Ofcom's strategic approach to AI, 2025/26

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Contents

Section

Annex

1. Introduction

1.1 **As the UK's converged communications regulator, Ofcom works with industries that have technology at their heart.** The use of artificial intelligence (AI) is not new to the communications sector, as we set out in our Strategic Approach to AI 2024/25, but we have seen significant innovation and adoption of AI technologies in recent years. As we carry out our regulatory duties, we invest time and resource into understanding the impact of AI on each of our individual sectors and in the communications sector as a whole. As the technologies used by our sectors evolve, new opportunities for businesses and consumers emerge, but these often also come with risks. Our sector-specific and cross-cutting work to understand AI enables us to achieve the outcomes we want to see for the services that people use and the markets we regulate. This report focuses mainly on the opportunities provided by AI, though we also give a high-level summary of risks in Section 4: 'How Ofcom fosters safe and responsible innovation'.

1.2 **Our work to support AI innovation is underpinned by our regulatory approach.** Our focus on outcomes, rather than the underlying technology, means that the services Ofcom regulates are free to deploy AI without first checking with us for permission, helping to enable faster innovation by reducing regulatory friction. Ofcom's Regulatory Principles include that we consult widely with all relevant stakeholders and assess the impact of regulatory action before imposing regulation on a market. We also work to ensure that interventions are evidence-based, proportionate, consistent, accountable and transparent in both deliberation and outcome.

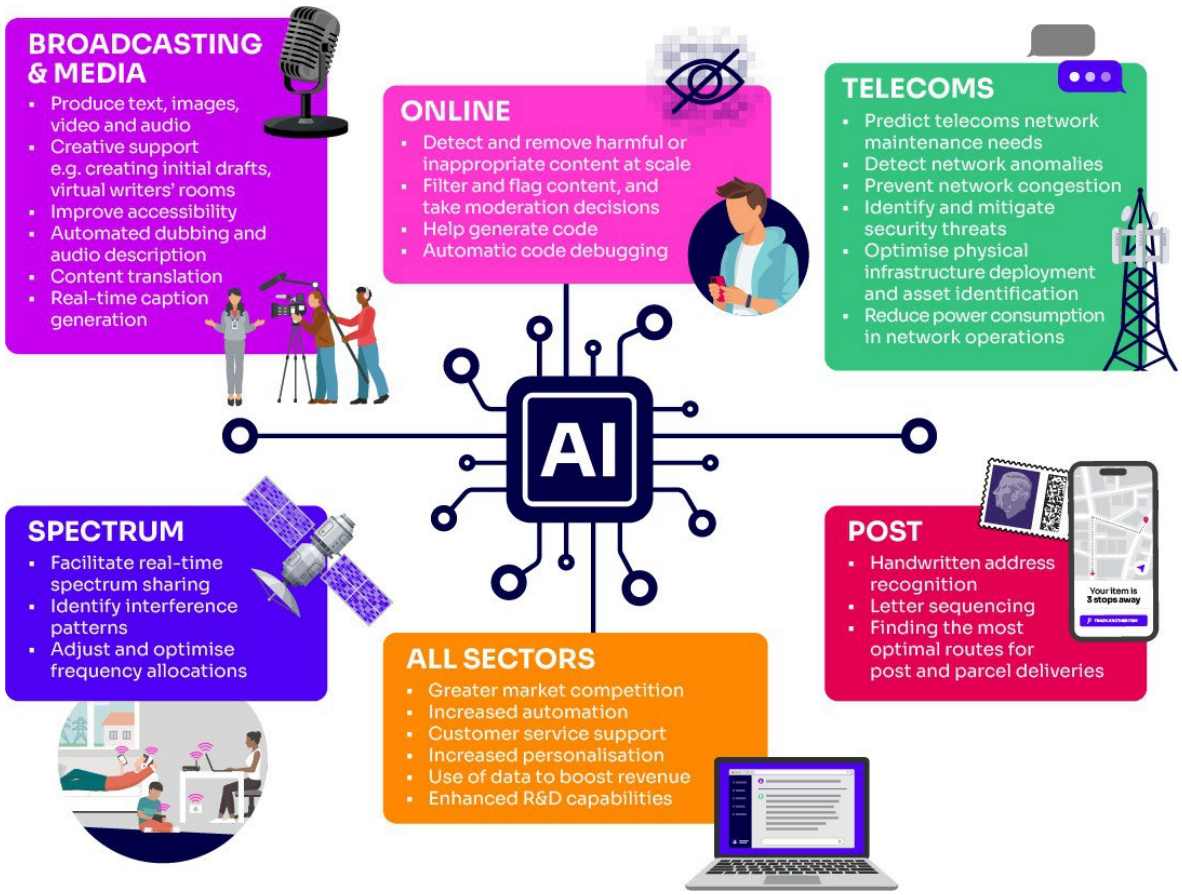
1.3 **It is important that our regulation remains fit for the future**. In general, our regulation is technology-neutral, which means we focus on regulating outcomes for consumers and citizens, not on whether or not particular technologies should or should not be used to deliver them. We regularly assess the impact that various technological developments like AI may have in our sectors and any implications for our ability to deliver on our regulatory outcomes. As AI is a rapidly developing technology, we regularly engage with industry and external experts to ensure that our understanding of the current and future opportunities and risks that AI can enable in our regulated sectors is up to date.

1.4 **Our regulatory approach, combined with our understanding of AI across our sectors, can help industry to unlock the current and future benefits of AI.** Our horizon-scanning work has identified a number of significant current and future opportunities for innovation across all the sectors we regulate. AI innovation has the potential to drive better outcomes for consumers and businesses across the industries we regulate, both now and in the future. For example:

a) For **online services**, AI has supported the development of automated content moderation to help improve safety by identifying and mitigating harmful content at scale and with greater speed, providing better outcomes for users of online platforms.
b) In the **broadcasting sector**, AI is improving accessibility by generating real-time captions, translating content into multiple languages, and providing automated dubbing and audio descriptions to support diverse audiences to engage with media.
c) AI is used by **telecoms companies** to help keep their networks secure; and in the future, the telecoms sector may use AI to enhance network management leading to better service quality and reliability, as well as potentially improving sustainability.

d) In the future, AI could be used to optimise **spectrum allocation**, helping to reduce congestion on networks and enhance network efficiency to deliver a better service for consumers.
e) AI could also help **postal companies** to further optimise delivery routes for post and parcels which could save money, reduce carbon emissions, and improve reliability and quality of service for consumers.

Figure 1: Examples of current and future AI use cases across our sectors



1.5 **More generally, like in other industries, AI could drive cost savings and improvements across the communications sector.** AI has the potential to increase productivity across a wide range of areas, such as using AI to produce routine documentation, or using chatbots to support with customer service. Around 1 in 5 (22%) people in the UK workforce say they already use AI as part of their job. As well as cutting costs, AI could also help businesses to increase revenue by monitoring and analysing consumer feedback and market forecasts, with potential to improve long-term business forecasts and the products available to consumers. We may also see greater market competition if AI can lower the barriers to entry into our regulated industries. These opportunities sit alongside widely recognised challenges associated with the deployment of AI and questions around the future of work.

1.6 **We have an important role to play in supporting innovation in AI in our sectors**. Having regard to the desirability of encouraging investment and innovation, and of promoting economic growth, is built into Ofcom's duties – and we can help our sectors use AI more confidently, safely, and in different ways, to help realise the positive outcomes offered by

AI. We are taking forward a range of initiatives that can help support AI innovation. These include:

a) **Investing in hands-on and technical AI research, including through sandboxes and technical labs** – Creating a safe space to experiment with technology (including with AI) helps to ensure the UK has an infrastructure that can continue to support, encourage, and increase innovation and growth. Together with the Digital Catapult, Ofcom runs the SONIC Labs that are providing an interoperable ('Open RAN') test-bed for mobile network equipment vendors to explore the use of AI in mobile networks. As well as supporting the mobile sector's approach to AI deployment, this work can help inform our future guidance on network resilience for mobile operators;
b) **Providing large data sets to help train and develop AI models** – Publishing our data and making it available to industry can help support AI innovation. Our data could be used to train and develop AI models, improving their outputs and helping to unlock AI benefits for the UK communications sector more quickly. For example, we have published unique, large data sets relating to spectrum (e.g. how spectrum is used in the UK and mobile signal strength measurement) which has enabled academia and industry to use high-quality UK specific training data for state-of-art AI models for spectrum use cases;
c) **Collaborating with other institutions to provide regulatory alignment** – By working with other regulators and institutions, we can act quickly to understand emerging technologies and help set rules and standards to provide the regulatory clarity needed to encourage safe innovation. For example, we work with the CMA, the ICO and the FCA through the Digital Regulation Cooperation Forum (DRCF) on horizon-scanning work to understand new AI applications such as agentic AI. We are also working with the Alan Turing Institute to build a taxonomy for safety technology, providing regulatory alignment and clarity to help free up the time and resources for organisations to focus on safe innovation; and
d) **Building relationships and providing active support to stakeholders to increase regulatory clarity** – Our close engagement with the services we regulate, including supervised services, helps support business and keep us up to date with industry's current and future plans for AI use. We are also working with our DRCF partners to provide more practical cross-sectoral support for businesses looking to innovate with AI. During 2024/25, the DRCF piloted an AI and Digital Hub that provided free and informal advice to innovators that want to use AI. Over the next year, we will be working with our DRCF partners to launch further support for innovators.

1.7 **Although AI can provide many opportunities for business and consumers, AI is creating and amplifying harms**. Across our sectors, some risks enabled by AI are rising – especially in online safety. For example, deepfake intimate image abuse (IIA) has skyrocketed in the past few years, facilitated by the increasingly widespread availability of generative AI (GenAI) tools. This causes serious personal distress and harm to many. GenAI is also used to create synthetic child sexual abuse material (CSAM) and to develop new and sophisticated forms of scams. Our external engagement suggests that while industry will directly benefit from AI deployment, the risks created or exacerbated by AI primarily flow to the consumer. These risks can cause serious harm to individuals, especially in our online lives – for example, 2 in

5 UK internet users aged 16+ believe they have experienced a deepfake and 1 in 5 (14%) report seeing a sexual deepfake.[1]

1.8 **We are working to mitigate these AI risks**: as set out in our Plan of Work 2025/26, we are establishing the online safety regime to continue our work in building a safer life online for all UK users, especially children. We are also shifting our focus to ensure that providers comply with their legal obligations to protect users, while continuing to implement the regime. The Online Safety Act (OSA) contains a number of elements that will help us to manage the clear risks of technology change creating new harms for users. First, it specifically requires that when firms change their regulated services significantly– for example by adding a new AI chatbot as part of the regulated service – they are required to do a fresh risk assessment and take any necessary mitigating measures. Second, the OSA is also clear that content created by AI or by a human can be illegal content. If illegal content such as CSAM or IIA has been created by AI, firms still need to act on it

1.9 **Across all our sectors, we are taking steps to mitigate risks in line with our regulatory duties.** As part of our responsibilities, we have an important role to play in promoting consumer safety and trust in new technologies. This is particularly true for rapidly evolving technologies such as GenAI – and as different forms of AI are increasingly deployed by businesses for a range of purposes. Our actions are set out in relation to three broad risks that span our regulated sectors: *synthetic media, personalisation*, and *security and resilience*. We consider these three risks to still be the most relevant to our sectors and our work, especially as our research suggests that only a third (34%) of adults said they feel confident recognising AI-generated content online – indicating that people remain vulnerable to harms from mis- and disinformation, and sophisticated and more personalised fraud and scams. Misuse of GenAI can also still be used to breach network security, for example by developing more virulent malware. We continue to engage with industry and take action ourselves to manage these risks.

1.10 **It is also important that we exploit the opportunity of AI to reduce the burden of regulation on our stakeholders.** We are trialling over a dozen proof-of-concepts for our own use of AI aimed at increasing Ofcom's productivity, improving our processes and generating efficiencies. These initiatives span Ofcom's work and see AI deployed in different ways, including analysing large data sets in our consultations and complaints handling, using AI to improve spectrum planning, and to perform tasks more efficiently in corporate services. As a regulator, safety is at the heart of both our internal and external-facing work on AI and we need to ensure the confidentiality and security of the information that we hold. Through these trials we will assess their potential benefits as well as ensure the tools are used ethically, appropriately, and securely ahead of wider use in Ofcom.

1.11 **To support a consistent approach to AI regulation, we are engaging with the Government as it takes forward its work on AI.** The Government recently published AI Opportunities Action Plan which requested that regulators such as Ofcom to update on their approach to regulating AI, including how their work supports AI innovation. This document provides such an update for Ofcom. As set out in this document, we have a role to play in supporting AI innovation in our sectors and will continue to engage with the Government on its plans to support AI opportunities in the UK and how our role may be relevant. For instance, the Government is planning to bring data centres into scope of the upcoming Cyber Security

[1] Online Nation 2024 report

and Resilience Bill, and we continue to work with Government on any new responsibilities that we may receive under this Bill. We will continue to consider how best to encourage investment and support growth in the context of new responsibilities. We are also engaging with the Government's AI Security Institute (AISI) which is conducting research to help inform AI governance to support knowledge exchange where appropriate.

1.12 **Our update on Ofcom's Strategic Approach to AI is set out in the following sections**:

- Opportunities for innovation in AI across the communications sectors
- How Ofcom's work supports AI innovation in our sectors
- How Ofcom fosters safe and responsible innovation
- Ofcom's capability to regulate in an AI context
- Engaging with others on AI
- Planned AI work

2. Opportunities for innovation in AI across the communications sectors

2.1 **As we noted in our letter to Government setting out how Ofcom is contributing to economic growth across the UK, businesses across the communications sector have long been at the cutting edge of technology and they are well-placed to embrace the new opportunities of AI.** Ofcom has a history of working creatively to harness innovation to support the delivery of good outcomes for consumers and to promote economic growth. AI is no exception, and this technology can bring benefits to businesses and consumers when it is used safely.

2.2 **We regularly engage with industry and external experts to ensure our understanding of current and future opportunities that AI can enable in our regulated sectors is up to date.** Our external engagement suggests that while industry will directly benefit from AI deployment, the risks created or exacerbated by AI primarily flow to the consumer. With this in mind, we see a critical role for Ofcom in supporting industry to gain from the innovation and opportunities presented by AI, while making sure that those benefits are passed onto consumers too, and that consideration is given to the mitigation of any risks. We provide a more detailed update on our work over the last year to address AI-related risks in Section 4: 'How Ofcom fosters safe and responsible innovation'.

2.3 **Through our horizon-scanning, we are aware that many of our stakeholders and consumers are already seeing some of these AI-enabled benefits**, and we anticipate that these will become more prevalent and widespread in the future. We set out a range of sector-specific examples of how AI could provide opportunities for industry and consumers in Figure 2 below. This overview is not intended to be a comprehensive list of every AI use case in our sectors – rather it is a high-level overview of some of the significant opportunities we are seeing or are likely to see across our sectors.

2.4 **We have not separated our examples of AI opportunities into 'current' or 'future' use cases as we recognise that industry is still experimenting with AI**, meaning that many existing use cases are likely to develop and evolve to bring future benefits. Most of our examples fit this category – the use cases described are technically possible already and some companies and individuals may be doing them already, but we are likely to see greater adoption and more benefits in future. We have, however, identified two 'future-only' use cases across our sectors – **improved spectrum management;** and **optimal routes for post deliveries.**

Figure 2: Areas of significant opportunity for AI innovation in each of the sectors Ofcom regulates

Relevant sectors(s)	Description of opportunity	Benefits to industry and consumers
Spectrum	**Improved spectrum management**: In future, AI-powered systems could facilitate real-time spectrum sharing among multiple users or networks, especially in under-utilised bands, and could identify interference patterns and adjust frequency allocations. AI could also be used to optimise spectrum allocation by predicting high-demand areas and reallocating frequencies dynamically.	• **Identifying interference** and **adjusting frequency allocations** using AI could automatically minimise disruption, simultaneously improving service quality for consumers and improving efficiency for industry. • **Dynamic spectrum management** could reduce congestion on networks and help enhance network efficiency to deliver a better service for consumers.
Telecoms	**Improved network management and efficiency**: AI can predict telecoms network maintenance needs, detect anomalies, dynamically reallocate resources to prevent congestion, and swiftly identify and mitigate security threats. AI can also help to optimise physical infrastructure deployment, and it could help make asset identification faster and more efficient. AI can also be deployed in the network (e.g. Radio Access Network) to help reduce power consumption in network operations.	• **Dynamic network management** can help improve service quality and internet reliability, benefiting both business and individual telecoms customers. • **Optimising infrastructure deployment** can help prevent unnecessary duplication of assets, saving money and using fewer resources. • **Deploying AI in networks to manage power usage** could improve sustainability in future, both by reducing emissions from power usage and by lowering energy costs for network providers.

Relevant sectors(s)	Description of opportunity	Benefits to industry and consumers
Post	**Increased efficiency in postal services:** AI can boost operational efficiency in the postal sector by helping with handwritten address recognition and letter sequencing. AI could also provide a future opportunity to postal companies, by helping to find the most optimal routes for post and parcel deliveries.	• **Helping with address recognition and letter sequencing** can significantly improve efficiency in mail processing, saving time and costs for postal firms. Improved address recognition can also benefit consumers as it could help increase the reliability of the postal service. • **Identifying the most efficient delivery routes** would save money for postal firms and help to reduce carbon emissions. It may also improve the reliability and quality of postal services.
Broadcasting & Media	**Creative support and ideation:** AI can be used across the creative process, from helping artists develop initial ideas through to optimising content distribution. Both individuals and companies, online and in traditional broadcasters, can now use AI tools to produce text, images, video and audio to a reasonable standard to help develop and produce content for consumers.	• **AI can be used across the creative process** to save time and reduce costs. This could benefit both artists and industry, as many of the tasks AI can help with are time consuming and repetitive. Using AI can free up artists' time for more creative work, while saving money. • **Using AI tools to produce text, images, video and audio** can help lower barriers to entry for creatives, as it is less expensive to produce and distribute content. This can benefit consumers by supporting a greater volume and variety of content that reflects their interests.
	More accessible media: AI improves accessibility by generating real-time captions, translating content into multiple languages, and providing automated dubbing and audio descriptions to support diverse audiences.	• Providing tools to **generate real-time accessibility features automatically** makes it easier for audiences from all backgrounds and abilities to engage with media. • **These accessibility tools** could especially increase the ability for audiences with disabilities and for non-native English speakers to access content. • **Automating accessibility features** saves time and money for media and online content companies/creators.

Relevant sectors(s)	Description of opportunity	Benefits to industry and consumers
Online	**Improved online safety through AI-driven content moderation**: AI-driven content moderation can efficiently detect and remove harmful or inappropriate content at scale. Companies are increasingly using automated tools powered by AI to filter and flag content, and take moderation decisions around inappropriate or harmful content.	• **AI-driven content moderation** can improve online safety by identifying and mitigating harmful content at scale and with greater speed, providing better outcomes for users of online platforms. • **Partially automating content moderation** with AI can also help save time and money for online companies by freeing up time for employees to work on more complex tasks.
	More efficient software development: AI has the potential to significantly improve the efficiency and quality of software development, for example by helping with code generation and review, and with automatic code debugging.	• **More efficient and high-quality software development** saves time for employees, which can then be used on more interesting and creative tasks. This could be especially valuable for game developers, as creating games using 'traditional' coding methods can be long and costly. • **Using AI to help with code generation and review** can also lower barriers to market entry for small firms or individuals, as a business without software development skills could partner with AI to build digital products and environments.

2.5 **Our horizon-scanning work has also identified a number of significant current and future opportunities for innovation across the communications sector as a whole.** For instance, AI can help our regulated companies to carry out their activities more quickly and at a lower cost by allowing them to automate aspects of their work. As we could see the benefits of these AI opportunities in any of our regulated sectors, some of the opportunities have already been mentioned in Figure 2. More detail on these cross-sectoral AI opportunities, and other examples we have identified, are summarised in Figure 3 below.[2]

[2] We are aware that each of these opportunities can also create potential risks. More detail on our work to understand and mitigate risks from AI use cases can be found in Section 4: 'How Ofcom fosters safe and responsible innovation'.

Figure 3: Areas of significant opportunity for AI innovation across all the sectors Ofcom regulates

Description of opportunity	Benefits to industry and consumers
Greater market competition: AI lowers the barrier to entry for many of our regulated industries, especially media and online content providers.	• Using AI can reduce the cost and time required to create and provide specific communications services/products, **lowering the barriers to entry into the communications industry**. Lower barriers to entry can allow smaller players to compete with established firms, helping to support economic growth in the UK. • Allowing smaller players to **enter and compete in our regulated sectors** can in turn provide jobs and opportunities for the UK economy.
Increased automation: AI can help speed up and/or automate repetitive tasks such as taking notes, scheduling and transcribing meetings, analysing documents, developing staff training and on-boarding material, and producing routine reports.	• Time saved from **automating repetitive work** can free up capacity for employees to focus on more complex and engaging activities, which could lead to more valuable work outputs and innovation. • **Increased automation** across the board is also likely to reduce operating costs for businesses, for example if they choose to restructure their workforce.
Improved customer service: Many companies are now starting to use generative AI (GenAI) to help provide customer service, most commonly through GenAI chatbots.	• **Automating part of the customer service journey using GenAI** – done responsibly – can benefit both the consumer and the company. Consumers can benefit from shorter customer service waiting times and this could improve customer satisfaction, helping industry to attract customers and make more money.
Increased personalisation: Many companies already use algorithms to target personalised content, including adverts, at audiences. AI offers opportunities for even greater personalisation, for example, providing sports and news highlights tailored to an individual. Companies could also start using GenAI to develop hyper-personalised adverts.	• **Increased personalisation** can provide benefits to consumers by helping them to navigate the vast amounts of content available to find what is more relevant and interesting to them. • **Tailored products and services** could also help consumers to save money and time and recommend accessible services suitable for a customer's specific needs. • **Improved targeting** can also provide industry with greater audience/customer engagement, helping to increase revenue. • **Using GenAI to help develop adverts** could help industry save costs on advert creation, potentially by automating repetitive work.

Description of opportunity	Benefits to industry and consumers
Use of data to boost revenue: AI can help monitor and summarise customer sentiment and feedback across various online platforms, enabling businesses to pinpoint areas of improvement or things customers particularly value. Machine learning can also identify correlations and trends in markets and cashflow to improve the accuracy of long-term business forecasts.	• **Monitoring and summarising customer sentiment with AI** can benefit companies by informing their future business strategies and by improving customer engagement. Businesses could then pass this benefit on to consumers, by building products that better meet customer needs. Collectively, these impacts work to drive growth across our sectors. • **Improved accuracy of long-term business forecasts** could help industry to better prepare for market fluctuations, making their business models more sustainable and resilient. Greater industry resilience could also make services more reliable for consumers.
Enhanced research and development capabilities: AI can be used to improve organisations' research and development abilities, enabling them to innovate efficiently and explore new use cases.	• **Improving research and development capabilities**, in part by using AI to automate certain tasks and free up time for more creative thinking, can benefit industry by allowing organisations to quickly prototype and innovate new products with minimal cost. • **More efficient innovation** can also lower barriers to market entry by making it quicker and easier to test new products and services. This can offer more potential products and services to consumers, which may provide benefits to them as well.

3. How our work supports AI innovation in our sectors

3.1 **Our regulation remains fit for the future as we are primarily focused on outcomes rather than specific technologies, and we can act accordingly with our existing powers to achieve these outcomes.** Our Regulatory Principles explain that, amongst other things, Ofcom operates with a bias against intervention, albeit with a willingness to intervene promptly and effectively where required. This approach gives the services we regulate the freedom to experiment and innovate, providing they do so safely. The services Ofcom regulates are also free to deploy AI without first checking with us for permission, helping to enable faster innovation by reducing regulatory friction.

3.2 **We also strive to ensure that our regulation is proportionate,** making sure that any interventions are evidence-based, consistent, accountable and transparent in both deliberation and outcome. We consult widely with all relevant stakeholders and assess the impact of regulatory action before imposing regulation on a market. Ofcom maintains this approach across all services we regulate, including those using AI, to ensure that we are not stifling the potential for growth in our sectors by taking disproportionate action.

3.3 **We continue to review our regulation to assess whether it is still relevant and achieving our aims.** We examine our regulation in both systematic and ad-hoc ways to consider whether it is having the desired impact. Where necessary, we will remove regulations if needed, to make sure we are still achieving our regulatory aims and we are not disproportionately placing a burden on industry which could stifle innovation and growth. We will continue to assess the impact that technological developments like AI may have in our sectors, and any implications for our ability to deliver on our regulatory outcomes.

3.4 **Our work to support AI innovation is underpinned by our regulatory approach.** By supporting industry to use AI more confidently, safely, and in a range of different ways, this should lead to innovation in the sectors we regulate. We have grouped our work to help support AI innovation into the following categories, with specific examples for 2025/2026 summarised below in Figure 4:

a) **Investing in hands-on and technical AI research, including through sandboxes and technical labs** – Creating a safe space to experiment with technology (including with AI) helps to ensure the UK has an infrastructure that can continue to support, encourage, and increase innovation and growth;
b) **Providing large data sets to help train and develop AI models** – Publishing our data and making it available to industry can help support AI innovation. Our data could be used to train and develop AI models, improving their outputs and helping to unlock AI benefits for the UK communications sector more quickly;
c) **Collaborating with other institutions to provide regulatory alignment** – By working with other regulators and institutions, we can act quickly to understand emerging technologies and help set rules and standards to provide the regulatory clarity needed to encourage safe innovation; and
d) **Building relationships and providing active support to stakeholders to increase regulatory clarity** – Our close engagement with the services we regulate, including supervised services, helps support business and keep us up to date with industry's

current and future plans for AI use. We are also working with our DRCF partners to provide more practical cross-sectoral support for businesses looking to innovate with AI.

Figure 4: High level summary and examples of how Ofcom's work in 2025/26 can support AI innovation in our sectors

How our work can support use of AI in our sectors	What we will do and how this should support innovation
Investing in hands-on and technical AI research, including through sandboxes and technical labs	• We **have developed DSIT-funded 'spectrum sandboxes' that explored new technologies to measure and report spectrum use and interference.** Adoption of these technologies in radio networks could provide the data necessary for greater use of AI/machine learning in spectrum management, leading to **more reliable radio networks and more efficient use of spectrum.** • Our internal Online Safety Technology Lab will continue to **support practical research into safety technologies**, allowing colleagues to investigate and demonstrate the extent and power of online safety technologies. Ofcom has investigated the use of GenAI to aid content moderation efforts. For example, GenAI could be used to generate synthetic content to plug gaps in the training data used to develop content moderation tools. Supporting research into safety technologies fosters safe innovation by **developing tools for online safety that others could use and by establishing clear guidelines for industry development.** • Ofcom and Digital Catapult are collaborating in the SONIC Labs, providing an interoperable ('Open RAN') test-bed for mobile network equipment vendors. This work includes a technical study to understand the use of AI in mobile networks. **As well as supporting the mobile sector's approach to AI deployment, this work can help inform our future guidance on network resilience for mobile operators**. Ofcom is also represented on the oversight board of UK Telecoms Lab, which **provides a space for operators and vendors to test security, resilience, and interoperability on near-representative test networks**. • We will further our research work on the **application of machine learning for more efficient and reliable radio wave propagation models**. This research could **improve the accuracy and speed of spectrum planning** and thereby increase spectrum efficiency, as well as enable better performance and innovation, and provide better information on service availability for consumers, such as radio (DAB) and TV reception**.**

How our work can support use of AI in our sectors	What we will do and how this should support innovation
Providing large data sets to help train and develop AI models	• We **publish all the non-confidential research data that we collect, with large data sets available in machine-readable formats**. For example, our annual Connected Nations report provides data on communications infrastructure, usage and coverage. Our data from across our regulated sectors is available in the Research, Statistics and Data section of the Ofcom website. • Ofcom has **invested in generating unique, large data sets relating to spectrum which we publish as Open Data** (e.g. how spectrum is used in UK, mobile signal strength measurement data, and more[3]). This could **enable academia and industry to use high-quality UK specific training data for state-of-art AI models for spectrum use cases**. Providing this data (which can be scarce) to help train and develop models can support innovation, through providing higher performing and lower cost radio networks.
Collaborating with other institutions to provide regulatory alignment	• In partnership with the other Digital Regulation Cooperation Forum (DRCF) regulators, **we hosted a Responsible GenAI Forum event** in March 2025 **to highlight best practice in the responsible deployment of this technology** and to **communicate our common policy positions**. This event was attended by 200 experts and decision-makers in the field. The knowledge and best practice shared at the event can help **support industry to innovate both now and in future by providing regulatory clarity and alignment.** • We are working with the Alan Turing Institute to **build a taxonomy for safety technology**. Providing regulatory alignment and clarity helps **cut down on the regulatory burdens** placed on organisations, **freeing up their time and resources to focus on safe innovation.** • Ofcom has an **enduring working relationship** with the National Cyber Security Centre and **evaluates AI opportunities on an ongoing basis** with particular reference to the Telecommunications (Security) Act 2021 (TSA). • We **engage with a range of stakeholders internationally**, including other regulators, standardisation bodies, academic experts, and industry, **to monitor emerging AI developments, opportunities and approaches**, and their implications across our regulated sectors.

[3] We have also published data on radio wave propagation and background radio noise measurement.

How our work can support use of AI in our sectors	What we will do and how this should support innovation

Building relationships and providing active support to stakeholders to increase regulatory clarity	• We are providing more practical cross-sectoral support for businesses looking to innovate with AI. During 2024/25, the DRCF piloted an AI and Digital Hub that provided **free and informal advice to innovators** that want to use AI. Over the next year, we will be working with our DRCF partners to launch further support for innovators. We want to build on the Hub pilot and collaborate across the DRCF so that **businesses can** bring **AI and digital products and services to market responsibly, faster and with greater confidence.**
	• We will continue to work with big online platforms **to understand how they are deploying AI tools, and how they can continue both to innovate safely and use AI to improve safety on their services.** Examples of what we are looking to understand include: how services are deploying content moderation tools, how they are using different types of AI to understand user behaviour and age, and how they use AI to add friction into the user journey to improve safety.
	• The **UK's media sector enjoys a worldwide reputation for high quality productions and an exceptionally skilled workforce**. It has a proven **track record for attracting substantial inward investment.** In the context of our wider work on Public Service Media we will work with government and our stakeholders to **understand how best to build on this success story.** We will tie this into our considerations of **what policy enablers may be required to support the media sector in exploiting the opportunities that AI may present** for public service broadcasters, news providers, audiences, and the media sector as a whole. We will set out our initial views in our forthcoming Public Service Media review.
	• There has been **significant growth in new providers specialising in AI assurance services in recent years**. The UK Government sees significant economic potential in this market and has proposed several measures to support its continued development. We will **continue to engage with this emerging sector to highlight opportunities for online safety-focused auditing and assurance techniques.**
	• We are **developing additional media literacy resources to support media literacy stakeholders**, including:
	  ○ An issues summary that looks at the media literacy challenges and opportunities AI creates.
	  ○ The foundational skills needed for everyone to have good media literacy in response to an increasingly AI-mediated information space.

4. How Ofcom fosters safe and responsible innovation

4.1 **Ofcom has regulatory duties and outcomes that we want to see, and managing risks from services that use AI is an essential part of delivering these duties and outcomes.** AI can bring numerous benefits and opportunities to industry and consumers – but many of the use cases also come with potential risks. It is important that we are aware of these risks so we can take appropriate action to manage them and protect consumers from harm.

4.2 **Our external engagement suggests that the risks from AI are likely to directly affect consumers, while the benefits of AI may go to businesses in the first instance.** We therefore need to make sure we are proactively understanding the potential impact of these risks and continue to take action to mitigate them. We have maintained our approach of exploring types of risks from the perspective of the consumer across sectoral boundaries. This enables us to mitigate cross-cutting risks more effectively and efficiently as we explore and tackle them in a more holistic way – working across our remit as a converged communications regulator.

4.3 **We have built on our work over the past year to re-evaluate key AI risks.** Based on this assessment, we still consider that the three risks detailed in our AI Strategic Update in 2024 are the most relevant to our sectors and our work: synthetic media, personalisation and security and resilience. These are described below:

a) **Synthetic media**[4] – AI tools can be used to create synthetic content that depicts child sexual abuse, acts of terrorism, and deepfake intimate image abuse. They can also be used to generate more convincing mis- and disinformation, as well as more sophisticated and personalised fraud and scams. These are not hypothetical risks; the use of AI to create harmful synthetic material is happening now and becoming more commonplace. A study undertaken by Internet Matters found that 10 percent of children aged 13 to 16 had either directly experienced or knew of someone who had experienced being featured in fake nude images or videos. Meanwhile, the Internet Watch Foundation has found that reports of AI-generated child sexual abuse material quadrupled between 2023 and 2024. Synthetic media can also cause harm even when it is used without malicious intent, for example by reinforcing societal biases or by generating unintentional inaccuracies;

b) **Personalisation** – AI tools can be (and are) used by many of our regulated services to curate and personalise the content that is served to UK users on online services. These systems are typically referred to as recommender systems or algorithms. Recommender systems can, in the most serious of cases, lead to an increased risk of users encountering illegal and harmful content online. It can also cause harm by increasing the risk of exposing vulnerable consumers to specific content that might be harmful to them. AI driven recommender systems can also affect the discoverability of UK and public service content, including news content, exacerbating the existing trend of echo chambers. A lack of transparency around AI personalisation could affect the ability of

[4] Synthetic media is an umbrella term for video, image, text, or voice that has been generated in whole or in part by artificial intelligence algorithms

UK consumers to make informed choices about the content they consume and the services they use, and undermine their privacy; and

c) **Security and resilience** – AI is rapidly becoming an established tool on both sides of the security frontline. Without AI, targeted attempts to steal the credentials of specific individuals with financial authority or privileged network access within a company required significant skilled resources. AI is now allowing attacks to be crafted quickly and cheaply, with increasing quality and effectiveness. More advanced forms of AI, like GenAI, can be used to develop more virulent malware, identify vulnerabilities in networks, and/or provide instructions on how to breach network security. Additionally, poorly developed GenAI models could also contribute to the risk of system outages. For example, if source code is inefficient in its use of energy or bandwidth, or the widespread use of the code by applications leads to an overall resource outage. The use of AI in security defence tools is key to automating the response to this increasing attack volume, and is also being used to disrupt attacks and scams.

4.4 Figure 5 below updates on work to address these risks and more detail on our future work to both support innovation and address risks enabled by AI can be found in Annex 1.

Figure 5: Areas of key risks & examples of Ofcom's work to date to address these risks

Key risks	Examples of our work across 2024/25 to address risk
Synthetic media	• Published an open letter to online service providers explaining how certain types of GenAI chatbots and apps are in scope of the online safety duties. • Co-hosted the DRCF's Responsible GenAI Forum event which brought together industry, civil society and regulatory voices to explore how to tackle the potential risks posed by GenAI. • Published three statements outlining how we are protecting users from risks online – including those posed by GenAI. In our illegal harms and protection of children statements, we outline how platforms can identify and manage risks, including risks posed by the sharing of illegal synthetic content and synthetic content that is harmful to children. • Our statement on age assurance outlined how services who display or publish their own pornographic content, including via GenAI tools, can introduce robust age checks. • Published our guidance on how regulated online services can combat online gender-based violence, which includes interventions to tackle AI-enabled harms like non-consensual deepfake content. • Published two discussion papers exploring the merits and limitations of interventions to tackle GenAI risks. One of these papers focused on red teaming, a type of AI model evaluation which helps to surface harmful content. The other paper looked at measures to address the creation and sharing of harmful deepfakes, including deepfake intimate images and deepfake fraudulent adverts, for example the use of model filters, watermarks and user reporting functions. • Hosted a workshop at our 2024 Making Sense of Media Conference on mis- and disinformation to demonstrate how so-called 'attribution measures' like metadata and labelling schemes could be used to improve media literacy and help users identify and make sense of synthetic content. • Engaged with public service broadcasters and news providers to understand how these organisations are using AI and GenAI tools in the newsroom, and to investigate the challenges and opportunities that may derive from the application of AI and GenAI tools by other key actors across the news media value chain. Our findings are published in our Public Service Media Review.

Personalisation	• Published our Illegal Harms statement under the online safety regime, which includes measures recommending that certain services collect safety metrics when testing recommender systems (which may include AI-driven systems), to improve online safety. • Published our Protection of Children statement, which includes measures recommending that service providers that operate recommender systems should take steps to design and configure them to the effect of filtering out harmful content from children's content feeds. We have also recommended a measure allowing children better control of their feeds by allowing them to provide negative feedback on content. • Recently completed work on responsible recommender systems, which outlines recent progressions in this rapidly developing area, and provides insights that will inform our future work into responsible algorithmic development. • Consulted on our draft guidance: A safer life online for women and girls. The draft guidance sets out practical and ambitious steps online providers can take to tackle harms that disproportionately affect women and girls, including AI-generated harms like deepfake intimate image abuse. We recognise this is a growing threat, with one study finding that more deepfake intimate image abuse was posted online in 2023 than in all years previous. To address this, we recommend good practices like red teaming and product testing to prevent people from misusing GenAI systems to generate and share deepfake intimate images. • Conducted research which explores the application of AI in identifying terror-related content in text, images, videos, and audio. We will build on this work in our internal Online Safety Tech Lab in 2025/2026 by examining the practical applications of these terror detection methods. • Published research and insights from stakeholder engagement on the use of AI and GenAI tools in the news sector as part of the Public Service Media Review. This outlined how AI used by online intermediaries may lead to social media users seeing more hyper-personalised news content, which could in turn exacerbate problems associated with people not seeing a wide range of views, limiting exposure to diverse perspectives and a range of topics. • Published our research update on the role of online intermediaries in the news sector. Building on our 2022 report, we further investigated the concerns that social media raised, looking at the influence they have on the news people see, the impact of ranking of news content on access and consumption, the diversity of sources, topics and viewpoints to which people

Key risks	Examples of our work across 2024/25 to address risk
	are exposed to on social media, and the incentives systems that these services have. • Published a media literacy discussion paper exploring the applications of GenAI and the media literacy implications including on areas such as news, digital inclusion and personalisation.
Security and resilience	• Continued tracking developments in how GenAI could be used to develop malicious tools that threaten network security. • Continued engaging with regulated services covered under the TSA to understand how they are integrating GenAI into their systems, including how they are considering robustness and security both in their own systems and across their vendor supply chains. • Engaged with standards bodies (e.g. the European Telecommunications Standards Institute, the International Organisation for Standardisation, and the International Telecommunication Union). These organisations are developing standards and are working on issues such as robustness and security for language models that underpin GenAI tools and how AI can support network security.

5. Our capability to regulate in an AI context

5.1 **Ofcom has always been an expert body.** We have long relied on technical knowledge and expertise to exercise our functions and perform our duties effectively. This allows us to assess the opportunities and risks arising from new forms of technology. We have more than 100 technology experts (with approximately 60 AI experts) in our data and technology teams, including some with direct experience of developing AI tools. Examples of these tools include computer vision for age estimation technologies; a speech moderation app which uses AI to check if speech is harmful to people with protected characteristics; and an application to create invisible watermarks on images. These experts are supporting our understanding of the impacts and risks of AI on our sectors and stakeholders. We continually assess and review our capabilities to ensure we have the expertise we need.

5.2 **We have built strong data and AI expertise across Ofcom.** We will evolve our data culture and literacy programme to embed knowledge and understanding of AI across our organisation. We will strengthen our existing data strategy, policies and guidance to create the foundation for our increased use of AI tools. Our work this year will include a focus on everyday AI in ICT tools that we already use. We will also extend our work in this space to specialist applications that need bespoke development, potentially in collaboration with other regulators where the tools seek to address common problems.

5.3 **Important trials are underway.** We are internally testing more than a dozen proof-of-concepts, which may increase Ofcom's productivity and generate efficiencies. These trials include using third-party GenAI applications within existing systems (i.e. everyday AI) as well as creating GenAI based applications in-house. The trials span a wide range of uses; including support for our internal corporate functions (e.g. finance, communications and people); supporting analysis of large data sets in our consultations and complaints work; and supporting our spectrum planning. Here are some examples:

a) We have streamlined the transcription of broadcast content to assist with the assessment of complaints received, by using an AI transcriber. This has generated accurate transcripts faster, enabling colleagues to focus on analysing the content.
b) In advance of off-the shelf tools becoming available, we developed a customised text summarisation tool to find patterns within consultation responses sentences and paragraphs, and to match the themes with those identified in wider internal documents. We have now broadened this work to explore off-the-shelf products in the marketplace.
c) We have used AI to improve spectrum planning, with huge potential to improve spectral efficiency and usage in sharing licences – especially in built up areas using high frequencies.
d) We are using AI tools during our software development process, from testing to production, documentation and in some cases writing code.

5.4 **We are going further.** Over the next year, we will accelerate the use of AI across our policy areas. We also commit to using technology, including AI, in a way that reduces the regulatory burden on our stakeholders in line with our general approach to regulation. As a

regulator, safety is at the heart of both our internal and external-facing work on AI, so we will ensure that we are using it carefully and appropriately. This means we are likely to continue to trial AI at Ofcom until we are confident that our tools are safe and secure for more widespread use.

5.5 **We have continued investing in our horizon-scanning and commercial skills** to help maintain our understanding of how businesses operate and how industry can make money in a rapidly changing environment. Ofcom continues to attract colleagues with business and industry experience across our sectors, and we remain in open dialogue with industry. This allows us to make informed considerations around the specific costs and benefits of individual regulatory measures, as well as our overall regulatory approach, to ensure our regulation is proportionate and allows for growth in our industries.

6. Engaging with others on AI

5.1 **Ofcom regularly engages with other domestic and international organisations, to collaborate on AI-related topics, and will continue to do so.** For example:

- **Ofcom regularly engages with the Government on AI.** The Government recently published its AI Opportunities Action Plan which set out its ambitions to support AI innovation and deployment in the UK. As set out in this document, we have a role to play in supporting AI innovation in our sectors and will continue to engage with the Government on its AI ambitions as it takes them forward. The Government has also committed to consulting on AI legislation and has established the AI Security Institute (AISI) which is conducting research to help inform AI governance. Ofcom is engaging with AISI to support knowledge exchange on shared interests including AI safety. We will also continue to monitor the risks posed by AI and review potential gaps in our existing regulatory powers and coordinate with the Government on these matters.
- **Ofcom is a member of the DRCF.** Through the DRCF, we have been collaborating with other UK regulators on algorithmic processing, audits and AI governance, as well as UK Government AI policy development. During 2024/25, the DRCF piloted an AI and Digital Hub that provided free and informal advice to innovators that want to use AI. Over the next year, we will be working with our DRCF partners to launch further support for innovators. The DRCF has set out more information about our plans for cooperation in its 2025/26 workplan. We anticipate continuing to work together on the regulation of AI over time, as both the technology and policy landscape continue to evolve. For example, we are continuing to develop our collective understand of how each DRCF member's regulatory regimes might apply to AI, while working together to identify and resolve any points of conflict. This year, the DRCF will also examine the potential future ecosystem of agentic AI to understand how it may develop and the regulatory implications for regulators and industry, to produce an external output in 2026. Alongside other DRCF members, Ofcom is part of the AI Regulators in Scotland Working Group which regularly meets with other public bodies based in Scotland to discuss how AI is impacting their sectors.
- **Ofcom is a founding member and current Chair of the Global Online Safety Regulators Network (GOSRN)**, a growing network of regulators with responsibility for online safety which to date includes regulators from Australia, Fiji, Ireland, South Korea, South Africa, Slovakia, the Netherlands, and France**.** Through GOSRN, we are sharing our experiences and learnings about AI-related issues to better understand the risks and opportunities that AI technologies pose to our work as online safety regulators. The focus will initially be on technical solutions to protect children online and how to manage the safety challenges of GenAI.
- **Ofcom is also a member of the European Platform of Regulatory Authorities (EPRA),** a network of over 50 European audiovisual regulators. Through EPRA's AI Roundtable, we are exchanging experiences with EPRA members on the use of AI tools in broadcasting regulation, and on the impact that AI technologies are having on the broadcasting sector.
- **We are proactively engaging in policy debates globally on AI, across the sectors we regulate.** This includes engaging directly with civil society, academics, and

policymakers around the world to understand the uses and impact of AI. This engagement has seen us contribute to the development of Council of Europe guidelines, published in December 2023, on the responsible use of AI systems in journalism. We held a seat as an observer to the Observatory for Information and Democracy's AI Research Assessment Panel which published its policy recommendations in January 2025. We are participating in the Organization for Security and Co-operation in Europe's Media and Big Tech initiative to develop policy guidance to enhance the availability and accessibility to quality journalism and public interest information online.

- **Ofcom is participating in discussions on AI standards in standards development organisations** including at the International Telecommunication Union (ITU), where Ofcom takes a leading role in representing the UK. Ofcom also participates in the European Telecommunication Standards Institute (ETSI)'s Technical Committee: CYBER, where the telecoms aspects of AI security are formalised. ETSI is the Government's Standards Development Organisation of choice for this work and the DSIT AI Security team will also interact with the International Organisation for Standards. We are sighted on the DSIT AI Security briefs as they pertain to telecoms.
- **We are continuing to grow our AI understanding by partnering with academics and academic institutions,** such as the National Research Centre on Privacy, Harm Reduction and Adversarial Influence Online (REPHRAIN) to share knowledge. This includes us sharing the risks and challenges from AI that our in-house experts have identified through carrying out or commissioning their own technical research. We have also linked up with the UKRI Centres for Doctoral Training in AI and Digital Futures Institutes, including attending events, workshops and hackathons. We host academics at Ofcom through fellowships, for example, in February 2025 we welcomed an academic from a UK higher education institution on the British Academy Innovation Fellowship scheme. They are partnering with Ofcom for 12 months to develop outcomes to enhance Ofcom's understanding of AI and media literacy and the impact of AI on trust in news, and to offer solutions to shape policy and practice. We have also arranged two joint PhD projects with the University of Manchester and University of Sheffield, and we regularly bring in academics to give research presentations to colleagues across the organisation.

A1. Planned AI work for 2025/26

A1.1 Ofcom's planned AI work will ensure that we continue to identify and respond to AI-related risks across our remit. This work will include continuing to execute and evolve many of the key activities that we have set out in this document, as well as starting new work across our different policy areas.

A1.2 Ofcom's Plan of Work 2025/26 sets out the planned work that we will carry out over the next 12 months. As AI has relevance across our remit, many of these projects will undertake work to consider AI's impacts, even if this is not explicitly referenced. This Annex provides examples of the AI work that we will carry out in each of our policy areas as well as work that cuts across our policy areas.

Policy area	Work we will do in 2025/26

Cross-sectoral	• We are developing additional media literacy resources to support media literacy stakeholders, including:
	  ○ An issues summary that looks at the media literacy challenges and opportunities AI creates.
	  ○ The foundational skills needed for everyone to have good media literacy in response to an increasingly AI-mediated information space.
	• We are working with the DRCF to evaluate the DRCF's AI and Digital Hub and develop a successor model.
	• We will continue our horizon-scanning work to identify emerging and longer-term AI developments that could have implications for citizens and consumers, regulated services and regulated sectors.
	• We will continue to publish all the non-confidential research data that we collect, with large data sets available in machine-readable formats.
	• We will continue to proactively monitor and engage with AI developments internationally, such as the EU's AI Act, to understand their impact on Ofcom's regulated sectors and stakeholders.
	• We are engaging in domestic and international regulatory forums, including the DRCF, GOSRN and EPRA, on AI issues that cross regulatory remits.
	• We will continue to engage on AI issues within standardisation bodies, including Ofcom's ongoing representation of the UK at the ITU.
	• We will continue to engage with the Government on its plans for AI opportunities and its planned future consultation on AI legislation.
	• We are investing in building our AI capabilities by upskilling our talent and further exploring how we can leverage AI across our operations.

Policy area	Work we will do in 2025/26
Online safety	• Our internal Online Safety Technology Lab will continue to support practical research into safety technologies, allowing colleagues to investigate and demonstrate the extent and power of online safety technologies. • We are working with the Alan Turing Institute to build a taxonomy for safety technology, providing clarity on standards which industry needs to enable innovation. • We will continue to work with big online platforms to understand how they are deploying AI tools, and how they can continue both to innovate safely, and use AI to improve safety on their services. • We will publish our final Guidance on a Safer Life Online for Women and Girls. • We will continue to engage with the emerging sector of AI assurance services to highlight opportunities for online-safety focused auditing and assurance techniques. • We will monitor the development of new AI technologies, products and services, and make sure that services are aware of their obligations under the Online Safety Act. • We will publish research exploring the merits of interventions that could help to respond to harmful deepfakes, including adopting watermarks, content provenance, and AI labels. This work includes in-depth experiments on the robustness of selected watermarking tools. We will also undertake research examining how GenAI tools are changing the way people search for information online. • We will explore the need for measures in our upcoming Codes of Practice to address AI-based harms. For example, we will shortly publish proposals on the use of hash matching to prevent the sharing of intimate images without consent, including AI-generated imagery. We will also explore the need for AI specific measures such as how technical interventions could help online services to detect deepfake fraudulent adverts on their platforms. • We will work with our DRCF counterparts to deliver our AI programme of work. This will include exploring the implications of new and emerging technologies – such as agentic systems – and what they could mean for our regulatory remits and industries.

Policy area	Work we will do in 2025/26
Telecoms	• Ofcom and Digital Catapult are collaborating in the SONIC Labs, on a technical study to understand the use of AI in mobile networks – this work will be leveraged to develop guidance on network resilience for mobile operators. • Ofcom is represented on the oversight board of UK Telecoms Lab, which provides a space for operators and vendors to test security, resilience, and interoperability on near-representative test networks. • Ofcom participates in the European Telecommunication Standards Institute (ETSI)'s Technical Committee: CYBER, where the telecoms aspects of AI security are formalised. ETSI is the Government's Standards Development Organisation of choice for this work and the DSIT AI Security team will also interact with the International Organisation for Standards. • We will continue to monitor and engage on AI standards development, with standards bodies domestically and internationally. • We will continue to engage with industry and the vendor supply chain to monitor AI-related cyber security risks, plus fraud and scams risks, flagging any concerns around negative impacts of AI on telecoms security to the appropriate entities (regulated companies, government and law enforcement). • We will use our regulatory powers to investigate security compromises in scope of the Network and Information Systems Regulations and the TSA and identify whether these have been facilitated by AI risks. • We will continue to engage with telecoms operators to understand how AI technologies are applied in their networks and their future development plans and support them in the development and deployment of any future telecoms systems and processes underpinned by AI. • We will continue to monitor AI market developments to understand how AI's increased adoption and use could impact digital markets related to telecoms (e.g. increased rollout of Edge computing). This monitoring will also consider impacts on consumers, and evaluate changes to the market structure of either digital or telecoms markets and the resulting impact on competition. • We will continue to monitor how developers of AI systems and those deploying them in telecoms are prioritising explainability, interpretability and transparency to build trust and accountability.

Policy area	Work we will do in 2025/26
Broadcasting & Media	• We will issue further guidance to broadcasters as necessary, ensuring they continue to understand their responsibilities and accountabilities regarding AI. • We will continue to investigate the implications of social media's influence over media plurality and sustainability, and the discoverability of news content and public service media content. • We are considering what policy enablers may be required to support the media sector in exploiting the opportunities that AI may present, and what policy solutions may be necessary to address the identified risks for audiences, public service broadcasters, news providers and the media sector as whole. • We will provide an update on both opportunities and risks as part of our second phase of the Public Service Media Review.
Spectrum	• We will further our research work on the application of machine learning for more efficient and reliable radio wave propagation models that can cover all aspects of complex spectrum mechanisms.
Post	• We will continue to monitor how the postal sector could further embrace AI opportunities.