on behalf of the UK government. The governance of the Crown Commercial Service is further detailed here.

Value Wales platform

The Wales Procurement Policy Statement sets out the procurement practices and actions required of all public sector organisations in Wales. In this regard, Value Wales helps the Welsh public sector realise improved value for money through "smarter procurement" in the following manner: increases in savings through collaboration, improvements of process efficiency especially through use of technology, protection of the economy by encouraging smaller and more local suppliers and seeking reinvestment in local communities and by building of procurement capability.

The platform includes a comprehensive suite of eProcurement tools and associated support services such as Value Wales - ePurchasing and Value Wales - Procurement Route Planner. The service is delivered in a modular format to meet the needs of the Welsh public sector and their suppliers.

Scotland eCommerce

The effective use of technology is at the heart of the procurement reform and Scottish Procurement is leading a number of core initiatives to deliver value for money and to contribute to the Scottish economy.

The Scottish government's eCommerce Shared Service provides possible solutions which assist both the public and private sector streamline the way business is conducted. The tools include Public Contracts Scotland (PCS) the national advertising portal for all contracting opportunities across the Scottish public sector.

Public Contracts Scotland Tenders provide buying organisations with a set of web-based collaborative procurement tools including eTendering and eEvaluation. The standard pre-qualification questionnaire assists buyers to reduce the inconsistency in supplier selection.

6.6 ePayment

GOV.UK Pay

GOV.UK Pay is a free and secure online payment service for government and public sector organisations.

6.7 Knowledge Management

Go On service

The Go On service converts increasing numbers of people into confident Internet users, including the disadvantaged and the digitally excluded. More importantly, its guidance modules have enabled people to explore the benefits of the Web, whether to save money, find a job or use public services.

Criminal Justice eSystems

Justice is served by a modern IT infrastructure and case management system. Information on the administration and regulation of the justice system in England and Wales can be found on the justice.gov.uk website, which is aimed at those working within and reliant on information produced by a number of different bodies belonging to the judicial system. The Criminal Justice Secure eMail, serves over 400 000 users and 9 000 organisations and departments, processing around 3 000 000 secure messages each month.

A dedicated "Guidance" section of justice.gov.uk for members of the judiciary, legal practitioners and other interested professionals covers a wide range of policy areas, including freedom of information, elections and human rights.

The HM Revenue & Customs

The HM Revenue & Customs is the tax authority in the UK. Services cover all aspects of taxation, including individuals and employees, employers, businesses and corporations. Citizens and businesses are provided with the full list of HMRC online services.

6.8 Cross-border platforms

No particular infrastructure has been reported in this field to date.

6.9 Base Registries

Modelling registry data

The United Kingdom is moving forward with an interesting prototype which deals with modelling registry data, in particular for open registries. The authority in charge of maintaining and updating the guidelines is called the Registries Design Authority and is part of the Government Digital Services (GDS). The approach to modelling data in a new registry consists of naming conventions for registries and fields, appropriate data type usage, support for linking registries, privacy protection, extensibility and finally semantics and metadata. In the case of the UK, the main vocabulary used for listing datasets in the open data port, data.gov.uk, is DCAT.

Furthermore, in the UK registries are clearly defined as being open, closed, shared and private, and it is the nature of the registries which defines what services are appropriate for it. An example of a service designed to exchange personal data is the Tell Us Once service, which allows the reporting of birth or death to be carried out once, yet is automatically distributed to the appropriate government organisations. The personal data entered for the purpose of the service is held for a maximum of 35 days, after which it is deleted to protect the person's data. Additional resources have also been

created by Government Digital Service (GDS), which have as their objective the facilitation of building registries and services such as the ones mentioned above.

Register register

Another important item introduced by the UK is the Register register. Even though it is currently running in a beta phase and contains only six entries, it will certainly prove to be an extremely useful tool for the management of registries in the future.

Company Registry

The Company Registry administered by Companies House should be the single, authoritative place to find data directly related to a limited company such as the date it was formed and the date it was dissolved and a link to the registered office.



7 Cross-border Digital Public Administration Services for Citizens and Businesses

Further to the information on national digital public services provided in the previous chapters, this final chapter presents an overview of the basic cross-border public services provided to citizens and businesses in other European countries. Your Europe is taken as reference, as it is the EU one-stop shop which aims to simplify the life of both citizens and businesses by avoiding unnecessary inconvenience and red tape in regard to 'life and travel', as well as 'doing business' abroad. In order to do so, Your Europe offers information on basic rights under EU law, but also on how these rights are implemented in each individual country (where information has been provided by the national authorities). Free email or telephone contact with EU assistance services, to get more personalised or detailed help and advice is also available.

Please note that, in most cases, the EU rights described in Your Europe apply to all EU member countries plus Iceland, Liechtenstein and Norway, and sometimes to Switzerland. Information on Your Europe is provided by the relevant departments of the European Commission and complemented by content provided by the authorities of every country it covers. As the website consists of two sections - one for citizens and one for businesses, both managed by DG Internal Market, Industry, Entrepreneurship and SMEs (DG GROW) - below the main groups of services for each section are listed.

7.1 Life and Travel

For citizens, the following groups of services can be found on the website:

- Travel (e.g. Documents needed for travelling in Europe);
- Work and retirement (e.g. Unemployment and Benefits);
- Vehicles (e.g. Registration);
- Residence formalities (e.g. Elections abroad);
- Education and youth (e.g. Researchers);
- Health (e.g. Medical Treatment abroad);
- Family (e.g. Couples);
- Consumers (e.g. Shopping).

7.2 Doing Business

Regarding businesses, the groups of services on the website concern:

- Running a business (e.g. Developing a business);
- Taxation (e.g. Business tax);
- Selling in the EU (e.g. Public contracts);
- Human Resources (e.g. Employment contracts);
- Product requirements (e.g. Standards);
- Financing and Funding (e.g. Accounting);
- Dealing with Customers (e.g. Data protection).

The Digital Public Administration Factsheets

The factsheets present an overview of the state and progress of Digital Public Administration and Interoperability within European countries.

The factsheets are published on the Joinup platform, which is a joint initiative by the Directorate General for Informatics (DG DIGIT) and the Directorate General for Communications Networks, Content & Technology (DG CONNECT). This factsheet received valuable contribution from Rhian Jones, Government Digital Service, Cabinet Office.



 \mathbf{W} The Digital Public Administration factsheets are prepared for the European Commission by Wavestone.

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ISA² is a EUR 131 million programme of the European Commission which develops digital solutions that enable interoperable cross-border and cross-sector public services, for the benefit of public administrations, businesses and citizens across the EU.

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