



The UK's Digital Strategy - BCS Briefing

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BCS

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This document

This is the BCS briefing on the UK’s Digital Strategy¹.

The strategy was published on June 13, 2022. It covers the following areas:

- Digital foundations
- Ideas and intellectual property
- Digital skills and talent
- Financing digital growth
- Spreading prosperity and levelling up
- Enhancing the UK’s place in the world

For the most part, the Digital Strategy brings together in one document policy initiatives on digital and data driven technologies that were previously announced in other national strategies, such as the [National Innovation Strategy](#), [National Data Strategy](#), [National Artificial Intelligence Strategy](#), and the [Integrated Review of Security, Defence, Development and Foreign Policy](#).

Of note are updates on:

- The [UK digital identity and attributes trust framework - beta version](#)
- The [Plan for Digital Regulation: Developing an Outcomes Monitoring Framework](#)
- Creation of the [Digital Skills Council](#)

The remaining sections provide further details of government’s proposals on the above areas.

1 Digital foundations

Infrastructure: The Strategy outlines a continued focus on improving digital infrastructure through previously announced initiatives including:

- Achieving at least 85% gigabit coverage by 2025 and at least 99% gigabit coverage by 2030

¹ <https://www.gov.uk/government/publications/uks-digital-strategy>

- An ambition for the majority of the population to have access to a 5G signal by 2027

DCMS will be publishing a Wireless Infrastructure Strategy that will set out a strategic framework for the development, deployment and adoption of wireless networks in the UK.

Governance: The Strategy highlights that the government

- is currently asking for views on [Data Storage and Processing Infrastructure, Security & Resilience](#) as part of the National Data Strategy commitment to develop a stronger risk management framework for data infrastructures
- will be creating a legal gateway to allow public bodies to share data with organisations that follow the rules of the UK digital identity and attributes trust framework to validate a person's identity
- is launching a [revised version of the digital identity trust framework](#), which has been updated to reflect testing and stakeholder feedback
- has published an [initial outcomes monitoring framework for digital regulation](#), and is seeking feedback on the framework
- is working with TechUK and the CBI to develop a digital regulatory approach that is intended to be streamlined, coherent and pro-innovation
- has established the Digital Regulation Cooperation Forum ([DRCF](#)) as a key mechanism for developing pro-innovation approach to regulation
- will be publishing draft legislation to establish a pro-competition regime for digital markets in response to the [pro-competition regime for digital markets consultation](#)
- intends to publish a white paper on the governance of AI by the end of the year

Security: The Strategy summarises recent action to mitigate risk to the tech sector from economic transactions:

- The National Security and Investment Act commenced in January 2022
- A package of measures to [update the export controls regime](#) for military, dual-use and other sensitive goods and technologies announced in December 2021
- The Telecommunications Security Act published in 2021

The strategy also highlights a current consultation on [App security](#), which is aimed at improving the security of individuals and businesses within the digital environment, which BCS will respond to.

2 Ideas and intellectual property (IP)

The Strategy signposts:

- The upcoming publication of UKRI Councils Strategic Delivery Plans that will build on the announced increase in [UKRI funding](#) to £25 billion as a key part of government strategy to further develop world class research in the university sector.
- The government intends by March 2023 to support the university sector develop and publish a suggested best-practice blueprint for delivering the commercialisation of university-based research.
- Funding bodies are consulting with universities on the Research Excellence Framework (REF), which is due to report by the end of 2022

- The expansion of [R&D tax reliefs](#) to cover cloud computing and data acquisition
- A newly launched review of the '[Future of compute](#)'², which will consider possible interventions to ensure research and industry have internationally competitive access to compute including sufficient cloud based compute and high performance compute
- The NHS has published the '[Data saves lives](#)' strategy to harness the potential of data in health and care in England, while maintaining the highest standards of privacy and ethics

3 Digital skills and talent

The Strategy includes the announcement that DCMS is launching the [Digital Skills Council](#), which is Chaired by the Minister for Tech and the Digital Economy, and Phil Smith (former UK CEO of Cisco systems).

The council will encourage employers to:

- Invest in employer-led digital upskilling of the existing workforce. The Government will support industry partners to explore incentive and recognition schemes, to promote employer-led training.
- Inspire the next generation to see digital and tech as an essential career path into a broad range of careers.
- Include a more diverse range of candidates in industry's vision of the digital workforce. Too many recruiters have high expectations of the ready-made skills they can 'buy in'. The lack of diversity in the UK's digital workforce is hampering digital growth by excluding potential workers and consumers from the sector's development. DCMS will work with industry to promote diverse and inclusive recruitment and retention practices within the industry and ensure that people from a wide range of ethnic and socioeconomic backgrounds are encouraged into digital roles.

Other points to note from this section of the Strategy includes:

Schools:

- The Department for Education (DfE) will continue to support schools to deliver computing alongside a full range of subjects
- Through the National Centre for Computing Education ([NCCE](#)) DfE will ensure that every school in England is equipped with the knowledge to teach computing
- DCMS will facilitate the NCCE to strengthen its links to digital employers and industry through the recently announced Digital Skills Council
- [Ofsted](#) have published a research paper on computing education, which was welcomed by DCMS and the Digital Skills Council

Technical skills:

- From August 2023, DfE is introducing new digital [Functional Skills Qualifications](#) (FSQs) intended to provide a benchmark of digital skills for employers

² In this context compute refers to computational resources that will be highly scalable capacity or are high performance, for example developing quantum computers

- By the end of the decade, most post-16 technical education and training will be aligned to employer-led occupational standards, and will correspond with occupational routes approved by the Institute for Apprenticeships and Technical Education (IfATE)
- DfE is scaling up delivery of Skills Bootcamps in England in 2022/23, with up to £150 million of additional funding
- Government is working closely with stakeholders in the digital sector to identify opportunities for improvements that support digital growth and are delivering sector campaigns via trusted sector voices, including TechUK and BCS, to inspire and inform SMEs to recruit apprentices.
- To support adults who lack the essential digital skills for life, DWP is developing 3 employment and skills pathfinders, which can refer claimants to foundation digital skills courses, Essential Digital Skills Qualifications (ESDQs) and online learning, and Skills Bootcamps.

Postgraduate:

- DCMS will continue to support the new [AI and Data Science MSc conversion courses](#) programme with a further 2,000 scholarships to be delivered between 2023 and 2025
- The government will invest £117 million to create 1000 new AI PhDs through Centres for Doctoral Training (CDTs), which is expected to allow the additional cohorts of PhDs to start studying in 2024/25
- The Global Talent Network is planned to launch in 2022. It will bring highly skilled people to the UK in science and technology sectors. The network will launch in the US and India, before expanding worldwide in 2023

4 Financing digital growth

Points to note from this section of the Strategy include:

- The government has an aspiration for UK's institutional investors, especially pension funds, to take a more proactive approach to growth technology investing
- DCMS will continue to invest in the acceleration of technology start-ups and scale-ups across the UK, and will run a [Digital Growth Grant competition](#) over summer 2022
- Government will keep the Enterprise Investment Scheme (EIS) and the Seed Enterprise Investment Scheme (SEIS) under review to see if there is any opportunity to improve them further

5 The whole UK: spreading prosperity and levelling up

This section deals with

- Supporting the UK's businesses through digital adoption
- Improving public services
- Supporting access to public procurement opportunities
- Levelling up our regional economies
- Supporting net zero

Points to note from this section of the Strategy include:

- The government still faces many challenges in achieving digital change at scale. To tackle this, the Cabinet Office will publish a cross-Government digital and data strategy in 2022.
- The Cabinet Office's [Algorithmic Transparency Standard](#) recommendations are now available to help public sector organisations provide clear information about the algorithmic tools they use to support decision-making
- [The Data Standards Authority](#) is establishing standards and making data-sharing across Government more effective.
- The [Digital, Data and Technology Playbook](#) has recently been published, which sets out plans to enable innovative approaches to public service procurement of commercial processes around digital, data and technology (DDaT)
- The government has published the [digital ecosystems report](#), which identified several regions as digital and tech growth hubs across the UK
- Government announced £2.6 billion of localised funding through the [UK Shared Prosperity Fund \(UKSPF\)](#), which can be used to fund interventions that have relevance to the digital and technology sectors

Supporting net zero

The Strategy highlights:

- The government's £1bn [Net Zero Innovation Portfolio](#) to accelerate the commercialisation of low-carbon technologies, systems and business models in power, buildings, and industry
- Publication of [Energy Digitalisation Strategy](#) that included a range of actions for digitalising the energy system, which would help reduce the amount of energy generation needed to decarbonise the economy
- £315m of support available through the [Industrial Energy Transformation Fund](#) (IETF) to data centres to support improvements to cooling systems and waste-heat recovery

6 Enhancing the UK's place in the world

Points to note from this section of the Strategy includes:

- A key government policy ambition is for the UK to be a recognised Science and Tech Superpower that is at the forefront of global regulation on technology, cyber, digital and data, as articulated in the [Integrated Review of Security, Defence, Development and Foreign Policy](#)
- The UK is establishing itself as a global leader in artificial intelligence (AI), which is one of the 7 technology families identified in the [Innovation Strategy](#)
- The DCMS Centre for Data Ethics and Innovation (CDEI) has launched the [AI Assurance Roadmap](#)
- The government is proactively working with the OECD, G20 and the UN to shape global regulation on data and digital, and will work with G7 members on the concept of Data Free Flow with Trust during the UK's presidency
- The UK will continue to advocate for an Internet that is pro-prosperity, supports democracy, open society values, and accessibility, governed through inclusive and

effective multi-stakeholder processes, is secure and resilient, and technically scalable, interoperable, open and global

- The government will seek to ensure that the free flow of data and anti-data localisation provisions are included in trade agreements, such as free trade agreements, that are reached with other countries
- The [International Data Transfers Expert Council](#) will publish a report in early 2023 identifying what the UK can do to ensure that global data flows are frictionless, sustainable and stable, for the long-term, to the benefit of both the UK and global economy.
- The government intends to form alliances with like-minded partners on topics that require supra-national cooperation, such as highly complex R&D projects, semiconductor supply chain resilience and telecoms supply chain diversification
- DCMS is developing a UK strategy to ensure that we support the UK's domestic semiconductor industry

Who we are

BCS is the UK's Chartered Institute for Information Technology. The purpose of BCS as defined by its Royal Charter is to promote and advance the education and practice of computing for the benefit of the public.

We bring together industry, academics, practitioners and government to share knowledge, promote new thinking, inform the design of new curricula, shape public policy and inform the public.

As the professional membership and accreditation body for IT, we serve over 60,000 members including practitioners, businesses, academics and students, in the UK and internationally.

We also accredit the computing degree courses in over ninety universities around the UK. As a leading information technology qualification body, we offer a range of widely recognised professional and end-user qualifications.