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This fully updated seventh edition of *The Technology, Media and Telecommunications Review* provides an overview of evolving legal constructs in 28 jurisdictions around the world. It is intended as a business-focused framework for both start-ups and established companies, as well as an overview for those interested in examining evolving law and policy in the rapidly changing TMT sector.

Broadband connectivity and wireless services continue to drive law and policy in this sector. The disruptive effect of new technologies and new ways of communicating creates challenges around the world as regulators seek to facilitate the deployment of state-of-the-art communications infrastructure to all citizens and also to use the limited radio spectrum more efficiently than before. At the same time, technological innovation makes it commercially practical to use large segments of ‘higher’ parts of the radio spectrum for the first time. Moreover, the global nature of TMT companies compels them to address these issues in different ways than before.

A host of new demands, such as the developing ‘Internet of Things,’ the need for broadband service to aeroplanes, vessels, motor vehicles and trains, and the general desire for faster and better mobile broadband service no matter where we go, create pressures on the existing spectrum environment. Regulators are being forced to both (1) ‘refarm’ existing spectrum bands, so that new services and technologies can access spectrum previously set aside for businesses that either never developed or no longer have the same spectrum needs, and (2) facilitate spectrum sharing between different services in ways previously not contemplated. Many important issues are being studied as part of the preparation for the next World Radio-communication Conference to be held in 2019. No doubt, this conference will lead to changes in long-standing radio spectrum allocations that have not kept up with advances in technology, and it should also address the flexible ways that new technologies allow many different services to co-exist in the same segment of spectrum.

Legacy terrestrial telecommunications networks designed primarily for voice are being upgraded to support the broadband applications of tomorrow that will extend economic benefits, educational opportunities and medical services throughout the world. As a result, many governments are investing in or subsidising broadband networks to ensure that their citizens can participate in the global economy, and have universal access to the vital
information, entertainment and educational services now delivered over broadband. Many governments are re-evaluating how to regulate broadband providers, whose networks have become essential to almost every citizen. Convergence, vertical integration and consolidation also lead to increased focus on competition and, in some cases, to changes in the government bodies responsible for monitoring and managing competition in the TMT sector. Similarly, many global companies now are able to focus their regulatory activities outside their traditional home, and in jurisdictions that provide the most accommodating terms and conditions.

Changes in the TMT ecosystem, including increased opportunities to distribute video content over broadband networks, have led to policy focuses on issues such as ‘network neutrality’ – the goal of providing some type of stability for the provision of the important communications services on which almost everyone relies, while also addressing the opportunities for mischief that can arise when market forces work unchecked. While the stated goals of that policy focus are laudable, the way in which resulting law and regulation are implemented has profound effects on the balance of power in the sector, and also raises important questions about who should bear the burden of expanding broadband networks to accommodate the capacity strains created by content providers and to facilitate their new businesses.

The following chapters describe these types of developments around the world, as well as the developing liberalisation of foreign ownership restrictions, efforts to ensure consumer privacy and data protection, and measures to ensure national security and facilitate law enforcement. Many tensions exist among the policy goals that underlie the resulting changes in the law. Moreover, cultural and political considerations often drive different responses at the national and the regional level, even though the global TMT marketplace creates a common set of issues.

I would like to take the opportunity to thank all of the contributors for their insightful contributions to this publication and I hope you will find this global survey a useful starting point in your review and analysis of these fascinating developments in the TMT sector.

John P Janka
Latham & Watkins LLP
Washington, DC
October 2016
I OVERVIEW

The Office of Communications (Ofcom) and the Communications Act 2003 (the Act) regulate the UK communications landscape. Ofcom’s current priorities are set out in its 2016–17 Annual Plan. They include promoting effective competition, ensuring that markets work effectively for consumers through their continued work on a Strategic Review of Digital Communications, securing standards and improving quality by making targeted interventions to improve consumer and citizen outcomes and implementing additional measures to protect consumers from harmful behaviour by firms or other offensive content on television and radio. The European Commission’s Digital Single Market (DSM) proposals (set out in more detail in Sections II.v and V.iv, infra) promise to make significant changes to this landscape, if adopted in their current form.

II REGULATION

i The regulators

Ofcom is the independent communications regulator in the UK. The Department for Culture, Media and Sports (DCMS) remains responsible for certain high-level policy formulation and the promulgation of legislation (a role performed by the Department for Business, Innovation and Skills before 2011), but most key policy initiatives are constructed and pursued by Ofcom. Ofcom has largely delegated its duties for radio and TV advertising to the
Advertising Standards Authority (ASA), and a number of new regulatory bodies have been established within the ASA (such as the Broadcast Committee of Advertising Practice). On 1 November 2014, Ofcom renewed its 10-year contract with the ASA until 2024, with only minor changes from the previous contract. The changes were mainly intended to recognise established practices agreed between Ofcom and the ASA since the initial implementation of the co-regulatory system.

Ofcom’s principal duty is ‘to further the interests’ of citizens in relation to communications matters and to further the interests of consumers in relevant markets: where appropriate by promoting competition by making communication markets work for everyone. This is enshrined in Ofcom’s three main objectives: (i) to promote competition and ensure that markets work effectively for consumers; (ii) to secure standards and improve quality; and (iii) to protect consumers from harm.

Ofcom’s priorities and major work areas (which in some cases underpin the three key objectives) for the year are set out below:

\[ a \] Promote competition and ensure that markets work effectively for consumers:
- creating the opportunity for large-scale deployment of more ultra-fast networks;
- implementing proposals to increase Openreach’s independence;
- ensuring that European regulatory frameworks work for the UK;
- supporting competition in fixed-line services, through market reviews;
- improving consumers’ and business’ ability to make informed choices; and
- monitoring price increases, providing advice and information on prices, and making sure all consumers receive value from their communication providers.

\[ b \] Secure standards and improve quality:
- supporting the implementation of a new broadband universal service obligation (USO);
- delivering a step-change in the quality of telecoms services; and
- implementing conclusions of BBC Charter Renewal.

\[ c \] Protect consumers from harm:
- addressing nuisance calls; and
- continuing to respond to emerging consumer issues.

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4 Ofcom has concurrent powers to apply competition law along with the primary UK Competition Law Authority, the Competition and Markets Authority (CMA). Enhanced concurrency arrangements came into effect on 1 April 2014 with the objective of increasing the enforcement of competition law in the regulated sectors by strengthening the cooperation between the CMA and sector regulators, including Ofcom, referred to as concurrency. The most recent Annual Report on concurrency was published by the CMA on 28 April 2014, available at www.gov.uk/government/uploads/system/uploads/attachment_data/file/519739/Annual--report-on-concurrency-2016.pdf.

5 Available at: www.ofcom.org.uk/content/about/annual-reports-plans/ann-plans/1560620/Annual-Plan-2016-17.pdf.

6 Openreach is part of the BT Group and develops and maintains the UK’s main telecoms network.
• Ofcom’s specific statutory duties fall into five main areas:
  • ensuring the optimal use of the radio spectrum;
  • ensuring that a wide range of electronic communications services – including high-speed data services – are available throughout the UK;
  • ensuring plurality in the provision of broadcasting and ensuring a wide range of TV and radio services of high quality and broad appeal;
  • securing the universal service obligation on postal services within the jurisdiction; and
  • applying adequate protection for audiences against offensive or harmful material, and unfairness or the infringement of privacy.

On 25 February 2016, Ofcom published its initial conclusions of its overarching review of the UK’s digital communications first announced on 12 March 2015.7 This was Ofcom’s second major assessment of the telecommunications sector: the first began in December 2003 and concluded in September 2005 and was the first of its kind in 10 years. The review encompassed two discrete phases. Phase one focused on evidence gathering and understanding experiences of digital communications. Ofcom started the first phase in July 2015, publishing a discussion paper.8 The second phase of the review resulted in initial conclusions focusing on six fundamental measures intended to facilitate the development of the UK communications market:

  a universal availability of fixed and mobile services – it was noted the UK government is scheduled to consult on this issue in late 2016;
  b strategic shift to large scale fibre deployment – Ofcom believes the key incentive for investment and innovation is to stimulate network-based competition to encourage improvements to current networks and the formulation of new network infrastructure;
  c a step change in the quality of service – Ofcom identifies that the most commented upon issue throughout the conduct of this review was in relation to the quality of service;
  d significantly strengthening the independence of Openreach – notwithstanding the functional separation of BT in 2005, Ofcom notes that the BT Group continues to exercise control over the strategic decision making and budget apportioned to the part of its network reserved for competitors;
  e empowering and protecting consumers – against a backdrop of increasing diversity and expansion within the communications market, Ofcom is mindful of the need to provide clear and accurate information to consumers to enable informed choices on the best packages for their needs; and
  f simplifying and removing unnecessary regulation – Ofcom reiterates its fundamental principle of non-interference except where strictly necessary and the promotion of deregulation where feasible. In this regard, Ofcom has introduced proposals to deregulate the market for central London business connections due to the plethora of competition.

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The next steps set out in phase two were, as follows, to implement the proposed measures through the usual mechanism of regular reviews of individual markets and likewise to implement specific dedicated projects. Specific dedicated projects that have been envisaged include:

a. Ofcom working with the UK government to introduce the new universal right to broadband;
b. Ofcom continuing to provide accurate, comparable, accessible and increasingly granular coverage information, published in its Connected Nations 2015 report and nation-specific reports towards the end of 2016;
c. Ofcom using its power to require operators to improve mobile coverage, for example by including licence conditions on population and geographic coverage for new spectrum releases;
d. Ofcom working with BT and industry to make BT’s underground duct system more easily accessible to competitors. Ofcom will implement these changes through the Civil Infrastructure Directive and UK transposition legislation, planned for summer 2016. Ofcom will also make specific proposals for improving access in its Wholesale Local Access Market Review. Ofcom will also use this review to implement regulated access and pricing policies to support investment in access networks;
e. Ofcom setting tough minimum standards for Openreach in the business market with rigorous enforcement and fines for underperformance;
f. Ofcom publishing the first annual Report of Service Quality in 2017;
g. Ofcom extending minimum standards, and introducing rules to incentivise Openreach to go beyond minimum standards and deliver better service. These rules will be introduced in 2016, and consulted on during the Wholesale Local Access Market Review;
h. Ofcom setting up a working group with the communications industry to coordinate better service quality;
i. Ofcom consulting on the introduction of automatic compensation for consumers and small businesses;
j. Ofcom developing detailed proposals on Openreach independence and discussing these proposals with the European Commission in 2016;
k. Ofcom working with industry and third parties (e.g., price comparison sites) to improve the level of information available to consumers, and exploring a requirement for providers to publish a standard cost comparison measure alongside their tariffs;
l. Ofcom consulting on mobile switching in the first half of 2016, and completing its review of switching triple-play services (phone line, TV, broadband); and
m. Ofcom consulting on proposals to streamline and update the General Conditions by summer 2016, and finalising proposals by spring 2017. Ofcom will also consider the scope for deregulation in one of every four market reviews.

The discussion paper also provided insight into future policy challenges across fixed, mobile and content sectors, including:

a. investment and innovation, delivering widespread availability of services. Ofcom deduced that a strategy must be implemented that offers appropriate incentives to stimulate private investment and innovation to ensure a diverse range of services are readily available. The strategy should also consider what needs to be done to ensure services are available in less commercially viable regions;
United Kingdom

b sustainable competition, delivering choice, quality and affordable prices. In general, Ofcom believes that the best mechanism for delivering choice, quality and affordable prices is a healthy competitive market. It will continue to encourage this through regulation that protects both competition and incentives for efficient investment;

c empowered consumers, able to take advantage of competitive markets. Competition is only effective when consumers are equipped to make an informed decision and can easily act on that information to make a switch if they want to; and

d targeted regulation where necessary with deregulation elsewhere. Regulation works best when it is targeted where it is needed, and removed where it was not required.9

In addition, the Body of European Regulations in Electronic Communications (BEREC), formed after the adoption of Regulation (EC) 1211/2009,10 is now playing an increasingly significant role at a European level. The BEREC replaces the European Regulators Group, and acts as an exclusive forum and vehicle for cooperation between national regulatory authorities (NRAs) and between NRAs and the European Commission (the Commission).

The prevailing regulatory regime in the UK is contained primarily in the Act, which entered into force on 25 July 2003. Broadcasting is regulated under a separate part of the Act, in conjunction with the Broadcasting Acts of 1990 and 1996. Other domestic legislation also affects this area, in particular:

a the Wireless Telegraphy Act 2006;
b the Digital Economy Act 2010;
c the Data Protection Act 1998;
d the Privacy and Electronic Communications (EC Directive) Regulations 2003 (as amended by the Privacy and Electronic Communications (EC Directive) (Amendment) Regulations 2011);
e the Freedom of Information Act 2000;
f the Regulation of Investigatory Powers Act 2000;
g the Data Retention and Investigatory Powers Act 2014 (DRIPA);
h the Enterprise Act 2002; and
i the Competition Act 1998.

Following the review of the European Framework for Electronic Communications Regulation (Revised Framework),11 the government adopted the Electronic Communications and Wireless Telegraph Regulations 2011 on 4 May 2011, which amended the Act, the Wireless

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Telegraphy Act 2006 and other primary and secondary legislation, and implemented most aspects of the EU Better Regulation Directive (2009/140/EC)\textsuperscript{12} and the Citizens’ Rights Directive (2009/136/EC).\textsuperscript{13}

The wholesale reform of the European data protection regime continues following the release in 2012 of a draft general data protection regulation. On 15 December 2015, the European Parliament and the Council reached a conclusive consensus on the EU data protection reform package and in April 2016, the European Parliament and Council adopted the final version of the Draft Data Protection Regulation (the General Data Protection Regulation) and the final version of the Data Protection Directive for police and judicial cooperation on criminal matters. The formal adoption of the EU data protection reform package and its applicability in all Member States from 25 May 2018 marks the end of disparate data protection rules and across the EU.\textsuperscript{14}

In May 2011, the DCMS also launched a review of communications regulation intended to lead to a new communications regulatory framework to be in place by 2015. It focused on three key aspects: growth innovation and deregulation; a communications infrastructure that provides the foundations for growth; and creating the right environment in which the content industry may thrive. In June 2012, the DCMS announced that, following responses to its May 2011 review, it had concluded that a complete overhaul of the legislation was not required, but it recognised the need to update the regulatory framework to ensure that it is fit for the digital age. To inform the development of the regulatory framework, the government held a range of seminars to obtain industry and public opinion on topics including driving investment in TV content, competition in the content market, the consumer perspective, maximising the value of spectrum and supporting growth in the radio sector. It was originally anticipated that the DCMS would publish a white paper in the early part of 2013 with a communications bill to follow shortly thereafter. In July 2013, the DCMS published a policy paper titled ‘Connectivity, content and consumers – Britain’s digital platform for growth’ (the Strategy Paper).\textsuperscript{15} In line with the government’s view that a large-scale overhaul of the existing legislation is unnecessary, the Strategy Paper focused on specific and incremental legislative changes to a number of areas, including the following:

\begin{itemize}
\item \textsuperscript{14} http://ec.europa.eu/justice/data-protection/reform/index_en.htm.
\end{itemize}
United Kingdom

a a consumer rights bill introducing a new category of digital content in consumer law, together with a set of statutory rights for the quality standards that this content should meet, and the remedies available to consumers when digital content does not meet these standards;
b changes to improve spectrum management and amendments to the Wireless Telegraphy Act 2006;
c amending the Electronic Communications Code (ECC) to make it easier for communications companies to use land for broadband infrastructure; and
d scaling back Ofcom’s duty to review public service broadcasting (PSB) at least every five years and draft PSB reports.

Following on from the above, the Consumer Rights Act 2015 introduced rights in respect of the quality of digital content and digital services. The Act received royal assent on 26 March 2015 and is coming into force in stages. The main provisions of the CRA, including those relating to goods, services and digital content, came into force on 1 October 2015.

The DCMS issued its spectrum management strategy in March 2014, recognising the need for, among other things:
a a uniform system for the valuation of spectrum to set licence fees;
b the government to work together with Ofcom to encourage efficient use of spectrum, in particular in the release of spectrum, the transfer of spectrum and the assignment of spectrum to new users;
c encouragement of innovation; and
d a strategy to address increased demands on spectrum that will evolve from the growth of the ‘Internet of Things’ (IoT), machine-to-machine (M2M) communication and 5G.

The DCMS’s strategy was followed in April 2014 by Ofcom’s spectrum management strategy, discussed in more detail below.

A proposal to reduce Ofcom’s duty to review PSBs, such that the duty would arise only upon the demand of the Secretary of State, was withdrawn in February 2014. Ofcom published the findings of its third review of PSBs on 2 July 2015. It found that overall, despite declining spending levels, PSBs continue to provide programmes that are highly valued by audiences.

In August 2014, the DCMS issued a consultation paper,16 seeking input on the goals and policies set out in the July 2013 report entitled ‘Connectivity, content and consumers – Britain’s digital platform for growth’ which was explored further in a framework published in February 2014. The results of this consultation were used to develop the government’s digital communications infrastructure strategy, which was published on 18 March 2015.17 Overlapping with the government’s 2015 budget, the government has made commitments in relation to broadband infrastructure, in particular superfast broadband, connectivity in rural

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areas and the delivery of mobile broadband connectivity. As part of its focus on ensuring that the UK becomes a ‘leading digital nation’, the government has set up a Ministerial Digital Taskforce to develop networks, including infrastructure.

The DCMS published a consultation on 26 March 2015\textsuperscript{18} on three areas of broadcasting regulation: the defence against copyright infringement in Section 73 of the Copyright, Designs and Patents Act 1988; the must offer/must carry provisions applicable to PSBs and electronic communications networks (ECNs) respectively in the Communications Act 2003; and the rule on electronic programme guide prominence. On 5 July 2016, the government responded to the DCMS consultation.\textsuperscript{19} The government response sets out that deregulation of the must offer/must carry legislation in the Communications Act 2003 is not desirable and would risk endangering the balance of relationships between stakeholders. The government goes on to conclude that commercial PSDs are fairly compensated for their licensed PSB channels and that there should continue to be no net payments between platform operators and PSDs for carriage of their licensed PSB channels.

The government has decided to repeal Section 73 of the Copyright, Design and Patents Act 1988, which provides that copyright in a broadcast of PSB services (and any work in the broadcast) retransmitted by cable is not infringed where the broadcast is receivable in the area in which it is retransmitted. This was designed to ensure the retransmission of public service broadcasts in areas with poor aerial receptions. However, on consultation, all of the PSBs were in favour of repeal, believing the repeal of Section 73 was a prerequisite for allowing PSBs to receive payments from the cable networks as compensation for the benefits they bring to them. The government believes that the repeal of Section 73 will have the simultaneous effect of closing the loophole used by providers of internet-based live streaming services by ensuring that such services cannot exploit PSB content without any benefit flowing to the PSBs. It remains to be seen whether the current regulatory framework will ensure a zero net fee position or whether it will result in commercial PSBs seeking retransmission fees and subsequently lead to disputes.

With regard to the ECC, in December 2014 the government proposed to introduce a new code. This proposal was subsequently withdrawn in January 2015 following representations from stakeholders on the practical application of the proposed revised code. The government agreed to consult further. The DCMS launched a consultation on 26 February 2015\textsuperscript{20} (which closed on 30 April 2015) on reforming the ECC, welcoming submissions in particular on:

\begin{enumerate}
\item the definition of land and ownership;
\item how consideration is to be determined;
\item upgrading and sharing apparatus;
\item contracting out the revised code;
\item the role of land registration; and
\item transitional arrangements, savings and retrospectivity.
\end{enumerate}


\textsuperscript{20} Available at www.gov.uk/government/consultations/consultation-on-reforming-the-electronic-communications-code.
Regulated activities

Ofcom oversees and administers the licensing for a range of activities, including, broadly speaking, mobile telecommunications and wireless broadband, broadcast TV and radio, postal services, and the use of radios for maritime, aeronautical and business purposes.

The Act replaced the system of individual licences with a general authorisation regime for the provision of ECNs or electronic communications service providers (ECSs). Operators of ECNs and ECSs must comply with the General Conditions of Entitlement as specified in the Act. As well as the General Conditions, individual ECN or ECS operators may also be subject to further conditions specifically addressed to them. These may fall into four main categories: universal service conditions, access-related conditions, privileged supplier conditions, and conditions imposed as a result of a finding of significant market power (SMP) of an ECN operator or an ECS provider in a relevant economic market.

Mobile and satellite services require licences under the Wireless Telegraphy Act 2006 to authorise the use of the operators’ radio transmission equipment and earth stations on specified frequencies. Under the Act, Ofcom should adopt decisions on the rights of use for radio frequencies allocated for specific purposes within the national frequency plan within six weeks and, in any other case, as soon as possible after receipt of the application. Since 30 April 2014,21 radio transmission equipment and earth stations mounted on mobile platforms (ESOMPs) on aircraft have been exempt from licensing requirements when operating within the 1800MHz or 2100MHz bands, provided they comply with European Telecommunications Standards Institute requirements.22 From 27 June 2014, pursuant to the Wireless Telegraphy (Exemption and Amendment) Regulations 2014,23 land-based transmission equipment and ESOMPs are exempt from licensing requirements across all frequencies, provided they comply with certain technical specifications.24

Ownership and market access restrictions

No foreign ownership restrictions apply to authorisation to provide telecommunications services, although the Act directs that the Secretary of State for Culture, Media and Sport (Secretary of State) may require Ofcom to suspend or restrict any provider’s entitlement in the interests of national security.

In the context of media regulation, although the Act and the Broadcasting Acts impose restrictions on the persons that may own or control broadcasters, there are no longer any rules that prohibit those not established or resident in the EEA from holding broadcasting licences.

At the end of 2011, Ofcom was asked by the Secretary of State to report on measuring media plurality in light of the proposed acquisition of British Sky Broadcasting Group Plc (BSkyB) by News Corporation. In 2012, Ofcom submitted two reports to the Secretary of State advising on approaches to measure media plurality. Ofcom gave evidence and provided advice to the Leveson Inquiry, including advice on models of media regulation. In February 2014, the House of Lords Select Committee on Communications produced a report.

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22 Available at www.etsi.org/standards/looking-for-an-etsi-standard/list-of-harmonised-standards.
into media plurality, including advice on the scope and flexibility of any assessment of media plurality.\textsuperscript{25} The report includes a recommendation that Ofcom should conduct a review of media plurality every four or five years, that there be a higher threshold for intervention and that there be a reform of the system for reviewing mergers in the media sector. The DCMS produced a Media Ownership and Plurality Consultation Report on 6 August 2014 setting out a framework to assess media plurality and commissioning Ofcom to develop a suitable set of indicators.\textsuperscript{26} Following on from this, Ofcom published a consultation proposing a framework for media plurality on 11 March 2015.\textsuperscript{27} The proposed framework builds on the advice Ofcom gave to the Secretary of State in 2012. The consultation in particular makes the following points, which Ofcom has either developed or affirmed since 2012:

\begin{itemize}
  \item[a] online news and digital intermediaries should be measured by the framework;
  \item[b] cross-media consumption metrics should form the foundation of plurality assessment;
  \item[c] impact metrics should feature in the assessment of plurality;
  \item[d] qualitative factors should be considered alongside quantitative metrics (such as the above) in the assessment of plurality;
  \item[e] the measurement framework must be capable of capturing the differences in the level of media plurality and sources of news across the UK and within the UK nations; and
  \item[f] media ownership can be taken into account by using a framework with metrics that can be considered at both the retail and wholesale level.
\end{itemize}

This consultation closed on 20 May 2015. At the time of writing, Ofcom intended to publish a statement in summer 2016.

\textbf{iv Transfers of control and assignments}

For transactions that do not fall within EU merger control jurisdiction, the UK operates a merger regime in which the parties to a transaction can choose whether to notify a transaction prior to closing. The UK Competition and Markets Authority (CMA) monitors transactions prior to closing and has the power to intervene in un-notified transactions prior to closing or up to four months from the closing of a transaction being publicised. Where the CMA intervenes in a closed transaction it is the policy to impose a hold-separate order.\textsuperscript{28} The administrative body currently responsible for UK merger control is the CMA, which was established on 1 April 2014 by merging the function of the former Office of Fair Trading and the former Competition Commission in accordance with the Enterprise and Regulatory Reform Act 2013. The CMA consults Ofcom when considering transactions in the broadcast, telecommunications and newspaper publishing markets.\textsuperscript{29}

\textsuperscript{25} www.publications.parliament.uk/pa/ld201314/ldselect/ldcomm/120/120.pdf.
\textsuperscript{26} www.gov.uk/government/publications/media-ownership-plurality-consultation-report.
\textsuperscript{27} http://stakeholders.ofcom.org.uk/binaries/consultations/media-plurality-framework/summary/Media_plurality_measurement_framework.pdf.
\textsuperscript{28} Note, however, that changes in control of certain radio communications and TV and radio broadcast licences arising as a result of mergers and acquisitions may in certain circumstances require the consent of Ofcom.
\textsuperscript{29} The CMA and OFCOM have signed a memorandum of understanding in respect of their concurrent competition powers in the electronic communications, broadcasting and postal sectors. This is available at www.gov.uk/government/uploads/system/uploads/attachment_
The Secretary of State also retains powers under the Enterprise Act to intervene in certain merger cases, which include those that involve ‘public interest considerations’. In the context of media mergers, such considerations include, for example, the need to ensure sufficient plurality of persons with control of media enterprises serving UK audiences; the need for the availability throughout the UK of high-quality broadcasting calculated to appeal to a broad variety of tastes and interests; and the need for accurate presentation of news, plurality of views and free expression in newspaper mergers. In such cases, the Secretary of State may require Ofcom to report on the merger’s potential impact on the public interest as it relates to ensuring the sufficiency of plurality of persons with control of media enterprises. Ofcom is also under a duty to satisfy itself as to whether a proposed acquirer of a licence holder would be ‘fit and proper’ to hold a broadcasting licence pursuant to Section 3(3) of each of the 1990 and 1996 Broadcasting Acts.30

v European Digital Single Market Strategy (DSM) & Telecoms

On 6 May 2015, the European Commission published a Communication on a DSM Strategy for Europe. This Strategy aims to make the EU’s single market ‘fit’ for the digital age through three pillars: (1) better online access for consumers and businesses across Europe; (2) creating the right conditions and a level playing field for the advanced digital networks and innovative services; and (3) maximising the growth potential of the digital economy. The Strategy includes legislative proposals to make cross-border e-commerce easier, to end unjustified geo-blocking, to reform the copyright regime and reduce burdens due to different VAT regimes. In addition to reviewing both the e-Privacy and the Audio-visual Media Services Directive, the Commission also intends to conduct an analysis of the role of platforms, to improve cross-border parcel delivery and to undertake initiative in relation to data ownership and the cloud. The Commission hopes that establishing a supportive investment climate for digital networks will help to mobilise private investment and generate investor confidence. The proposals aim to stimulate increased cross-border commerce within the EU and modernise some of the legislative frameworks that govern content diffusion and communications.

The UK government published a response to the Commission’s initial 2015 DSM proposals in January 201631 and the Commission’s current legislative proposals will now be discussed by the European Parliament and the Council and are not expected to be adopted before 2017. Therefore, it is not expected that the Commission’s proposals will become binding on Member States for several years.

On 14 September 2016, EU President Jean-Claude Juncker announced the European Commission’s DSM Strategy proposals for telecoms regulation reform and plans to modernise and improve connectivity across the EU (a proposal to modernise the EU’s copyright rules was also announced). The telecoms and connectivity proposals included:

a recasting four existing Directives (Framework, Authorisation, Access and Universal Services Directives) as one Directive, the European Electronic Communications Code (the Code);

30 There is also the power to take ‘appropriate measures’ nationally to protect the plurality of the media under Article 21(4) of the EU Merger Regulations (Regulation 139/2004/EC).

United Kingdom

b upgrading BEREC to a full-fledged EU agency;
c a 5G Action Plan for the development and deployment of 5G networks in Europe; and
d a ‘WiFi4EU’ initiative to aid European villages and cities roll out free public WiFi.

Generally, the proposed Code aims to address and harmonise spectrum policy and regulation, including spectrum auction timing, across the single market in part to stimulate competition and investment in 5G networks. It also tries to address new technologies and services that are not clearly contemplated by current legislation. Over-the-top (OTT) services would be classified as a sub-class of ECS and be subject to regulations concerning security (including security audits) and interconnectivity (among end-users and to emergency services). Other amendments regarding number allocation have been made to address the expected advent of the IoT and M2M communication. The Code also proposes to sweep away universal service access requirements to legacy technologies (e.g., public payphones) and replace it with a requirement to ensure end-users have access to affordable, functional internet and voice communication services, as defined by reference to a dynamic basket of basic online services delivered via broadband. In addition, the proposed Code proposes additional consumer protections via proposed regulations requiring telecoms providers to provide contract summaries and improved comparison tools.

It is also proposed that the regulatory role of BEREC be enhanced with a view to improving regulatory consistency across the single market. For example, it is proposed that decisions on spectrum assignment be subject to a ‘peer review’ process whereby BEREC would issue an opinion on whether the decision should be amended or withdrawn to ensure consistent spectrum assignment. BEREC would also issue opinions on any NRA (national regulatory authority)-proposed remedy in relation to maintaining the Code’s objectives. These opinions are proposed to be persuasive, rather than binding, but the Code requires that the NRA and the European Commission (as relevant) take the BEREC opinions into account. BEREC would be granted some legally binding powers, as well, including a ‘double-lock’ system in relation to any draft remedy proposed by an NRA (i.e., where BEREC and the European Commission agree on a position regarding such draft remedy, the NRA could be required by the Commission to amend or withdraw the draft measure).

In terms of policy proposals, the 5G Action Plan proposes to bring ‘uninterrupted 5G coverage’ to all major European urban areas and transportation corridors by 2025, with several interim deadlines relating to, among others, development of a deployment roadmap (by 2017), spectrum assignment (2019) and development of global 5G standards (2019). Specifics on the 5G Action Plan, such as the development of 5G standards, are still under development. There is limited guidance on funding for the 5G Action Plan, although the Code is itself intended to stimulate such investment and the Commission has promised to launch a European Broadband Fund by the end of 2016 (combining private and public investments) to support network deployment throughout the EU. The European Commission has also committed to exploring a proposal by a telecoms industry group to provide a venture financing facility (jointly funded by public and private sources) for start-ups developing 5G technologies and applications. The WiFi4EU initiative proposes to assist local authorities to offer free WiFi connections in parks, libraries and other public spaces by providing local authorities with small grants of up to €60,000 (from a total initial budget of €120 million) for equipment and installation costs. It remains to be seen how these proposals will change.
during the codecision procedure, but if the aim comes to reality, a more harmonised telecoms regulatory regime with an advanced 5G network could be in place by 2025, providing a robust platform for delivery of the single market aims.

III TELECOMMUNICATIONS AND INTERNET ACCESS

i Internet and internet protocol regulation

As previously noted, the Act is technology-neutral, and as such there is no specific regulatory regime for internet services. ISPs are also ECNs or ECSs depending on whether they operate their own transmission system, and are entitled to provide services under the Act in compliance with the general conditions and, where applicable, specific conditions.

VoIP and VoB are specifically subject to a number of general authorisation conditions under the Act, such as those related to emergency call numbers.

Following various market reviews, Ofcom has imposed conditions on access to the internet on BT and KCOM (formerly Kingston Communications) where it found that these had SMP. As part of these conditions, both companies must make regulatory financial statements. Since April 2014, BT has been required to increase the amount and improve the clarity of information in these statements and in 2015 Regulatory Accounting Guidelines were put in place by Ofcom.32 Conversely, KCOM’s reporting requirements have been reduced.33

In the context of the ‘net neutrality’ debate, the Revised EU Framework adopted a range of internet traffic management provisions allowing national regulatory authorities such as Ofcom to adopt measures to ensure minimum quality levels for network transmission services, and to require ECN and ECS operators to provide information about the presence of any traffic-shaping processes operated by ISPs. These provisions were implemented into UK telecoms legislation following the legislative changes approved by the government on 4 May 2011.

In June 2010, Ofcom published a consultation paper to open the debate on what, if any, regulatory intervention should be required in connection with internet traffic management. Following this consultation, Ofcom announced in November 2011 that market forces should be sufficient to address issues in relation to internet traffic management, but Ofcom will consider using its powers to impose minimum quality of service levels if innovation is under threat from traffic management. In September 2013, Ofcom published a consumer guide on traffic management to help consumers make an informed choice when deciding which ISP they want to use. This information was provided to address an ‘awareness gap’ regarding the application of traffic management. The lack of consumer awareness, and a commitment to educating consumers, was noted in Ofcom’s annual plan for 2014/2015.

In this plan, Ofcom reiterated its view from 2011 that market forces should be sufficient to address traffic management issues.

In a statement of November 2010 setting out its views on net neutrality, the coalition government announced that it does not propose to legislate further to regulate traffic

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32 Available at: http://stakeholders.ofcom.org.uk/consultations/BT-cost-attribution-review-second-consultation/.

management, although it stressed the importance of maintaining an open internet in which all users could access any legal content, ensuring that ISPs’ traffic management policies are transparent to consumers, and allowing ISPs to manage their networks to ensure a good service, which will in turn encourage investment and innovation. There have been no formal statements by the government in relation to regulation of traffic management since 2010.

Prior to the EU Regulation on Open Internet Access coming into force in 2016, the Broadband Stakeholders’ Group (BSG) published a voluntary industry code of practice on traffic management transparency for broadband services introducing transparency requirements on ISPs’ traffic management practices in March 2011. Subsequently, in July 2012, major ISPs published the Open Internet Code of Practice, which commits ISPs to providing full and open internet access. The latest Open Internet Code was published on 8 June 2016. The new Code continues to preserve the concept of an Open Internet while clarifying the context in which some innovative services, which could become more prevalent as the IoT becomes a reality, could be provided alongside the Open Internet. The new Code adds three new commitments, namely: (1) ISPs promise open and full access to the net across their range of products; (2) firms cannot market a subscription package as including ‘internet access’ if certain kinds of legal content or services are barred; and (3) members must not target and degrade content or applications offered by a specific rival.34 Notably, Everything Everywhere has opted out of signing the new Code.

From April 2016, the EU Regulation on Open Internet Access35 put in place in Europe wide rules for net neutrality and granted end-users the right to access and distribute information and content, use and provide applications and services, and use terminal equipment of their choice, irrespective of the end-user’s or provider’s location (Article 3(1)). The aim is that users will have access to online content which is not subject to discrimination or interference. Likewise, companies may not pay for prioritisation so access to an SME’s website will not be unjustly slowed down to allow access for larger companies. The requirement that all internet traffic be treated equally is subject to exceptions (1) to comply with EU or national legislation related to lawfulness of content or with criminal law; (2) to preserve the security and integrity of the network such as to combat viruses; (3) to minimise network congestion that is temporary or exceptional; and (4) to filter spam (i.e., to filter unsolicited communication and allow parents to set up parental filters). In terms of the latter, such measures will need to be transparent, non-discriminatory and proportionate and will not be able to be maintained for longer than is necessary. Likewise, providers of internet access services must publish information on traffic management measures in end-user contracts along with details on the privacy of end-users and the protection of their personal data. Notably, the NRAs in charge are required to monitor and enforce the open internet rules although it is for member states to lay down rules on the penalties applicable to infringements of the net neutrality provisions. On 30 August 2016, BEREC published guidelines36 for NRAs on the implementation of net neutrality under the EU Regulation on Open Internet

Access, in particular covering obligations to monitor closely and ensure compliance with the EU net neutrality rules to ensure equal treatment of traffic in the provision of internet access services and related end-user rights.

ii Universal service

Universal service is provided under the Act by way of the universal service order. Universal service obligations in the UK cover ECNs and ECSs and activities in connection with these services. Ofcom designated BT and KCOM as universal service providers in the geographical areas they cover.

In September 2008 and March 2010, the Commission launched a consultation on whether broadband services should be included within the scope of the universal service. The Commission's Europe 2020 Strategy of March 2010 included aiming for broadband access for all by 2013, and access for all to internet speeds of 30Mb/s or above by 2020. An October 2013 report of the Commission announced that the 2013 basic target had been met, although high-speed broadband coverage remains low.\(^37\) To support the Digital Agenda for Europe, the EU Parliament and the Council passed a Directive\(^38\) in May 2014 aiming to cut the costs of the high-speed rollout. By 1 July 2016, Member States had to apply measures to, among other things, better coordinate civil works, provide greater access to, and information regarding, infrastructure, and reduce the time taken to grant permits required to lay down networks.

The coalition government supported the former Labour government’s policy of universal access to broadband at a speed of 2Mb/s. Even though the target was initially set for 2012, in July 2010, the Secretary of State for the DCMS publicly stated that it would be 2015 before every home in the UK had at least a 2Mb/s broadband connection. The coalition government stated that it expected the private sector to lead the necessary investment, but it confirmed in the spending review of October 2010 that it was committed to investing £530 million until 2015 to help deliver superfast broadband to more rural and hard-to-reach areas. The coalition government received EU state aid clearance in November 2012 for its National Broadband Scheme.\(^39\) Subsequently, rural local authorities started to sign contracts with broadband network developers. A further £300 million will be available by 2017 as part of the TV licence fee settlement. In November 2014, the DCMS published guidance on its plans to improve the UK’s broadband network, in particular making high-speed broadband available in rural communities.\(^40\)

In September 2012, as part of a scheme to create ‘super-connected cities’, the government announced £144 million in investment across 10 of the UK’s largest cities to help provide them with superfast broadband: London, Belfast, Cardiff, Edinburgh, Birmingham, Bristol, Leeds, Bradford, Manchester and Newcastle received £94 million between them, while smaller cities will share a £50 million fund. The scheme was extended to Aberdeen, Brighton and Hove, Cambridge, Coventry, Derby, Londonderry, Newport, Oxford and

Perth in December 2012. However, following legal challenges by two of the UK’s biggest networks, the government withdrew the state-aid application relating to the super-connected cities. Consequently, public funds for the super-connected cities scheme had to be withdrawn in July 2013, before the DCMS diverted the allocated sums to a scheme that allowed SMEs to apply for vouchers to install faster internet connections in August 2013. As part of the government’s 2014 autumn statement, this scheme was extended by 12 months to March 2016 with a further £40 million of funding. The plan to install wireless access points across the super-connected cities, however, was re-emphasised in July 2013. In January 2014, the DCMS announced a £10 million fund for a pilot programme to extend superfast broadband to hard-to-reach areas. In February 2014, a further £12 million was allocated to provide superfast broadband to Wales. Both funds opened for bids in March 2014. An August 2014 report from the DCMS confirmed that the rollout of superfast broadband to 95 per cent of UK homes and businesses remains on track for completion by 2017, and that it intends to focus on extending the rollout to the final 5 per cent. This progress was confirmed in the government’s digital communications infrastructure strategy, published in March 2015. As part of the Commission’s state aid clearance decision, the UK committed to undertake an ex post facto evaluation of the National Broadband Scheme. This was published by Oxera in March 2015. The Commission has approved an extension on materially the same terms and the scheme will now be valid until December 2020.

The development of superfast broadband will require the rollout of fibre-optic cable throughout the UK telecommunications network infrastructure. In June 2014, Ofcom published its follow-up conclusions to a December 2010 review of the wholesale broadband access market setting out remedies to promote competition and investment in current and superfast broadband services. In June 2015, Ofcom published a report setting out its assessment and recommendations on the provision and availability of communications services for SMEs in the UK. Ofcom found that the availability of superfast broadband to SMEs is significantly lower than to residential premises. In Ofcom’s annual review for 2015–2016, Ofcom noted that enabling SMEs to get the best out of communication services was a priority.

Access and interconnection are regulated in the UK by EU competition law and by specific provisions in the Communications Act 2003 aimed at increasing competition. The general conditions require all providers of public ECNs to negotiate interconnection with other providers of public ECNs. Specific access conditions may also be imposed on operators with SMP. Although prices charged to end-users are not regulated, Ofcom may regulate wholesale rates charged by certain operators to alternative operators for network access. This is the case, among other things, of wholesale fixed termination rates, wholesale mobile call termination rates, wholesale broadband access rates (as detailed above), local loop unbundling and wholesale line rental services.

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43 Available at http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/sme/bb-for-smes.pdf.
In connection with this, Ofcom imposed specific conditions on BT and KCOM in certain areas where they enjoy SMP so as to allow alternative operators to compete in the retail broadband market. These include an obligation to provide general and non-discriminatory network access to BT and KCOM’s wholesale broadband products to alternative operators on a reasonable request; an obligation to maintain separate accounts between the services to alternative operators and its own retail division as well as other related transparency obligations; and a charge control on BT to ensure that charges for its broadband wholesale products are based on the costs of provision. Network access obligations included virtual access to new fibre lines laid by BT (through its access service division, Openreach), allowing alternative operators to combine their own electronics with physical infrastructure rented from BT. Furthermore, in June 2015, Ofcom proposed a charge control on the wholesale prices BT charges for products using leased telecoms lines, which provide vital high-speed links for businesses and providers of superfast broadband and mobile services.

In 2016, Ofcom also stated that Openreach must become more independent from BT and proposed that Openreach should become a distinct company with its own board and accountable executives; Openreach should also have independent branding, own assets that it already controls and have a separate strategy in relation to budget allocation. Likewise in February 2016, Ofcom committed to making it easier for telecoms providers to invest in advanced, competing infrastructure by improving access to Openreach’s network of telegraph poles and ducts allowing competitors to connect their own fibre optic cables directly to homes and businesses.

iii Restrictions on the provision of service

The Digital Economy Act 2010 empowers the Secretary of State to impose obligations on ISPs to limit the internet access of subscribers who engage in online copyright infringement. Under the Digital Economy Act 2010, Ofcom has proposed a code of practice (in the absence of a code put forward by the industry) governing the ‘initial obligations’, which require ISPs to send notifications to their subscribers following receipt of reports of copyright infringement from copyright owners. ISPs must also record the number of reports made against their subscribers and provide copyright owners, on request, with an anonymised list that enables the copyright owner to see which of the reports it has made are linked to the same subscriber (also known as the copyright infringement list). Despite the Court of Appeal’s dismissal of an appeal against the Digital Economy Act 2010 by BT and TalkTalk in March 2012, there are still arguments as to whether the information to be collected by ISPs on copyright offenders might infringe data protection legislation and which costs are to be borne by ISPs. A second draft of the Code of Practice that will implement the Act was published in June 2012. This version, and legislation on cost sharing, have to be approved by both Houses of Parliament and then subjected to EU scrutiny before coming into effect. In June 2012, Ofcom had

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expected that the first notification letters would be sent out in early 2014. Due to delays in implementing legislation, Ofcom announced in May 2013 that the first letters will not be sent out until the latter half of 2015. The government has not revealed a timetable detailing how this will be achieved. In September 2013, to accelerate the process, music and film companies tried to convince ISPs to sign up to a voluntary code of practice that would also require them to create a database of repeat offenders. In July 2014, the DCMS announced a scheme named ‘Creative Content UK’ spearheaded by ISPs and media industry leaders and supported by a government contribution of £3.5 million, to raise awareness of copyright infringement and warn internet users whose accounts are used to illegally access and share copyright material. In addition to this educational function, the scheme also introduced the Voluntary Copyright Alert Programme (VCAP), under which educational warning letters will be sent to those suspected of online piracy. In addition to voluntary involvement in this scheme, ISPs’ responsibilities include blocking access to websites that provided unauthorised links to content protected by copyright, following two recent court decisions: a decision of the Court of Justice of the European Union (CJEU) in February 2014, which held that providing a hyperlink to material protected by copyright can constitute a communication to the public of that material, which was followed days later by UK High Court decision that required six UK ISPs to block access to websites providing hyperlinks to copyrighted content.

The government’s proposed Digital Economy Bill, which is intended to improve internet connectivity and provide improved protections for internet users by amending the Communications Act 2003 entered the Committee Stage in the House of Commons on 11 October 2016 and as at the time of writing is currently being debated. Among the proposals in that bill are a proposal to increase the maximum penalty for imprisonment for online copyright infringement from two to 10 years, to make various amendments to improve the delivery of public services and certain provisions of the Copyright, Designs and Parents Act 1998 are proposed to be repealed, as described in further detail above.

iv Security

Privacy and consumer protection

In the UK, consumers’ personal data is primarily protected by the Data Protection Act 1998 (DPA), which implements the EU Data Protection Directive (the Data Protection Directive), and by the Privacy and Electronic Communications (EC Directive) Regulations 2003 as amended by the Privacy and Electronic Communications (EC Directive) (Amendment) Regulations 2011 (the e-Privacy Regulations), which implement the EU Directive on Privacy and Electronic Communication, as amended by EU Directive 2009/136/EC (the e-Privacy Directive). The Data Protection Directive will be replaced on 25 May 2018 by

47 Svensson and others v. Retriever Sverige AB, Case C- 466/12, 13 February 2014.
49 The current status of the Bill is available at http://services.parliament.uk/bills/2016-17/digitaleconomy.html.
50 Directive 95/46/EC.
51 Directive 2002/58/EC.
the General Data Protection Regulation (GDPR),\textsuperscript{52} which will become directly applicable in all EU Member States. Until this date the Data Protection Directive will remain in force and there will be a transition period for organisations to adopt their privacy compliance programmes to the new law. The GDPR will significantly change the current UK – and broader European – data protection framework. In line with the European Commission's DSM Strategy and the reforms being brought in by the GDPR, the performance of the E-Privacy Directive is currently being evaluated against criteria such as efficiency, effectiveness and EU added value. A public consultation ran from April to July 2016 that was intended to inform this review, and the Commission is expected to publish these findings and a new legislative proposal on e-privacy by the middle of 2017. It is anticipated that reforms will focus on consistency with the GDPR and consistency of rules and enforcement across Member States, as well as updates to the scope of the E-Privacy Directive – which was last updated in 2009 – in the light of market and technological advancements and issues of security and confidentiality of communications.

The DPA is based around the principles in the Data Protection Directive that impose strict controls on the processing (including disclosure) of personal data, including but not limited to the following:

\begin{itemize}
  \item[a] providing one or more listed conditions, such as that the individual has consented or that the processing is necessary for the purposes of fulfilling a contract, that must be met to ensure personal data is processed fairly and lawfully;
  \item[b] the requirement that data can generally only be processed for the purpose for which it was obtained, must be kept accurate and up to date and for no longer than is necessary, and must not be excessive;
  \item[c] the requirement that data be kept secure (i.e., be protected against unlawful processing and against accidental loss, destruction or damage);
  \item[d] the restriction that data cannot be transferred to countries outside the EEA unless certain conditions are met, such as through the EU–US Privacy Shield (see Section VI, infra for more details), whereby personal data can be transferred to US entities that have undertaken a process of self-certification to determine that it meets an ‘adequate’ standard of privacy protection and commits to seven privacy principles; and
  \item[e] personal data must be processed in accordance with the rights of the data subject under the DPA, including that the individual has a right to access the personal data held about them, and a right in certain circumstances to have inaccurate personal data rectified or destroyed, among various other rights. The restrictions in the DPA may affect the ability of a business to disclose information that includes personal data to third parties, including public bodies, unless certain conditions are met.
\end{itemize}

The e-Privacy Regulations introduced further rules for the electronic communications sector, including controls on unsolicited direct marketing, restrictions on the use of cookies, and rules on the use of traffic and location data.

The broad themes of the revised European privacy regime are a strengthening of individual privacy rights, an emphasis on responsibility and accountability, and a desire to simplify and harmonise the rules across Europe. In the European Commission's view,\textsuperscript{52} Regulation (EU) 2016/679.

the proposed regime will bring various cost savings to organisations operating in Europe (by harmonising the rules across EU Member States and simplifying certain administrative requirements), will lead to more efficient cooperation between national regulators and businesses, and will set the ‘gold standard’ for data protection law. There has, however, been significant criticism by numerous industry groups, and by various directorates-general within the European Commission, on the basis that certain protections are disproportionately restrictive, create additional administrative and operational burdens for businesses to an inappropriate and unjustified extent, and dilute the potential benefits of the harmonising effect of the regulation by reserving various powers for Member States to put in place additional national rules.

The key changes under the Regulation include:

a. the form of the new rules as a regulation, rather than a directive, which will be directly applicable in every Member State;
b. the removal of the requirement to notify or register data-processing activities with the national regulator, however controllers and processors will need to keep their own record of processing;
c. the introduction of an extraterritorial effect, resulting in the regulation applying not only to organisations established within the EEA, but also to organisations established outside the EEA but offering goods or services to, or monitoring the behaviour of, individuals in the EEA (although it remains unclear how this will operate in practice);
d. a tightening of the requirements for valid consent, with the effect that consent will only be deemed to be valid if it is freely given, specific, informed and unambiguous;
e. a stricter approach to the export of data outside the EEA, resulting from the general standards of data protection being raised throughout the Regulation as a whole;
f. the introduction of mandatory data breach notification requirements (including notification within strict time periods to both the national regulators and to data subjects affected by the breach);
g. the introduction of a right to be forgotten and a right to data portability;
h. maximum fines of 4 per cent of an organisation’s annual global turnover for breaches; and
i. new definitions termed, ‘genetic data’ and ‘biometric data’, which include data relating to characteristics obtained during foetal development and data which allows the unique identification of a person to be confirmed through facial images or dactyloscopic data – now categorised as ‘sensitive personal data’.

Following the decision in the Schrems v. Data Protection Commissioner53 case, which invalidated the Safe Harbor Framework, the Commission and the US government entered into lengthy negotiations as to a new means of EU-US data transfers. The new the EU-US Privacy Shield came into effect on 1 August 2016 following approvals by the Commission and the Member States (see Section VI, infra, for more details).

Under the current DPA framework, the Information Commissioner’s Office (ICO) is responsible for the implementation and enforcement of the DPA and the e-Privacy Regulations as well as the Freedom of Information Act 2000 (which provides individuals with the ability to request disclosure of information held by public authorities).

53 Schrems v. Data Protection Commissioner (C-362/14).
The ICO continues its increasing focus on enforcement generally, and on the use of monetary penalties (of up to £500,000 at any one time) in particular. According to the ICO’s Annual Report of 2015/16,54 civil penalties relating to marketing calls and texts have totalled £2 million. The largest civil monetary penalty of £350,000 was issued against ProDial Ltd for making over 46 million nuisance calls and another penalty of £70,000 against Direct Security Marketing Ltd for conducting frightening automated calls in the middle of the night. The vast majority of civil monetary penalty notices are issued against the health and local government sectors, including a total of over £1 million in penalties issued against various NHS bodies. The largest fine imposed by the ICO on a private business to date is the £440,000 civil monetary penalty notices issued under both the e-Privacy Regulations and the DPA against Tetrus Telecoms, following a spam text message scam whereby Tetrus Telecoms obtained personal details from individuals and sold them on as sales leads to third parties.

The most common ground for large fines and enforcement action is loss of data, automated marketing calls and other major data security breaches. The ICO takes a serious view of the loss of data. In May 2015 the ICO issued a £160,000 penalty against the South Wales Police in connection with the loss of evidence in a sexual abuse case and a £200,000 monetary penalty against the Crown Prosecution Service following the theft of laptops. The Serious Fraud Office and The Money Shop have each been fined £180,000 for the accidental distribution of case evidence and the loss of computer equipment containing customer details, respectively. Where financial institutions are involved, the ICO often works in conjunction with the Financial Conduct Authority (FCA, previously the FSA). For example, Zurich was fined a record £2.3 million by the FCA in August 2010 for loss of an unencrypted back-up tape. A large amount of fines were issued against private companies for unsolicited marketing calls and text messages. Telegraph Media Group was fined £30,000 for sending unsolicited emails. In November 2015, the ICO issued fines against Nuisance Call Blocker Ltd and Telecom Protection Service Ltd totalling £170,000 for making unsolicited marketing calls to people registered with the Telecom Preference Service.

Individual data subjects have the right under the DPA to notify a data controller to cease or not to begin processing their personal data for the purposes of direct marketing. Under the e-Privacy Regulations, an organisation must obtain prior consent before sending a marketing message by automated call, fax, email, SMS text message, video message or picture message to an individual subscriber. There is a limited exemption for marketing by electronic mail (both email and SMS) that allows businesses to send electronic mail to existing customers provided that they are marketing their own goods or services; such goods and services are similar to those that were being purchased when the contact information was provided; and the customer is given a simple opportunity to opt-out free of charge at the time the details were initially collected and in all subsequent messages. The same maximum fine (of £500,000) also applies to breaches of the e-Privacy Regulations.

Under the e-Privacy Regulations, location data (any data that identifies the geographical location of a person using a mobile device) can be used to provide value-added services (e.g., advertising) only if the user cannot be identified from the data or the customer has given prior consent. In order to give consent, the user must be aware of the types of location data that will be processed, the purposes and duration of processing that data, and whether the data will be transmitted to a third party to provide the value-added service.
The requirements for the use of cookies and similar devices have changed significantly following amendments to the e-Privacy Regulations (implementing amendments to the e-Privacy Directive brought in by EU Directive 2009/136/EC) in May 2011 and will change further as that regime is reformed and updated.

The revised e-Privacy Regulations require the consent of the user of the relevant terminal equipment, unless the cookie is strictly necessary to provide an online service requested by the user (such as online shopping basket functionality, session cookies for managing security tokens throughout the site, multimedia flash cookies enabling media playback or load-balancing session cookies).

In practice, steps have been taken by most reputable UK websites to comply with these consent requirements, ranging from banner notices with tick boxes, boxes that require an active step to make them disappear to one-time banners or pop-overs giving brief information and allowing the user to take steps to disable the site’s cookies if they wish to do so before continuing to use the site.\(^55\) Between April 2015 and March 2016, the ICO received 210 reports regarding breach of cookies rules via their website, a stark increase compared to the previous financial year ending March 2015.\(^56\) Its current approach is to focus on sites that are not doing enough to raise awareness of cookies, or obtain their users’ consent, particularly those most visited sites in the UK. However, according to the ICO, cookies remain a ‘low’ consumer threat as the number of reported concerns about cookies was 210 compared to 161,186 received concerns about nuisance calls, text messages and emails.\(^57\)

A variety of different approaches can be seen across those countries that have implemented the consent rules, although there is a general trend towards an implied consent approach rather than a strict express consent approach.

The GDPR introduces a higher level of consent, stating that consent should be a clear affirmative act establishing a freely given, informed and unambiguous indication of the data subject’s agreement to the processing of personal data. Silence or inactivity should not constitute consent and consent needs to be obtained for each processing purpose.\(^58\) Further, the data subject will have the right to withdraw consent at any time as it shall be as easy to withdraw as to give consent.\(^59\) This suggests that the current consent approach will shift to a strict consent approach.

A further change brought in by the e-Privacy Regulations is the introduction of mandatory data-security breach notification requirements. These obligations fall on the providers of public ECNs or ECSs, and require such service providers to promptly inform the ICO of a personal data security breach and, where that breach is likely to adversely affect the personal data or privacy of a customer, that customer must also be promptly notified.

Under the GDPR, a data processor is under an obligation to notify the data controller of a personal data breach and the data controller must inform the supervisory authority not later than 72 hours after becoming aware of it, unless the data security breach is unlikely

\(^55\) See ‘Concerns reported about cookies via the ICO website (csv format)’ available at https://ico.org.uk/action-weve-taken/cookies.

\(^56\) See ‘Concerns reported about cookies via the ICO website (csv format)’ available at https://ico.org.uk/action-weve-taken/.

\(^57\) Available at https://ico.org.uk/action-weve-taken/.

\(^58\) General Data Protection Regulation: Recitals 26, 30 and 32.

\(^59\) General Data Protection Regulation: Article 7(3).
to result in a risk to the rights and freedoms of the data subject. If the personal data breach results in a high risk to the rights and freedoms of a natural person, the data controller must inform the natural person of the data breach without undue delay.\textsuperscript{60} An infringement of these provisions can lead to an administrative fine up to €10 million or in the case of an undertaking, up to 2 per cent of the total worldwide annual turnover of the preceding financial year.\textsuperscript{61}

Data retention, interception and disclosure of communications data
The Regulation of Investigatory Powers Act 2000 (RIPA) imposes a general prohibition on the interception of communications without the consent of both the sender and recipient, unless a warrant is issued by the Secretary of State (interception warrant). Interception warrants can be requested by a limited number of individuals heading various security and law enforcement bodies, by HMRC or by another state under a mutual assistance treaty. The grounds for issuing warrants are that the interception is in the interests of national security, for the purpose of preventing or detecting serious crime, or for the purpose of safeguarding the economic wellbeing of the UK.

Public telecommunications service providers who provide (or intend to provide) services to more than 10,000 users may be required to maintain interception capabilities on receipt of a notice from the Secretary of State (interception capability notice).\textsuperscript{62} In certain circumstances, contributions will be made towards the costs of implementing intercept capabilities or responding to warrants. There is a similar prohibition on the disclosure of communications data (e.g., subscriber, traffic and location data); however, no warrant is needed to allow disclosure. Disclosure can be made on request by a far wider range of public bodies, and the grounds on which requests can be made are far broader, including that the request is in the interests of public safety, for the purpose of protecting public health, or for the purpose of assessing or collecting any tax, duty, levy or other imposition, contribution or charge payable to a government department. RIPA was amended in July 2014 by DRIPA; however, as set out in more detail in Section VI, infra, in July 2015, the English High Court ruled that DRIPA is incompatible with the EU Charter of Fundamental Rights. Since this decision a draft Investigatory Powers Bill has been introduced to the House of Commons in March 2016 (set out in more detail in Section VI, infra), and it is currently being reviewed and needs to be in force by 31 December 2016.\textsuperscript{63}

Protection for children
Currently, there is no legislation in England that is specifically and expressly targeted at protecting children online in the UK. The Article 29 Data Protection Working Party opinion on the protection of children’s data states that businesses dealing with children’s data should give regard to what is in the best interests of the children and the child’s right to privacy.\textsuperscript{64}

\textsuperscript{60} General Data Protection Regulation: Articles 33 and 34.
\textsuperscript{61} General Data Protection Regulation: Article 83(4)(a).
\textsuperscript{64} Article 29 Data Protection Working Party – Opinion 2/2009 on the protection of children’s personal data.
Under the DPA, in order to fulfil the principle that children’s data is processed ‘fairly’, stronger safeguards should be in place, and age-appropriate language is required for privacy notices to ensure that children’s lack of maturity or understanding is not exploited.

The ICO\(^65\) has indicated, in relation to the collection of personal data from children online, that consent of a parent or guardian will normally be necessary to collect personal information from children under the age of 12. However, whether consent will be valid, and the nature of the consent, will depend on the complexity of the data usage and the degree of risk associated with sharing the information in question. For example, the publication of photos of a child, and potentially of friends and family, would require a more demanding form of parental consent and control (such as requiring the parent to register and actively consent on the site, and provide additional identification such as a credit card number), in comparison with requesting a child’s email address for the sole purpose of sending a fan club newsletter that they have requested (in which case, a tick box consent on the site for the child to tick and clear unsubscribe instructions may be considered more appropriate).

Parental or guardian consent is recommended by the ICO when the collection of information from a child is likely to result in:

- disclosure of the child’s name and address to a third party, for example as part of the terms and conditions of a competition entry;
- use of a child’s contact details for marketing purposes;
- publication of a child’s image on a website that anyone can see;
- making a child’s contact details publicly available; or
- the collection of personal data about third parties (e.g., where a child is asked to provide information about his or her family members or friends).

In May 2015, the ICO announced that it would review 50 websites and applications to comprehend exactly what information was routinely taken from children, how this was communicated to them and what parental permission was requested. This approach was mirrored by several other global bodies in an attempt to publish a combined report on the matter.\(^66\) The results of this combined effort, reported in September 2015, raised concerns regarding 41 per cent of the material considered. Indeed, only 31 per cent of websites and applications had effective controls to limit the collection of data from children.\(^67\)

In the GDPR, children are defined as vulnerable natural persons who merit specific protection with regard to their personal data.\(^68\) Consent to the processing of personal data in connection with the provision of online services to children (below the age of 16, unless a Member State provides for a lower age which cannot be lower than 13) is required to be given by a holder with parental responsibility.\(^69\)

The Child Exploitation and Online Protection Centre (CEOP) works to prevent exploitation of children online; it is made up of a large number of specialists who work alongside police officers to locate and track possible and registered offenders. CEOP was previously affiliated with the Serious Organised Crime Agency; however, following its

\(^{65}\) ICO’s Personal Information Online – Code of Practice.
\(^{66}\) ICO website – News and Events.
\(^{67}\) Ibid.
\(^{68}\) General Data Protection Regulation: Recitals 38 and 75.
\(^{69}\) General Data Protection Regulation: Article 8.
abolishment under the Crime and Courts Act 2013, the Centre became part of the National Crime Agency (NCA). CEOP also offers training, education and public awareness in relation to child safety online.

Internet safety for children in the UK is also monitored by the UK Council for Child Internet Safety (UKCCIS), a group of 200 organisations collaborating to keep children safe online. Established in 2010, the UKCCIS, among other things, provides advice for schools and colleges and creates guides for parents whose children are using social media. It has published an Internet Safety Strategy for children in the UK.

Website and software operators may apply for the Kitemark for Child Safety Online. This has been developed through collaboration between the BSI (the UK’s national standards body), the Home Office, Ofcom, and representatives from ISPs and application developers. The BSI will test internet access control products, services, tools and other systems for their ability to block certain categories of websites (e.g., sexually explicit, violent or racist activity).

Cybersecurity

Cyberattacks are becoming increasingly problematic in the global financial and regulatory landscape. The Government Communication Headquarters stated that more than 80 per cent of UK companies reported a security breach in 2014. More worryingly, PricewaterhouseCoopers reported that the total amount of global incidents escalated to 42.8 million in 2015, a 48 per cent increase from 2013.

The Computer Misuse Act 2000 (as amended by the Police and Justice Act 2006) sets out a number of provisions that make hacking and any other forms of unauthorised access, as well as denial of service attacks and the distribution of viruses and other malicious codes, criminal offences. Further offences exist where an individual supplies ‘tools’ to commit the above-mentioned activities.

The government has consolidated its focus on cybersecurity through the establishment of the National Cyber Security Programme with a dedicated pool of funds stretching to £860 million over five years until 2016. Following the passage of the Crime and Courts Act 2013, the government brought the National Cyber Crime Unit (NCCU) under the remit of the NCA. The NCCU brings together cybercrime response operations and uses information on cybersecurity threats collected from the private sector via the Cyber-Security Information Sharing Partnership (known as CISP). A recent policy survey reported that 65 per cent of large corporations reported a cyber breach in 2015, with 25 per cent experiencing a breach at least once per month and with the most costly breach amounting to £3 million. To address this, the government has begun offering cybersecurity advice directly to

73 Cybersecurity Regulation and Best Practices in the US and UK – Section 1.
businesses through publications such as the ‘10 Steps to Cyber Security’, and by establishing an information-sharing partnership whereby the government and industry can exchange information about cybersecurity threats and 51 per cent of businesses have undertaken five or more of the ‘10 Steps to Cyber Security’. To reduce the risk of cyberattacks, the government established the Computer Emergency Response Team in March 2014 to take a lead in administrating the UK’s response to national cybersecurity incidents. It has put an increasing emphasis on cyber skills, education and research to raise its cybersecurity strategy over the coming years. This includes ensuring that school children leave education with a basic understanding of cybersecurity, supporting a Cyber Higher Apprenticeship programme and launching Cyber First, which aims to identify and educate individuals to become the UK’s cybersecurity experts. In addition, in October 2016, the government opened the National Cyber Security Centre, which will form part of GCHQ and will offer an authoritative voice on information security in the UK, with one of its first mandates being to produce advice in conjunction with the Bank of England to enable financial institutions to improve their management of cybersecurity.

At a European level, the European Parliament adopted the Network and Information Security Directive (NISD) in July 2016. It introduces, among other things, mandatory breach notification requirements and minimum security requirements. The NISD imposes obligations on companies deemed to have a critical impact upon national infrastructure (including financial services organisations) to report breaches of cybersecurity to the national competent authorities without undue delay where the relevant incident would have a significant impact on the core services provided by that company. The NISD had been stuck in negotiations between EU lawmakers and Member States over which sectors the Directive should cover; after months of negotiations, it was decided that digital platforms such as search engines, social networks and cloud computing service providers will be subject to the Directive’s remit, albeit with ‘lighter touch’ requirements. The Directive aims to ensure a uniform level of cybersecurity across the EU as part of the Commission’s wider Digital Agenda for Europe.

IV SPECTRUM POLICY

i Development

The current EU regulatory framework for spectrum has been in force since 2003 following the introduction of the Telecoms Reform Package. This regulatory framework and in particular, the Framework Directive (2002/21/EC) and the Authorisation Directive (2002/20/EC), requires the neutral allocation of spectrum in relation to the technology and services proposed

by the user (e.g., mobile network operators and radio broadcasters). Following on from the Telecoms Reform Package, the Commission required Member States to adopt measures including greater neutrality in spectrum allocation, the right of the Commission to propose legislation to coordinate radio spectrum policy, and to reserve part of the spectrum from the digital dividend (from the switchover to digital television services) for mobile broadband services through the Better Regulation Directive and the Citizens’ Rights Directive.

In 2010, the Commission produced a Radio Spectrum Policy Programme (RSPP) detailing its key policy objectives and establishing general principles for managing radio spectrum in the internal market. This programme focuses on eliminating the digital divide, efficiently using spectrum and promoting investments, competition and innovation. The RSPP also defines a roadmap for the next steps in the EU Radio Spectrum Policy, which was approved on 14 March 2012 and which focuses on the spectrum needs for 4G wireless broadband systems.81

In the UK, Ofcom is responsible under the Act for the optimal use of the radio spectrum in the interests of consumers. This includes, among other things, monitoring the airwaves to identify cases of interference, and taking action against illegal broadcasters and the use of unauthorised wireless devices.

ii Flexible spectrum use

As the uses of the radio spectrum have increased, the allocation of spectrum by the regulator has developed from a centralised system, where use was determined by the regulator, to a market-based approach, where users compete for spectrum. Currently, auctions are the primary market tool used to implement the allocation.

Spectrum trading was introduced in the UK for the first time in 2004, and is permitted under the Wireless Telegraphy Act 2006 and associated regulations. Originally, the trading of spectrum was subject to a multi-stage process that, among other things, required a decision by Ofcom about whether to consent to the trade. However, the Wireless Telegraphy (Mobile Spectrum Trading) Regulations 2011, directed at making more efficient use of the available spectrum, and improvements in mobile services to meet the demand for faster and more reliable services for consumers, made significant changes to this process, removing the need to obtain the consent of Ofcom for proposed trades in most cases. In addition, under the regulations, the licensee can transfer all or part of the rights and obligations under its licence. A partial transfer, or ‘spectrum leasing’, can be limited to a range of frequencies or to a particular area. Ofcom also plans to simplify the process for time-limited transfers in line with the revised Framework Directive.

In July 2013, Ofcom lifted the restrictions on spectrum currently licensed for 2G to allow the provision of 3G and 4G services and the trading of spectrum. Ofcom also amended the terms of current 3G licences so that the licences become indefinite as well as allowing users to trade spectrum. In return, mobile operators pay annual fees for the 900MHz and 1,800MHz spectrum bands, which are those used to provide voice and data services using a mix of 2G, 3G and 4G technologies. In September 2015, Ofcom concluded that mobile operators should pay a combined annual total of £80.3 million for the 900MHz band and £119.3 million for the 1,800MHz band, which is 13 per cent lower than previously.

than Ofcom’s earlier proposals in February 2015. One half of the fee increase came into effect on 31 October 2015 with the second half expected to come into force on 31 October 2016. The latest fees take into account the operator’s requirement to provide voice coverage across 90 per cent of the UK landmass as well as the outcome of the spectrum auction in Germany which concluded in June 2015.82

In September 2013, the Ministry of Defence announced that Ofcom would be made responsible for the award of 190MHz of spectrum across current military bands, 2.3GHz and 3.4GHz, for civil use as part of the Public Sector Spectrum Release programme. This was due to be auctioned in December 2015 but following the CMA’s investigation into the merger between Telefónica UK Limited and Hutchison and Ofcom subsequently receiving letters from both Telefónica and Hutchison stating their intention to bring judicial review against Ofcom’s decision to commence the auction before the Commission’s decision on their proposed merger, Ofcom delayed the auction process. In October 2015, Ofcom published an Information Memorandum providing information for parties considering bidding in the awards process but no spectrum has yet been awarded to any party.83 In addition to the 2.3GHz and 3.4GHz bands, Ofcom continues to work with the government to consider which further spectrum used by the public sector may be available.

In April 2014, Ofcom published its spectrum management strategy setting out the approach to, and priorities for, spectrum management over the next 10 years.84 The strategy noted, in particular, the increasing use of wireless services across the UK and the need to meet the increased demands with which the spectrum is faced. Ofcom proposed that it use a combination of market forces and regulations to support its strategic goals, which includes increasing quality of radio frequency performance, providing greater information on spectrum use, repurposing some spectrum bands and providing for shared access to spectrum. As part of this, in September 2015 Ofcom published a consultation on using 10MHz of existing spectrum for new applications to be utilised for the IoT enabling M2M communications. Ofcom’s aim was to encourage M2M applications to use spectrum that would enable them to connect wirelessly over longer distances. Following on from the September 2015 consultation, on 23 March 2016 Ofcom released a statement confirming that spectrum within the 55–68MHz, 70.5–71.5MHz and 80.0–81.5MHz bands could be used for IoT services and M2M applications.85

iii Broadband and next-generation mobile spectrum use

In August 2012, Ofcom published its decision to allow Everything Everywhere (formed by the merger of Orange UK and T-Mobile UK in 2010) to vary its 1.8GHz 2G spectrum licences to allow the use of 4G (LTE and WiMax) technologies. Hutchison 3G also benefited from the licence variation as the buyer of a portion of Everything Everywhere’s 1.8GHz band, which the company was required to divest until the end of 2013 as a result of its merger in 2010. A legal challenge, which was expected to be brought by O2 (Telefónica) and Vodafone

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82 Available at: http://media.ofcom.org.uk/news/2015/annual-licence-fees-mobile-spectrum/.
83 According to: www.ofcom.org.uk/static/spectrum/fat.html.
against Ofcom’s decision, was avoided when Ofcom gave assurances that it would bring the release of new spectrum forward to September 2013. Acknowledging that its decision might give an advantage to Everything Everywhere, Ofcom did not want to delay the release of 4G services to customers in the UK any further, and Everything Everywhere launched its 4G services in October 2012. Ofcom issued a call for information on spectrum above 6GHz in January 2015, which ended in February 2015. Following on from this call for information, in April 2016 Ofcom consulted on improving spectrum access for consumers in the 5GHz band. The results of the consultation remain to be seen, but Ofcom has subsequently set out plans to open up a ‘sub-band’ within the 5GHz frequency range for Wi-Fi, which would increase the number of 80MHz channels available for Wi-Fi from four to six in order to accommodate data-hungry applications and ease congestion. These extra channels, which are already being used in the US, could be opened up within the next few years.

The technology is expected to provide more capacity at faster speeds for mobile services on smartphones such as video streaming, email and social networking sites.

iv White space

Following an earlier consultation, 2011 saw Ofcom set out the use of free spectrum, or ‘white space’, made available from the UK’s switch from analogue to digital TV and radio, for applications such as mobile broadband (particularly in rural areas) and enhanced Wi-Fi. Ofcom has estimated that the bandwidth available is equivalent to the spectrum available to current 3G services. The UK is the first country in Europe to progress its plans. A white space device will search for spectrum that is available and check a third-party database to find out what radio frequencies are available to ensure that it does not interfere with existing licensed users of the spectrum. New white space radios use frequencies that are allocated for certain uses elsewhere but are empty locally. Flawless management of spectrum is required to avoid interferences.

Ofcom has released a statement that certain white space devices that operate automatically and without manual configuration are licence-exempt, on the condition that they do not interfere with existing users. In February 2015, Ofcom published a consultation on proposals for authorising other types of white space devices on a licensed basis. This followed a pilot for innovative white space equipment that began in December 2013; none of the white space devices tested during the pilot demonstrated that they were capable of operating without some degree of manual configuration. Following the consultation, Ofcom decided to authorise manually configurable white space devices (WSDs) on a licensed basis while equipment that meets Ofcom’s licence exemption regulations is developed. Ofcom will then review whether a licensing regime is still required by the end of 2018. Ofcom expects that the transitional licensing regime will enable the deployment of WSDs to begin sooner in the UK. However, to balance the likelihood that such manually configured white space devices

86 Laying the foundations for next generation mobile services, update on bands above 6GHz, Ofcom, 20 April 2015. Available at http://stakeholders.ofcom.org.uk/binaries/consultations/above-6ghz/5G_CFL_Update_and_Next_Steps.pdf.
87 Available at: http://media.ofcom.org.uk/news/2016/speeding-up-wi-fi/.
89 Available at http://stakeholders.ofcom.org.uk/consultations/white-space-coexistence/.
have caused interference to incumbent users of the UHF TV band, Ofcom plans to introduce certain technical and non-technical licence conditions.\footnote{Available at: http://stakeholders.ofcom.org.uk/consultations/white-space-coexistence/} The final version of the ETSI Harmonised European Standard for white space devices\footnote{ETSI EN 301598 V.1.0.0(2014-02).} has been published and delivered to the European Commission. In February 2015, Ofcom published a statement allowing the commercial use and deployment of white space broadband technology, harnessing the unused parts of the radio spectrum in the 470MHz to 790MHz frequency band.\footnote{Available at: http://stakeholders.ofcom.org.uk/consultations/white-space-coexistence/}

Ofcom is also in the early stages of developing spectrum sharing. White space spectrum with a frequency in the spectrum bank 470MHz to 790MHz, which is not being used at particular times is the key to developing such sharing. This would be enabled by location-aware wireless devices or databases that provide information on white space availability. Likewise, Ofcom set out in its Spectrum Management Strategy that they would place particular emphasis on spectrum sharing. In July 2015, Ofcom published a consultation in an attempt to identify barriers to sharing, include regulatory tools to facilitate further sharing and set out how sharing would be considered on a case-by-case basis. Since the consultation closed, nothing further has been published in relation to spectrum sharing.\footnote{Available at: www.ofcom.org.uk/content/about/annual-reports-plans/ann-plans/Annual_Plan_Statement.pdf.}

The European Commission’s Digital Single Market (DSM) proposals included proposals relating to spectrum management which would, if adopted in their current form, have a significant impact in the UK (see Sections II.v and V.iv, infra for more details).

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v Spectrum auctions

The last spectrum auction was initially proposed to be in 2015 where licences were to be awarded in the 2.3GHz and 3.4GHz spectrum bands. The auction was postponed to 2016 and a total of 190MHz of high-capacity spectrum was to be made available in two bands: 2.3GHz and 3.4GHz, which are those particularly suited to high-speed mobile broadband services. Ofcom planned to set reserve prices totalling £70 million for the spectrum. Most notably, there was to be no cap on the amounts bidders could buy as Ofcom believes that buying large blocks has the potential to support fast download speeds, helping pave the way for 5G.\footnote{Available at: http://stakeholders.ofcom.org.uk/binaries/consultations/2.3-3.4-ghz-auction-design/statement/statement.pdf.} However, following the European Commission’s decision to block the proposed acquisition of O2 by CK Hutchison (H3G), Ofcom intends to publish a further consultation in the autumn of this year on competition measures and on specific aspects of auction design for the award of the 2.3GHz and 3.4GHz spectrum bands.\footnote{Available at: http://stakeholders.ofcom.org.uk/binaries/consultations/2.3-3.4-ghz-auction-design/statement/statement.pdf.}

Prior to the postponed auction of 2015, the most prominent auction took place in February 2013, where Ofcom announced the results for the auction of the 800MHz and 2.6GHz bands. The auctioned spectrum, which was previously used for digital TV and wireless audio devices, was cleared by retuning TV signals in July 2013 and is now used for further 4G mobile services. After more than 50 rounds of bidding, Vodafone, O2
(Telefónica), Everything Everywhere and Hutchison 3G UK secured various bands of the newly released spectrum. Consequently, all major mobile networks in the UK started to provide 4G services from September 2013 in addition to Everything Everywhere.

As Ofcom’s auction process is designed to promote competition and coverage, Ofcom attached a coverage obligation to one of the 800MHz lots that was won by O2 (Telefónica). The provider accepted the obligation to widen the coverage of its mobile broadband for indoor reception to at least 98 per cent of the population.

To ensure competition between the national operators, Ofcom introduced a floor and cap on the amount of spectrum that each of the operators can win and imposed safeguard caps to prevent an operator from holding too much spectrum. To diversify the market, Ofcom also reserved parts of the spectrum for a fourth national wholesaler. The reserved lots were won by Hutchison 3G UK.

Despite the fact that the government budgeted a surplus of £3.5 billion for the auctioned spectrum, it only raised a total of £2.34 billion.

vi Emergency services bandwidth prioritisation

The Universal Services Directive, a further part of the Telecoms Reform Package, introduces several extended obligations in relation to access to national emergency numbers and the single European emergency call number (112). Prior to the Universal Services Directive, obligations to provide free and uninterrupted access to national and European emergency numbers applied to providers of publicly available telephone services only. Under this Directive, however, these obligations are extended to all undertakings that provide to end-users ‘an electronic communication service for originating national calls to a number or numbers in a national telephone numbering plan’; the UK has mirrored this wording in its revisions to General Condition 4 under the Act. Such electronic communication service providers are therefore required to ensure that a user can access both the 112 and 999 emergency call numbers at no charge (and without the use of any cards or coins) and, to the extent technically feasible, make caller location information for such emergency calls (meaning information indicating the geographical position of the terminal equipment of the caller) available to the relevant emergency response organisations. In a January 2015 report entitled ‘Citizens and communications services’, Ofcom stated that it was monitoring the effectiveness of steps by the industry to improve emergency caller location information on mobile calls.

In 2013, the Home Office announced the Emergency Services Mobile Communications Programme, which plans to provide a dedicated emergency services network (ESN) that would provide the next generation communication system for emergency services. However, one of the lots, relating to a contracted agreement for an MNO to extend guaranteed signal coverage to ensure mobile coverage, was withdrawn in January 2015. The remaining contracts for the operation of the ESN were won by EE and Motorola Solutions, which will now work to provide the UK’s emergency services with a 4G long-term evolution (LTE) mobile network, replacing the existing private terrestrial trunked radio (Tetra) system.

In order to meet its contractual obligations, EE has asked for a variation of its Spectrum Access 2,100MHz licence to permit the use of LTE technology in the unpaired frequencies

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1899.9 to 1909.9MHz. Ofcom is currently consulting on the licence amendments. Ofcom's preliminary view is that granting the request is an efficient use of the spectrum and would benefit citizens and consumers. The deadline for comments to be provided on Ofcom’s preliminary view was 30 September 2016; therefore at the time of writing, responses received (including responses from Three and Vodafone) are currently being considered.97

V MEDIA

The UK media and entertainment industry continues to feel the effects of the advent of digital content and converged media platforms. The transition from traditional forms of media distribution and consumption towards digital converged media platforms is changing the commercial foundations of the entertainment and media industry in the United Kingdom. Politicians, lawyers, economists and members of the industry are all grappling with new business models to monetise content and control frameworks to provide sufficient protection for the rights of content creators and consumers alike. The European Commission has unveiled its new DSM Strategy with the intention of, *inter alia*, updating the European copyright law regime.98

i Restrictions on the provision of service

The service obligations and content restrictions described for the UK communications landscape in Sections I to IV, *supra*, apply to providers of digital content and converged media platforms. The regulatory framework described in these paragraphs applies to network operators and content providers alike in the context of the transmission of digital content across these converged media platforms.

ii Superfast broadband

The government’s rollout of superfast broadband has reached more than 1 million homes and businesses across the UK. The £1.7 billion nationwide rollout is on track to extend superfast broadband to 95 per cent of UK homes and business by 2017. Eight different projects have had successful bids for the £10 million innovation fund to explore ways to take superfast broadband to the most remote and hardest-to-reach places in the UK. This reflects the government’s current policy expressed in the Digital Economy Bill, which was introduced in the House of Commons on 5 July 2016 and intends to create a new broadband USO with a minimum download speed of 10Mb/s.99

It is estimated that faster broadband will not only improve profits for UK businesses, but will create an additional 56,000 jobs in the UK by 2024. The work involved in the current rollout is expected to provide a £1.5 billion boost to local economies, and by 2024 it

97 Available at: http://stakeholders.ofcom.org.uk/consultations/EE-licence-variation-1990-1920MHz/.
is hoped that the government’s current investments in faster broadband will be boosting rural economies by £275 million every month, or around £9 million every day.\footnote{Ofcom – The Office of Communications Annual Report and Accounts for the period from 1 April 2013 to 31 March 2014.} As of the end of 2015, there were 9.2 million superfast fixed broadband lines.\footnote{Available at: http://media.ofcom.org.uk/facts/.
}

\section*{iii Internet-delivered video content}

Digital content has driven new forms of consumption of, and interaction with, media and entertainment content in the UK. This is primarily taking place on the internet and, as in other parts of the world, the UK has seen a rapid rise in the use of Web 2.0 and IPTV on converged media platforms.

\section*{iv European DSM Strategy and media}

The DSM Strategy proposals (see Section III, \textit{supra}) includes proposals to revise the Audiovisual Media Services Directive (AVMSD) which coordinates national legislation on all audiovisual media including both TV broadcasts and on-demand services. Currently, AVMSD provides levels of harmonisation in areas such as accessibility for people with disabilities, promoting and distributing European works, commercial communications and protection of minors. The proposed revisions extend its application to ‘video-sharing platforms’ that tag, organise and target advertising on content and proposes to introduce an obligation to ensure that these content providers implement measures to protect minors from access to harmful content. In order to ensure equality in the promotion of European works, the draft Directive obliges on-demand services to ensure 20 per cent of the works in their catalogues is European. Furthermore, the proposal allows Member States to require on-demand services to invest in local content.\footnote{Available at: http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52016PC0287&from=EN.
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The Communication highlights basic principles about how it will ensure its DSM objectives through piecemeal legislative action. This includes proposing to maintain the intermediary liability regime under the e-Commerce Directive; the consideration of deregulation of traditional communication services rules and proposals to ensure that platforms are accountable to some extent for their content.

On 18 December 2015, the Commission proposed legislative actions in areas such as online content portability.\footnote{Available at: https://ec.europa.eu/transparency/regdoc/rep/1/2015/EN/1-2015-627-EN-F1-1.PDF.
}
On 25 May 2016, the Commission also proposed a Regulation prohibiting geo-blocking of the sale of goods and the provision of services in the EU. However, it proposed excluding a number of services from the scope of the Regulation; most importantly, audiovisual services and copyright-protected works such as music or e-books, except where the copyright-protected work is supplied to the customer in the premises of the trader or in a physical location where the trader operates.

On 14 September 2016, in addition to the telecoms proposals outlined in Section II.v, supra, the Commission adopted new proposals for copyright reform as part of its DSM Strategy. The Commission released proposals for a Regulation laying down rules on the exercise of copyright and related rights applicable to certain online transmissions of broadcasting organisations and retransmissions of television and radio programmes (the Copyright Regulation); a Directive on Copyright in the DSM (the Copyright Directive); and proposals for an additional Directive and Regulation to implement the Marrakesh Treaty to Facilitate Access to Published Works for Persons who are Blind, Visually Impaired, or Otherwise Print Disabled.

The Copyright Regulation introduces a cross-border clearance mechanism for digital broadcasting by broadcasters and retransmission of broadcasts online. Currently, broadcasters transmit programmes on their services which they have licensed from others or produced themselves, but programmes will inevitably contain content that is protected by copyright and needs to be cleared for use. Through the Copyright Regulation, the Commission proposes to extend the ‘country of origin’ principle – which has been in place for decades in respect of cable and satellite communications – to specific online services, including


109 Set out in the Satellite and Cable Directive (Directive 98/83/EEC), this principle allows broadcasters to clear rights for satellite broadcasting in one Member State and allows them to then make their satellite transmissions available in other Member States.
simultaneous online transmissions of a broadcast, ‘catch-up’ television services and associated ancillary services such as ‘the making of’ programmes. This means that broadcasters will only need to clear rights once, in the Member State from which their broadcast originates. However, it only applies to online broadcasts and does not apply to video-on-demand (VoD) services. The Copyright Regulation also proposes to extend the current system of mandatory collective management for retransmissions by cable of television and radio broadcasts from other Member States to other closed electronic communication networks, such as internet protocol television (IPTV). This means that instead of negotiating individually with every rights holder, operators who offer packages of channels will be able to obtain licences from collective management organisations.

The Copyright Directive focuses on three areas. First, it introduces measures to achieve a well-functioning marketplace for copyright. These include proposals for: (1) a new related right in publication which will allow publishers to charge fees for digital uses of the copyright works they have invested in the distribution of, including where small amounts of text are used in hyperlinks; (2) a requirement on online user-uploaded content platforms to take measures to ensure the protection of user-uploaded works (for example, by implementing content recognition software) in order to address rights holders’ concerns as to the ‘value gap’ (between the ease with which popular content is accessed online and the arguably meagre profit that rights holders reap from it); and (3) a mechanism for increasing the transparency to rights holders of the exploitation of their works, with an alternative dispute resolution procedure to allow authors and performers to ‘rebalance’ contracts. Second, it introduces measures to improve licensing practices and ensures wider access to content, by: (1) implementing legal mechanisms to facilitate easier licensing of ‘out-of-commerce’ works (which are works that are not available to the public through customary channels of commerce and cannot be reasonably expected to become available) by cultural institutions in order to aid cultural institutions in making these works, which have significant cultural and educational value, available to the public; and (2) requiring Member States to set up impartial bodies to assist in the negotiation of licensing agreements between audiovisual rights holders and VoD platforms. Third, the Directive introduces measures to adapt exceptions and limitations to the digital and cross-border environment in relation to: (1) research organisations conducting text and data mining; (2) the digital use of works and other subject matter for distance-learning educational purposes; and (3) cultural heritage organisations making digital copies of their permanent collections for preservation purposes.

The Directive designed to implement the Marrakesh Treaty introduces a new mandatory exception to the copyright rights harmonised under EU law, allowing people who are blind or otherwise print disabled to access books and other content in formats that are accessible to them, including across borders. The Regulation governs the exchanges of accessible format copies between the European Union and third countries that are parties to the Marrakesh Treaty. The European Parliament and the Council of the Member States will now discuss these legislative proposals under the so-called co-decision procedure. As such, it is unlikely that these proposals will become binding in Member States sooner than 2019/2020.

The European Commission has also investigated the practices of six major US film studios (Disney, NBCUniversal, Paramount Pictures, Sony, Twentieth Century Fox and Warner Bros) with respect to clauses in their licensing agreements with telecommunications company Sky UK. On 26 July 2016, the Commission accepted commitments from Viacom-owned Paramount to end a probe into potentially anticompetitive film licensing
contracts but confirmed that it continues to investigate five other studios and Sky UK. As a result, Paramount has agreed to stop enforcing contractual clauses that (1) prevent European consumers outside the UK and Ireland watching Paramount films on Sky’s UK satellite and online channels and (2) prevent rival broadcasters from airing its pay-TV content in the UK. In practice, this means that Paramount will no longer insert geo-blocking restrictions in its licensing contracts with broadcasters. The current probe deals only with Sky UK in the UK and Ireland but the Commission is also investigating the British pay-TV operator’s approach to consumers in France, Italy and Germany. Likewise, Paramount will not introduce or renew similar geo-blocking clauses in film licensing contracts with other broadcasters that operate in other European countries. Paramount will run the commitments package for five years and it will cover both standard pay-TV and on-demand services, both online and by satellite. The effect of the Commission accepting the commitments is that the studio will not be required to pay a fine, nor admit liability. Notably, the five other studios have not offered similar undertakings. The precise timing in relation to the separate investigations remains unknown but further development is expected in early 2017. It is, as yet, unclear what effect a final decision against the studios will have on consumers, but it could have a profound effect on the film industry in Europe. However, in spite of these commitments and the ongoing investigations, broadcasters will be under no obligation to offer packages outside their territories following the decision. Indeed, given that copyright is granted on a national basis, and not yet harmonised under EU law, broadcasters could face copyright-infringement cases if they offer films in territories in which they do not have a licence.

v Web 2.0
Web 2.0 is characterised as facilitating communication, information sharing, interoperability and collaboration for users of the internet. Users are empowered and encouraged to play a more active role in the creation and consumption of content, which has given rise to the concept of user-generated content (UGC). UGC has created issues of liability and ownership that have been addressed to some extent by legislation (see the references to the Digital Economy Act in Section III.iii, supra) and in court. The application of the Digital Economy Act is reliant on the ability of copyright owners to notify ISPs of potential copyright infringement. To do this, copyright owners will send details of the infringement, including IP addresses, to ISPs. However, courts in the UK continue to cast doubt over the use of an IP address as evidence that an individual has downloaded content unlawfully. Given this, as well as US authorities suggesting that a provider of Web 2.0 content will not be liable for copyright infringement if it removes material from its site when notified by the copyright owner, along with the formal challenges to the Digital Economy Act (see Section III.iii, supra), it remains to be seen how the Digital Economy Act will be interpreted in the UK in the future.

On 26 June 2012, Ofcom issued a consultation on the Online Infringement of Copyright (Initial Obligations) (Sharing of Costs) Order (Sharing of Costs Order), which was laid before Parliament. The consultation, which closed in September 2012, addressed how Ofcom should calculate the level of charges that participating copyright owners will have to pay to Ofcom for the costs of setting up and running a scheme for reporting online copyright infringement under an ‘initial obligations code’ for ISPs. However, in February 2013, the Sharing of Costs Order was withdrawn over concerns that it may not comply with the Treasury’s Managing Public Money guidelines. In response to a freedom of information request, Ofcom disclosed that it had spent £1.8 million on taking action against online copyright infringements in accordance with the Digital Economy Act in 2011 and
2012. Following the Treasury’s announcement, the DCMS stated in May 2013 that technical changes to the draft Sharing of Costs Order were required. There has been no update at the time of writing.

In a Select Committee Report published in September 2013, the Committee criticised the delay in the implementation of the Digital Economy Act and urged the government to set a clear timetable for resolving the impasse. However, the process is expected to be delayed, as it requires notification to the Commission.110 The government has welcomed work by the industry to develop a voluntary-led process.

On 19 July 2014, the government announced the launch of Creative Content UK, a programme between industry and ISPs to heighten awareness of copyright infringement online and introduce a subscriber alert programme. The subscriber alert programme will be known as the Voluntary Copyright Alert Programme (VCAP) and involves owners sending evidence of copyright infringement to ISPs who will respond by sending up to four letters of warning to their subscribers. A number of organisations such as Sky, BT, TalkTalk and Virgin Media have signed a memorandum of understanding which will underpin the Creative Content programme. Although the government pledged £3.5 million in funding for the education awareness element of the Creative Content campaign, there have been no further developments since.

IPTV

IPTV typically describes a platform that allows users to stream television content using the internet or mobile telephone networks. The key benefit of IPTV is that it allows a user to interact with the content because data can flow both ways in an IP network. IPTV is growing rapidly in the UK and this growth is predicted to continue, particularly in light of the new spectrum being made available as a result of the digital switchover.

IPTV is made available by a range of content providers in the UK, including public broadcasters (BBC’s iPlayer, ITV’s ITV Player, Channel 4’s 4oD), cable and satellite providers (both Virgin Media and BSkyB offer broadband-based VOD products), mobile operators (including Vodafone, Everything Everywhere, O2 (Telefónica) and Hutchison 3G), fixed-line operators, ISPs, online aggregators and websites.

To further facilitate user access to IPTV, the BBC, ITV, Channel 5 and BT have collaborated on an open-technology offering so that viewers with Freeview or Freesat and a broadband connection can access catch-up and on-demand programming via their televisions from online services such as BBC iPlayer in an initiative called YouView (previously known as Project Canvas). Since its launch in July 2012, YouView has been marketed heavily at UK consumers. In July 2014, an agreement was signed guaranteeing five more years of funding by all seven shareholders, including BT and TalkTalk, giving YouView further scale in the UK market.

According to Ofcom’s Communications Market 2016 report, UK adults spend more time online (8 hours 45 minutes) than they do sleeping (8 hours 18 minutes) with live TV decreasing more than any other activity across both the 16–24s and the 25–34s (42 minutes and 37 minutes respectively) with on-demand viewing increasing (43 minutes and 20 minutes respectively). However, watching live TV was still the most popular viewing activity for UK adults in 2016 although at its peak, the largest live TV audience was still

110 Select Committee Report – Supporting the Creative Economy.
lower than live TV’s biggest audience in 2014. Interestingly, BBC iPlayer remains the most popular service and video on demand from Sky remains the most popular type of VoD from a pay-TV operator. Ofcom believes the growth in take-up of paid-for VoD is primarily driven by the take up of SVoD service, with Netflix being the most popular non-broadcaster service. In turn, Ofcom attributes this to users wishing to access a back catalogue of TV programmes and original content. However, the rate of take-up of VoD services has slowed in recent years. Since 2014, the proportion of all adults claiming to have used at least one VoD service in the past 12 months has increased by 1 per cent each six months in a markedly slower rate of growth than the 6 per cent increase between 2013 and 2014 (see Section IV.v, supra). The BBC Royal Charter expires on 31 December 2016 and is expected to be renewed on 1 January 2017. In May 2016, a White Paper was published setting out the government’s proposals for the Royal Charter for the next 11 years. More recently, on 15 September 2016, the draft Charter was published. The draft Charter introduces a number of new reforms, most notably to the BBC’s governance where the BBC Trust is to be replaced by a unitary board (causing a great debate between the government and the BBC) and Ofcom will now become the external, independent regulator of the BBC. In addition, from 1 September 2016 the law changed requiring online content watchers to pay for a TV licence in order to watch BBC iPlayer.

vii Mobile services

In its annual report for 2015–2016, Ofcom details how it will make spectrum in the 700MHz band available for mobile data use by the start of 2022 and sooner if possible. As this part of the spectrum is currently used to deliver digital terrestrial television (DTT) services and wireless microphone usage, making the band available will mean that DTT and audio will no longer be able to use the spectrum. Ofcom is aiming to make the band available while safeguarding the benefits that DTT and audio provide to consumers. It intends to work closely with stakeholders to develop a plan for the DTT infrastructure modifications needed as well as working with government and industry and consumer groups.

In July 2014, the Supreme Court handed down a decision in BT’s favour with respect to termination charges. Ofcom had exercised its dispute resolution powers after complaints from mobile operators T-Mobile, Vodafone, O2 and Orange, in response to BT’s proposed changes to the termination rates it charges for 080, 0845 and 0870. Ofcom found that the proposals were not fair and reasonable. This decision was overturned by a decision of the Competition Appeals Tribunal (CAT) in August 2011, which was in turn overturned by the Court of Appeal in July 2013. The Supreme Court found that BT’s proposed changes to its termination charges were not unfair or unreasonable, and Ofcom’s decision was based merely on an opinion that the changes may have a distortive impact on competition.

114 Director-General of the BBC, Tony Hall, has called it an ‘honest disagreement’ with the government. www.bbc.co.uk/mediacentre/latestnews/2016/white-paper-response.
The United Kingdom voted to leave the EU by a vote 51.9 per cent in favour of ‘leave’ to 48.1 per cent in favour of ‘remain’ in the Brexit referendum on 23 June 2016. The referendum did not kickstart the exit process, which will not commence until the United Kingdom serves notice under Article 50 of the Treaty on European Union. Service of notice will trigger a period of negotiation between the United Kingdom and the EU on the terms of the United Kingdom’s exit, with exit taking effect once those negotiations have concluded or after two years (if sooner), irrespective of what terms have been agreed. On 2 October 2016, the government declared that it is currently committed to triggering Article 50 by the end of March 2017, and has stated that it intends to include a proposal for a ‘Great Repeal Bill’ to be included in the Queen’s Speech in the next session of Parliament. The government’s stated intention is that such a Bill would include proposals to repeal the European Communities Act 1972, end the jurisdiction of the ECJ over the UK, enshrine existing EU legislation into British law and provide a system post-Brexit for removing or amending EU laws that apply to the UK (whether directly effective or enshrined in UK law by a separate Act of Parliament). It is proposed that the Great Repeal Bill becomes effective as at the date of Britain’s exit from the EU (i.e., March 2019 or such date as may be agreed as part of the Article 50 process). It is anticipated that the final form of any ensuing legislation will be the subject of much debate. Practically, until we have more certainty about what Brexit is likely to look like, we consider it prudent to continue to move forward as if existing EU legislation and EU legislation that comes into force prior to Brexit will continue to apply to the United Kingdom post-Brexit, until we have more information about the post-Brexit status quo.

The European Commission’s ambitious DSM Strategy proposals (announced 14 September 2016) signpost that Europe’s approach to digital market access is likely to change significantly, to dramatically enhance Europe’s connectivity, to rationalise its telecoms regulatory regime, to end unjustified geographical restrictions on content and to reform the European copyright regime in favour of European interests.

However, the proposals are ambitious both in terms of scale and cost – using the 5G Action Plan as an illustrative example, the European Commission estimates that €500 billion in private investment will be required to deliver its 5G Action Plan, of which it is projected there will be a €155 billion shortfall based on current investment trends. The European Commission has indicated that part of the intent of the reforms is to stimulate competition and investment in the sector, but has also proposed the creation of a European Broadband Fund (to comprise both private and public funds) to help make up this shortfall. This proposal has yet to be tabled, but if the European Commission’s ambitions are to be met, it seems that a substantial amount of new or reallocated public funding for next generation telecoms infrastructure is forthcoming. While the WiFi4EU initiative will be funded by the EU (for installation and equipment costs only) for an initial budgeted amount of €120 million, €70 million of this is reallocated funding from the Connecting Europe Facility. Only €50 million will be previously unallocated funds.

It will be important to closely follow the progression of these proposals through the European Parliament and Council of the Member States’ co-decision procedure, as it is likely that certain of these proposals will be softened before they are adopted.
iii EU–US Privacy Shield

Under the Safe Harbor agreement, if the recipient US organisation was self-certified under the US Safe Harbor regime, data transfers could be made to the US, notwithstanding the general prohibition on transfer under the Data Protection Directive, because such a recipient was deemed to have adequate protection in place. The Safe Harbor regime was challenged in a case brought by Max Schrems who argued that the EU-US Safe Harbor agreement did not provide adequate security for EU citizens in light of the revelations exposed by Edward Snowden about the clandestine PRISM and NSA programmes. Schrems challenged the self-certification process involved in Safe Harbor and claimed that the personal data of EU citizens was no longer adequately protected due to US government surveillance. The ECJ invalidated the legal basis for Safe Harbor on 6 October 2015 with the immediate effect that the agreement was no longer considered to provide adequate protection under the eighth data protection principle.

Following the decision of the ECJ, the Commission and the US government conducted lengthy negotiations on a new framework for transatlantic data flows and agreed on a new EU–US Privacy Shield (the Privacy Shield), which came into effect on 1 August 2016.

Under the new Privacy Shield, US organisations commit to seven privacy principles in order to ensure that the adequate protections are in place. These include the notice principle, the data integrity and purpose limitation principle, the choice principle, the security principle, the access principle, the recourse, enforcement and liability principle as well as the accountability for onward transfer principle (the Principles). In order to join the Privacy Shield, an organisation must: (1) publicly commit to and implement the Principles through a self-certification process; (2) be subject to the authority of US law by the relevant enforcement authority; and (3) publicly disclose its privacy policy.115

The most significant changes from the Safe Harbor framework to the Privacy Shield include the following:

a individuals affected by non-compliance with the Principles can seek redress (from the organisation itself, from an independent dispute resolution body and from the national DPA) and non-compliance can be enforced by various bodies (FTC, a newly created privacy shield panel and judicial redress);

b there are tighter controls on transfers; and

c annual joint reviews by the European Commission, the FTC and the DOC on whether the Privacy Shield meets the adequacy finding that entitles companies to transfer personal data overseas legally; and

d written assurances by the US government that any access to personal data by public authorities will be subject to clear limitations, safeguards and oversight mechanisms.

In May 2016, Max Schrems filed a complaint with the Irish Data Protection Commissioner concerning the legal status of data transfers under Facebook’s standard contractual clauses. The Irish Data Protection Commissioner has referred the case to the ECJ.116

115 Available at www.privacyshield.gov/welcome.
iv DRIPA and the Investigatory Powers Bill

DRIPA came into force on 17 July 2014, following a fast-tracked procedure that meant it passed through all stages of Parliament within four days (a process that often takes months or even years) on the basis that its enactment was required for continued national security. The Act addressed two key issues: the obligation to retain communications data by communications providers and the extraterritorial expansion of powers under RIPA. DRIPA also clarified that interception capability notices under RIPA may be issued to telecommunications providers outside the UK in relation to conduct outside the UK.

The first part of DRIPA was implemented in response to the declaration of invalidity of Directive 2006/24/EC (Data Retention Directive) by the CJEU in April 2014, which found that it violated an individual’s right to privacy and was disproportionate to its aims. Under the Data Retention Directive, public communications providers (e.g., providers of fixed-network telephony, mobile telephony and internet access, internet email or internet telephony) had to retain traffic, subscriber and, where relevant, location data (but excluding content data) for a period of 12 months. The decision in the UK to reintroduce data retention laws is in stark contrast to the rest of Europe, where Germany, the Czech Republic, Romania, Austria, Cyprus, Belgium, Ireland and Bulgaria have already deemed similar provisions unlawful.

The first part of DRIPA grants the Secretary of State the power to issue notices to telecommunications operators requiring them to retain communications traffic data (e.g., time of call and who it was made to, but not the content of communications) for a period of up to 12 months for the purposes of investigating crime or issues of national security. The latter part of DRIPA amends RIPA to clarify that interception warrants may now be served on telecommunications providers based outside the UK if they provide services to UK users, requiring them to provide data to the UK government or risk civil sanctions or criminal prosecution under RIPA, which could result in directors facing up to two years in prison for non-compliance.

Following the passage of DRIPA, MPs Tom Watson and David Davis and leading civil rights group Liberty mounted a legal challenge against the Act over the legality of the GCHQ’s bulk interception of calls and messages via the judicial review procedure whereby a judge assesses the legality of a decision taken by a public body (in this instance, Parliament). The legality of DRIPA was questioned on the basis that the data retention provisions in the first part of the Act were introduced following the CJEU’s declaration that similar provisions in the Data Retention Directive were declared invalid.

In July 2015, the High Court declared the data retention provisions to be incompatible with EU law on the basis that they interfered with Articles 7 and 8 (the public’s right to respect for private life and communications and to the protection of personal data) of the EU Charter of Fundamental Rights. Particular criticism was made regarding the emergency nature of the legislation as well as its fast tracked path through Parliament.

118 Judgment in Joined Cases C-293/12 and C-594/12, Digital Rights Ireland and Seitlinger and Others.
119 R (Davis & Watson) v. Secretary of State for Home Department [2015] EWHC 2092.
In November 2015, the Court of Appeal referred the case to the ECJ and the Investigatory Powers Bill was introduced to the House of Commons in March 2016. It intends to provide a new legal framework to govern the use and oversight of investigatory powers of the executive branch. The new bill needs to be in force by 31 December 2016 and:

a. summarises and clarifies all the powers already available to law enforcement and the security and intelligence agencies in connection with obtaining communications;

b. creates a ‘double-lock’ of interception warrants meaning that warrants have to be authorised by the Secretary of State and approved by a judge before coming into force; and

c. adopts powers to the digital age in connection with the retention of internet connection records for law enforcement.\(^\text{120}\)

However, the outcome of the Court of Appeal’s referral to the ECJ may significantly change the current draft of the Investigatory Powers Bill. In July 2016 the Advocate General published a non-binding legal opinion on the compatibility of general data retention obligations with EU law. In particular, the Advocate General is of the view that general data retention obligations are within the scope of the provisions established under the E-Privacy Directive. Member States may, in order to fight serious crime, impose general data retention obligations on providers of electronic communications services, but a number of safeguards as described in *Digital Rights Ireland and Seitlinger and Others* must be held up.\(^\text{121}\) Should the ECJ follow the Advocate General’s opinion, DRIPA is likely to be invalidated and the Investigatory Powers Bill will need to be redrafted in order to establish appropriate safeguards and to confer powers for the objective of fighting serious crime.\(^\text{122}\)

VII CONCLUSIONS AND OUTLOOK

In 2015 and 2016, privacy debates continued both inside and outside the courtroom, highlighting the ever-evolving regulatory landscape and the ongoing legal controversies about the scope and extent of a citizen’s right to privacy. The implementation of the GDPR has been a milestone in the area of data protection law and companies will have to be in a position to be compliant with its provisions, which will become directly applicable on 25 May 2018, especially in the light of the introduction of high fines when certain provisions of the GDPR are breached. Following its fast-tracked introduction in 2014, the DRIPA legislation was declared incompatible with EU law on the basis that its data retention provisions violated the right to respect for private life and the protection of personal data and the draft Investigatory Powers Bill might have to be amended in light of the Advocate General’s opinion on the pending case in front of the ECJ. Negotiations between EU and US officials over updates to the Safe Harbor Framework ongoing have resulted in the agreement of an EU–US Privacy Shield, but a decision on Facebook’s use of standard contractual clauses which was referred to the ECJ in April 2016 remains outstanding.


\(^{121}\) *Sverige AB v Post- och telestyrelsen* and *Secretary of State for the Home Department v. Tom Watson and Others*, Joined Cases C-203/15 and C-698/15, 19 July 2016.