HM Government

Pro-innovation Regulation of Technologies Review

Creative Industries

June 2023

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June 2023

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Context

The creative industries are an engine of the UK's economic growth and at the heart of our increasingly digital world. From 2010 to 2019, the sector grew over 1.5 times faster than the wider economy in terms of Gross Value Added (GVA). It also contributed £108 billion in output in 2021, accounting for 6% of UK GVA. In 2020, the sector exported £41.1 billion in services, accounting for 14.2% of the UK's exports in services worldwide. Additionally, the sector employed 2.3 million people in 2021. This is 7% of the total UK workforce and has increased at almost five times the rate of the UK total employment growth rate since 2011[1].

This impressive reach positions the UK as a widely recognised leader in the creative industries, both in terms of economic impact and as a global cultural influence. However, this success should not be taken for granted, especially in a world of rising global competition and rapid technological development.

This report provides recommendations to promote growth and innovation in the creative industries including specific suggestions for sub-sectors including video games, advertising, live performance, and fashion, where clear regulatory opportunities have been identified from our engagement with industry. These sub-sectors make substantial contributions to the UK economy, with advertising and marketing contributing nearly £20 billion, music, performance and visual arts contributing over £8.3 billion, and design and fashion design contributing over £2.5 billion in 2021. As the creative industries continue to drive economic growth, appropriate regulation can help nurture innovation in a responsible way that protects creators' rights, encourages decarbonisation, and remains agile and responsive to the pace of technological change.

Scope of the Review

This review makes recommendations on specific regulatory reforms that could be implemented over the next 6-18 months, following extensive engagement with industry, regulators, and public bodies, as well as across government. Some recommendations apply across the creative industries while others focus on specific sub-sectors where bespoke approaches to enabling pro-innovation regulation are required. DCMS considers the creative industries to be comprised of the following nine sub-sectors: advertising and marketing; architecture; crafts; design and designer fashion (including textiles); film, TV, radio and photography; museums, galleries and libraries; music, performing and visual arts; publishing; and IT, software and computer services (including video games)[2].

Many elements of the creative industries require a different regulatory approach compared to other sectors the GCSA reviews have looked at to date. This is due to the distinctive features of its sub-sectors, the comparatively lower level of physical risk attached to the innovative products and services it produces, their unique economic and societal value, and their centrality to our national conversation. Several sub-sectors of the creative industries are already subject to various regulations, such as spectrum usage and public service broadcasting obligations. For other areas, self- and co-regulation have proven effective. It will be important for government to build on and nurture what has worked well for the sector, ensuring that the approach is right, remains proportionate and avoids stifling innovation.

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[1] DCMS, DCMS Sectors Economic Estimates (2023)
[2] DCMS, DCMS Sector Economic Estimates Methodology (2021)

Pro-innovation regulation: part of the solution

Stakeholders have reported a range of challenges facing the sector, some of which are not in scope of this review as they either cannot be addressed in the coming 6 to 18 months, or since they relate to matters beyond regulation. These include sector-specific tax reliefs, access to finance, supporting the creative industries to become a more R&D-intensive sector, managing issues which have arisen following the UK's exit from the EU including for touring performers, and strengthening the creative skills pipeline. Addressing these issues could have a transformative effect in improving and enhancing the business environment for creative industries. While we do not make recommendations on these specific issues, a pro-innovation regulatory environment is likely to complement wider initiatives to support the sector, such as those set out in the government's Creative Industries Sector Vision[3] and the Council for Science and Technology's forthcoming advice on R&D support.

We also note the interest from the creative industries in the recommendation set out in the Pro-innovation Regulation of Innovation Review: Digital Technologies report[4] (the 'Digital Technologies report') that the government should announce a clear policy position on the relationship between intellectual property (IP) law and generative artificial intelligence (AI) to provide confidence to innovators and investors. The government response to this report confirmed that a code of practice would be developed to enable AI innovators and the creative industries to grow together in partnership, allowing AI firms to access copyrighted work as an input to their models, while ensuring that there are appropriate protections in place to support the rights of holders of copyrighted work. We welcome the work done on this to date by the Intellectual Property Office. We understand from our engagement with creative industry stakeholders that while the development of a voluntary code of practice is an important, pragmatic step in resolving these tensions, it should not run counter to IP value creation, as IP is central to the sector accruing value and its capacity for growth.

Beyond regulation alone, the government's Creative Industries Sector Vision sets out a wider landscape approach to addressing the common challenges and opportunities across the creative sub-sectors, while the Council for Science and Technology will advise government on opportunities to strengthen support for R&D in the sector.

[3] https://www.gov.uk/government/publications/creative-industries-sector-vision
[4] Pro-innovation Regulation of Technologies Review: Digital Technologies - GOV.UK (www.gov.uk)

Section 1: Regulatory Frameworks

Future-facing regulation

Enhanced regulatory collaboration between the creative and digital economies

The internet has become an everyday presence in our lives. Emerging technologies such as virtual and augmented reality (VR, AR) systems and AI continue to enhance its potential and are developing at an exponential pace[5]. These disruptive new technologies are increasingly important for creative innovation, merging the physical and digital worlds to create unprecedented opportunities, such as enhanced participation in live events[6]. However, their potential future impacts on the creative industries are unknown. As these technologies mature, further issues may arise, for example regarding safety, ethics or risks related to their application, which could require regulation to ensure continued responsible innovation and to maintain public trust.

As set out in the Digital Technologies report[7], the government should avoid regulating emerging technologies too early to avoid stifling creative innovation or creating unintended consequences for the creative industries. Regular engagement between government, regulators and industry will be key to shaping future regulation and ensuring the creative and technology ecosystem continues to thrive. Other specific features of future regulatory structures should include flexible review periods which can adapt to the pace and fluidity of technological change and appropriate, iterative feedback processes including regulator-to-regulator communication channels, and engagement between the creative and technology sectors.

Regulation can also help new technologies to scale up and attract investment. Enabling the right infrastructure to test new ideas will be an important feature of future regulatory structures. This includes the use of multi-regulator regulatory sandboxes and testbeds, where businesses can experiment with novel products and services in a controlled and flexible testing environment. This approach enables risks to be identified and addressed by regulators so that innovations that benefit consumers can be brought to market more safely and quickly. The Digital Technologies report recommended that the government collaborate with regulators to develop a multi-regulator sandbox for AI within the next six months. Similarly, in its 2023/24 Workplan[8], the Digital Regulation Cooperation Forum highlights the benefit of cross-regulatory sandboxes to support innovation. We welcome such initiatives which help solve specific regulatory issues identified by industry or identify a way forward when clear regulatory pathways are not available.

Stakeholders have made clear, however, that a single regulatory framework applicable across all creative sub-sectors would neither be effective nor desirable, given the varied sets of issues and challenges that they face.

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[5] https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/
[6] https://www.weforum.org/focus/fourth-industrial-revolution
[7] Pro-innovation Regulation of Technologies Review: Digital Technologies - GOV.UK (www.gov.uk)
[8] DRCF Workplan 2023/24 | DRCF https://www.drcf.org.uk/publications/work-plans/drcf-workplan-202324

Recommendation 1: The Creative Industries Council (CIC) should leverage its position as a joint government-industry organisation to convene different parts of the creative and digital economies (including regulators as appropriate, with due regard to existing fora for cooperation) to explore effective information-sharing mechanisms regarding different models of regulation and the possible impacts of emerging technology on the creative industries. The CIC should also explore appropriate feedback loops and processes that facilitate the sharing of best practice to inform the development of effective future regulatory approaches.

Alternatives to traditional forms of regulation: self-regulation and co-regulation

Several creative sub-sectors have their own frameworks and standards enabling co- and self-regulation, especially those which are highly internationalised. Industry stakeholders have highlighted to us the value of a proportionate approach to regulation across the sector. A recent policy paper, Smarter Regulation to Grow the Economy[9], sets out that the government will end the default expectation that regulation is a first choice. Departments will be required to thoroughly consider non-regulatory options such as standards and guidance in the first instance, which are easier to adjust, remove or strengthen when no longer working effectively, for instance to keep pace with changing technologies. Regulators may sign up to this framework on a voluntary basis.

What is self-regulation and co-regulation?

Self-regulation *regulation is where a sector regulates itself voluntarily, at its own cost, often in response to delivering a government objective. Examples include the use of codes of conduct, customer charters, standards, or accreditation, with either a trade association or another industry body responsible for enforcement. The industry is then solely responsible for ensuring its members' compliance.*

Co-regulation *involves a greater degree of explicit government involvement, for instance in working with the sector to develop a code of practice, which the sector then enforces through an accredited organisation.*

<u>Video Games</u>

Video games are at the forefront of technological evolution. Developments are often so rapid in this sector that traditional forms of regulation are unable to keep pace. In this scenario, self-regulation can sometimes be an effective means to enable responsible innovation that remains in step with digital developments. The case study below is an example in which a self-regulatory framework supports a creative sub-sector to respond to technological developments (in this case, the rise in online games), and demonstrates the benefits of harmonising cross-border self-regulation in an internationalised sector. The Video Games Research Framework[10], published in May 2023, is an example of government working with industry and academia with the goal of enabling better research on a range of topics, including emerging technologies.

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[9] Smarter regulation to grow the economy - GOV.UK (www.gov.uk)

[10] Video Games Research Framework - GOV.UK (www.gov.uk)

Case study A – An Example of Successful Self-Regulation

The Pan European Game Information (PEGI) rating system was introduced for video games in the UK in 2003. PEGI was founded by the Interactive Software Federation of Europe (ISFE) as a self-regulatory age rating system for video games, which considers the age suitability of a game's content. The PEGI system is administered in the UK by the Games Rating Authority. While under the Video Recordings Act 1984, it is illegal to supply a PEGI 12-, 16- or 18-rated game to children below those ages in physical format, the ratings are also applied voluntarily by industry to many games supplied directly to connected devices (e.g., downloadable games and browser-based games)[11]. PEGI ratings are displayed on games across most major digital storefronts and more detailed information about game content can be obtained using the PEGI app. Today, PEGI is used and recognised throughout Europe, with PEGI rated products marketed in more than 35 countries[12].

<u>Advertising</u>

Advertising in the UK is a sector where self-regulation and co-regulation are well established. The sector has requested continued support for successful self-regulation and co-regulation models such as the Advertising Standards Authority (ASA). The ASA is the UK's independent advertising regulator which, in addition to its self-regulatory work, has co-regulatory arrangements with bodies such as Ofcom, for example in the regulation of TV and radio advertising.

Case study B – An Example of Successful Co- and Self-Regulation

Non-broadcast advertising is an area of self-regulation, in which rules drawn up by industry are administered by the ASA, with statutory backstops operating in discrete areas such as misleading advertising and gambling. The ASA has taken on an important role in developing innovative approaches to the regulation of online advertising, which largely holds advertisers primarily responsible for the creative content and media placement of their adverts. The ASA also places responsibilities on others involved in preparing or publishing marketing communications, to comply with their UK Code of Non-Broadcast Advertising and Direct & Promotional Marketing (the 'CAP Code'). A range of industry-sourced initiatives such as standards and best practice, intelligence-led tools and consumer awareness campaigns sit alongside this framework. Examples include the Internet Advertising Bureau's (IAB UK) Gold Standard[13], and the Trustworthy Accountability Group's (TAG) certification programmes[14]. Co-regulation applies in areas such as broadcast advertising; the ASA has responsibility for day-to-day regulation, with Ofcom acting as its statutory backstop.

The government already supports and encourages the adoption of these standards and is exploring how it can support further innovation and development of standards that aim to minimise consumer harms, especially in the online sphere. This includes consideration of regulatory options.

We note that in some cases, traditional forms of regulation may be more appropriate to ensure consumers and the public are best protected. For example, as set out in the

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[11] Government response to the call for evidence on loot boxes in video games - GOV.UK (www.gov.uk)
[12] PEGI – The European content rating system - ISFE
[13] https://www.iabuk.com/goldstandard
[14] https://www.tagtoday.net/certifications

government response to the call for evidence on loot boxes in video games[15]. While the government is currently pursuing improved industry-led protections regarding loot boxes, it will consider legislative options if deemed necessary to protect children and adults. Separately, the Online Safety Bill[16] will introduce new protections for internet users and apply to user-to-user services, including video games which allow interaction with other users online. The scale and speed of the growth of online advertising also presents some challenges. In particular, a lack of transparency and accountability in the supply chain, combined with misaligned incentives, has resulted in an increase in harms associated with online advertising. This has reduced the trust of internet users, ultimately impacting the sustainable growth of the online advertising industry. Legislative reform of the regulation of online advertising would give regulators the tools to tackle these harms. Regulation will work in parallel with innovative voluntary initiatives to reduce harm to consumers, particularly children.

Recommendation 2: Noting the government's commitment[17] to move away from defaulting to traditional regulation as a first choice, we recommend that regulators whose work intersects with the creative industries - primarily the CMA, ICO and Ofcom - should continue to support self-regulation and co-regulation where appropriate, in line with the Smarter Regulation Framework.

[15] Government response to the call for evidence on loot boxes in video games - GOV.UK (www.gov.uk)
[16] https://bills.parliament.uk/bills/3137
[17] Smarter regulation to grow the economy - GOV.UK (www.gov.uk)

Section 2: Regulatory reform to promote sustainability and decarbonisation

Issues contributing to the creative industries' carbon footprint are complex and varied, especially due to the diversity of its sub-sectors and intricate global supply chains. Their impact is substantial. For example, a typical £50 million feature film production emits 2,840 tonnes of $CO2$[18], and it is estimated that the entire global fashion product life cycle is responsible for up to 8-10% of total global greenhouse gas emissions[19]. As technological innovation accelerates, enabling us to produce more, faster, so does the need to ensure that innovation and sustainable practices are mutually reinforcing, as the need to achieve net zero becomes ever more acute. The UK's creative sub-sectors are united by a recognition that their practices need to become more sustainable. Regulatory frameworks can encourage environmentally friendly innovation and help creative industries take significant steps to decarbonise.

Standardisation of measuring and reporting emissions

A positive self-regulatory approach is already being taken in some creative sub-sectors, through industry-led initiatives[20], to decarbonise the production of creative content, and increase sustainable practices. However, so far there appears to be a lack of common standards. An overarching methodology to measure and record greenhouse gas emissions across the creative industries could help to both ensure an aligned approach across sub-sectors and encourage more sustainable innovation in the creative industries. More accurate methods to record data could make measuring emissions more accessible (particularly for SMEs) and create a more effective feedback loop. This could help to identify best practice across the creative industries and any gaps and weaknesses where a focus on innovating sustainable practices and processes could generate real change in achieving Net Zero. However, while there is value in standardising inputs, any common approach must be adaptable to the breadth of CI sub-sectors and their varying outputs (e.g., both digital and physical outputs).

Recommendation 3: As part of the government's wider work to measure greenhouse gas emissions across all sectors[21], it should work with the creative industries to

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[18] PEC, Creative Industries and the Climate Emergency: The path to Net Zero (2022)
[19] United Nations, ActNow for Zero Waste Fashion (2019); Quantis, Measuring Fashion – Environmental Impact of the Global Apparel and Footwear Industries (2018); PEC, Creative Industries and the Climate Emergency: The path to Net Zero (2022)
[20] Companies such as IAB Tech Lab, BAFTA's Albert, and Julie's Bicycle are actively involved in these efforts. IAB Tech Lab's Green Initiative focuses on lowering carbon emissions in the advertising industry and enhancing accountability. BAFTA's albert provides Sustainable Production certification and supports the film and TV industry in reducing environmental impacts. Julie's Bicycle mobilizes the arts and culture sectors to address the climate crisis. https://iabtechlab.com/press-releases/iab-tech-lab-unveils-multi-year-green-supply-path-initiative/; https://www.bafta.org/about/sustainability; https://wearealbert.org/about/ ; https://juliesbicycle.com/about-us/about-jb/
[21] Powering up Britain - GOV.UK (www.gov.uk)

explore the feasibility of developing a standard framework, to which industry could sign up voluntarily, for more accurately measuring and reporting greenhouse gas emissions across the creative industries sector given the diversity of its sub-sectors.

Removing competition barriers

The Competition Act 1998[22] prohibits agreements between businesses that restrict competition in the UK, unless specific conditions for exemption are met. Recently, the Competition and Markets Authority (CMA) sought public input on draft guidance[23] related to the application of the Chapter I prohibition in the Competition Act 1998. This guidance focuses on providing a better understanding of how rules should be interpreted with regards to environmental sustainability agreements made between businesses operating at the same level of the supply chain. This should help creative businesses navigate the legal landscape and ensure that their agreements comply with competition law while also pursuing their sustainability goals.

Creative businesses such as design agencies, advertising firms and digital media companies often work together on projects that require sustainable materials, energy-efficient technologies, or responsible production methods. The guidance could provide a framework for these businesses to deepen their collaboration without breaching competition laws, encouraging them to pool resources, share research and collectively invest in sustainable initiatives. The guidance could also facilitate knowledge-exchange and sharing of best practice within the creative sector, allowing for the adoption of more effective approaches and continuous improvement across the industry.

Recommendation 4: We recommend that the CMA should accelerate plans to publish guidance on the application of the Chapter I prohibition in the Competition Act 1998 to agreements between businesses operating at the same level of the supply chain in relation to environmental sustainability. While this would apply to businesses generally, it would benefit the creative industries.

Regulatory options to manage textiles waste

Fashion has one of the largest environmental footprints of the creative sub-sectors. Changing fashion seasons, ‘fast fashion’ design and production techniques and discarded garments are some of the many sustainability challenges facing the industry. The rise of fast fashion has seen us buying more and using our belongings less. In the UK, we purchase on average 16kg of new clothing annually per person, higher than other high-income countries like France, Sweden, and Italy. New research found that 45% of UK citizens said they purchase clothing at least once a month, yet 26% of items in a typical UK wardrobe were not worn in the past year[24]. The industry generates a huge amount of waste. In England alone over 1 million tonnes of textiles are disposed of in household and commercial municipal residual waste each year, or 4.2% of all municipal residual waste, including almost 400,000 tonnes of

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[22] https://www.legislation.gov.uk/ukpga/1998/41/contents
[23] Draft guidance on environmental sustainability agreements - GOV.UK (www.gov.uk)
[24] Citizen Insights - Clothing Longevity and CBM Receptivity in the UK.pdf (wrap.org.uk) - https://wrap.org.uk/sites/default/files/2023-05/Citizen%20Insights%20-%20Clothing%20Longevity%20and%20CBM%20Receptivity%20in%20the%20UK.pdf

clothing[25]. This material ends up going to landfill or incineration, contributing to waste sector emissions.

The fashion industry is inherently complex. Many businesses operate within a complicated network of global supply chains, where materials and manufacturing processes are outsourced. There are also challenges regarding data collection to better understand the impact of waste from the sector, as well as consumer understanding of sustainable clothing and the impact of their purchases. While the sector has voluntarily signed up to commitments such as WRAP's Textiles 2030[26] to tackle some of these environmental challenges and continues to develop new innovations, government intervention to manage these challenges through regulation could support the sector to surmount them. A more adaptable, agile regulatory framework in this field would offer businesses opportunities to develop, trial and commercialise innovative technological solutions to waste management, recycling and waste generated during production itself that could be exported globally, creating a more sustainable and circular textiles sector.

Recommendation 5: The government should consult the fashion industry within the next 18 months on regulatory options to manage textiles waste. This will inform future regulatory approaches to complement existing industry-led action.

[25] https://wrap.org.uk/sites/default/files/2021-10/WRAP-national-household-waste-comparison-2017.pdf
[26] https://wrap.org.uk/taking-action/textiles/initiatives/textiles-2030

Section 3: Pro-innovation legislation and innovative technologies

Pro-Innovation legislation and international agreements

A suite of legislation that has the potential to help drive growth in the creative industries is currently either in preparation or has already been introduced to Parliament. International treaties and agreements also have potential to support innovation in the UK's creative industries.

The Digital Markets, Competition and Consumers (DMCC) Bill[27], introduced to Parliament in April 2023, will give new powers to the CMA, and establish new, faster, more effective tools to address the unique barriers to competition in digital markets. Opening up digital markets to greater competition can unlock British creativity by reducing the risk to businesses, especially new challenger firms, that their innovative ideas may be quashed before they can get to market. The Bill could also be an important step towards addressing the concerns we heard raised across the creative economy about the inadequacy of current platform regulation in addressing asymmetries in information between dominant, largely global platforms and smaller, innovative companies.

The Data Protection and Digital Information Bill (No. 2)[28] was introduced to Parliament on 8 March 2023. The Bill aims to reform the existing UK data protection regime following Brexit to create a new pro-growth and pro-innovation data protection framework that reduces burdens on organisations, including creative businesses, and boosts the economy.

The Draft Media Bill[29], which is currently undergoing pre-legislative scrutiny, contains a package of reforms to drive growth of the UK's world-leading public service broadcasters (PSBs), allowing them to continue to foster innovations in the way TV is produced and consumed, and compete in a global digital world. The reforms in the Media Bill will help ensure the sustainability of both PSBs and radio stations across the UK, by updating regulation to respond to changing audience habits, so that they can continue to provide jobs and drive growth and innovation. The reforms include a new legislative online prominence framework to be enforced by Ofcom, who will be required to develop guidance to support this framework. The approach to regulation aims to prevent disproportionate impacts on a TV platform's ability to innovate and to allow sufficient flexibility in how both PSBs and TV platforms comply with the new prominence requirements.

Recommendation 6: The government should prioritise introduction of the Media Bill as soon as possible in the fourth session.

An effective and balanced copyright and performers' rights framework is central to the success of our creative industries. The Beijing Treaty on Audiovisual Performances is an international agreement to provide intellectual property rights in audiovisual performances.

[27] https://bills.parliament.uk/bills/3453
[28] https://bills.parliament.uk/bills/3430
[29] https://www.gov.uk/government/publications/draft-media-bill

These include performances given by actors, musicians, dancers, and other performers that are incorporated into audiovisual recordings. The Treaty requires countries to strengthen performers' moral rights, which are rights for artists to be recognised and credited for their performances in audiovisual works (such as films, TV shows or music videos), to object to alterations that could harm their reputation or artistic integrity, and greater freedom to withdraw their consent for use. UK law already provides equivalent rights to performers for their live performances and performances in sound recordings but before we ratify the Treaty, more needs to be done for recordings that capture sound and images together ('audiovisual fixations').

While the UK signed the Beijing Treaty[30] in 2013, it was not possible to implement or ratify the Treaty independently while the UK was a member of the EU. The government has made clear its intention[31] to ratify the Treaty. By doing so, UK audiovisual performers would be entitled to receive protection in and royalties from other contracting parties. The government issued a call for views on specific issues relating to implementation of the Treaty in 2021. We consider that the setting out of specific details on how the government intends to ratify the Treaty would provide valuable certainty for the creative industries.

Recommendation 7: The government should ratify and implement the Beijing Treaty at the earliest possible opportunity and provide details within the next 6 months of how it intends to ratify the Treaty.

5G and telecoms

5G has enormous potential to enhance live event experiences, enabling cloud adoption, low-latency video distribution and scalable audience engagement. It democratises content production, providing access to a wider range of production tools and simplifying the process for capturing and transmitting content. Stand-alone 5G delivered through localised private or public networks offers several promising commercial opportunities for creative companies around next-generation event innovation, which enriches users' experience and reduces latency, interference and other related issues that can adversely affect their quality[32]. The Wireless Infrastructure Strategy[33], published in April 2023, provides a long-term vision for supporting private sector 5G investment by promoting competition and lowering deployment costs.

In 2019, Ofcom introduced a new spectrum sharing framework for local wireless connectivity, which allows localised access to spectrum already licensed to mobile network operators through Local Access Licences. It also designates specific bands for shared use through Shared Access Licences (SALs). The SAL enables operators and businesses to obtain localised access to spectrum to implement 5G networks in specific locations for a range of applications, including broadcast and media operations. This approach was used by the BBC and overseas TV crews to cover King Charles III's coronation[34].

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[30] https://www.wipo.int/treaties/en/ip/beijing/
[31] Government response to HoL Comms & Digital Committee's 'At risk: our creative future' report (https://committees.parliament.uk/publications/39303/documents/192860/default/).
[32] Spectrum roadmap: Delivering Ofcom's Spectrum Management Strategy - Ofcom
[33] UK Wireless Infrastructure Strategy - GOV.UK (www.gov.uk)
[34] Using a private 5G network to support coverage of the King's Coronation - BBC R&D

Ofcom is already working to automate SAL bands by April 2024. In both the Spectrum Statement and Wireless Infrastructure Strategy, the government reaffirmed its commitment to the introduction of Dynamic Spectrum Access (DSA) where appropriate. These measures collectively will help facilitate the faster authorisation and establishment of private networks that support creative companies innovating to develop virtual and augmented reality technologies that improve user experiences at live events, which will help unleash innovation that has a powerful and transformative effect on the way we consume entertainment and create content.

Recommendation 8: To support the scaling up of these innovative location-based and potentially time-limited media applications, Ofcom should explore options to accelerate the planned introduction of licensing automation in the SAL bands specifically, and the introduction of DSA where appropriate.

Digital Watermarking

Emerging technologies around traceability – which embed imperceptible digital watermarks into media such as images and video – have the potential to offer commercial opportunities to UK-based innovators looking to develop products that will help businesses protect their digital assets, and prevent their unauthorised use.

Expanding on a recommendation made in the Digital Technologies report, which called for the development of watermarking as a technology solution for ensuring attribution and recognition in generative AI specifically, the government should intensify its engagement with businesses and the academic community to consider the role of these technologies in future and opportunities to support adoption in the medium term, where there are clear benefits. This may include sector-wide standards or proportionate regulation introduced at the appropriate point.

Recommendation 9: The government should continue to engage with industry on the potential roles of digital watermarking in the future with a view to promoting standards and proportionate regulation at the appropriate point as these technologies mature and become more widely adopted.

Supply chain traceability for non-digital creative industries

Supply chains in many creative sub-sectors are often opaque. This prevents consumers from making informed and more ethical purchasing choices. Clearer traceability in supply chains is of critical importance to the long-term success of the creative economy in the UK. By tracking the flow of components, it protects the originality and value of creative products by making it easier to identify and prevent counterfeiting and other unauthorised uses of copyrighted material. It also allows creative companies to demonstrate transparency and accountability in their supply chains, meeting the concerns of consumers whose decisions are increasingly being driven by ethical and environmental considerations.

There may be commercial opportunities for innovators to improve supply chain traceability – to address growing consumer concerns around sustainability, ethical practices, and transparency in those areas of the creative economy where physical items and manufactures predominate, such as fashion. This includes Internet of Things (IoT) devices embedded in products – such as sensors and Radio Frequency Identification (RFID) tags – which can collect and transmit data throughout the supply chain. However, this represents just one of several technologies with the potential to improve the traceability of physical components that form part of the final creative product.

As with digital watermarking, the technologies that are helping to improve supply chain traceability for physical items remain at a nascent stage, and to regulate now risks jeopardising their development and growth.

Recommendation 10: While these technologies continue to mature, government should avoid regulating prematurely and risk stifling innovation. Instead, as with digital watermarking technologies, it should prioritise engagement with industry on the benefits that these technologies could bring in the future. This includes encouraging industry to adopt and set standards at the appropriate moment and links with Recommendation 2 in the Pro-innovation Regulation of Technologies Review of Digital Technologies[35].

[35] Pro-innovation Regulation of Technologies Review: Digital Technologies - GOV.UK (www.gov.uk)