THE TECHNOLOGY, MEDIA AND TELECOMMUNICATIONS REVIEW

SIXTH EDITION

Editor John P Janka

LAW BUSINESS RESEARCH

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The Technology, Media and Telecommunications Review

Sixth Edition

Editor John P Janka

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EDITOR'S PREFACE

This fully updated sixth edition of *The Technology, Media and Telecommunications Review* provides an overview of the evolving legal constructs relevant to both existing service providers and start-ups in 29 jurisdictions around the world. It is intended as a business-focused framework for beginning to examine evolving law and policy in the rapidly changing TMT sector.

The burgeoning demand for broadband service, and for radio spectrum-based communications in particular, continues to drive law and policy in the TMT sector. The disruptive effect of these new ways of communicating creates similar challenges around the world:

- *a* the need to facilitate the deployment of state-of-the-art communications infrastructure to all citizens;
- *b* the reality that access to the global capital market is essential to finance that infrastructure;
- *c* the need to use the limited radio spectrum more efficiently than before;
- *d* the delicate balance between allowing network operators to obtain a fair return on their assets and ensuring that those networks do not become bottlenecks that stifle innovation or consumer choice; and
- *e* the growing influence of the 'new media' conglomerates that result from increasing consolidation and convergence.

A global focus exists on making radio spectrum available for a host of new demands, such as the developing 'Internet of Things,' broadband service to aeroplanes and vessels, and the as yet undefined, next-generation wireless technology referred to as '5G'. This process involves 'refarming' existing 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. In many cases, an important first step will occur at the World Radiocommunication Conference in November 2015, in Geneva, Switzerland, where countries from around the world will participate in a process that sets the stage for these new applications. 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 coexist in the same segment of spectrum.

Many telecommunications networks once designed primarily for voice are now antiquated and not suitable for the interactive broadband applications that can extend economic benefits, educational opportunities and medical services throughout a nation. 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. Governments are also re-evaluating how to regulate broadband providers, whose networks have become essential to almost every citizen. Convergence, vertical integration and consolidation are also leading 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.

Changes in the TMT ecosystem, including the increased reliance by content providers on broadband for video distribution, have also led to a policy focus on 'network neutrality' – the goal of providing some type of stability for the provision of 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 can have profound effects on the balance of power in the sector, and raises important questions about who should bear the burden of expanding broadband networks to accommodate the capacity strains created by content providers.

These continuing developments around the world are described in the following chapters, 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 2015

LIST OF ABBREVIATIONS

3G	Third-generation (mobile wireless technology)
4G	Fourth-generation (mobile wireless technology)
5G	Fifth-generation (mobile wireless technology)
ADSL	Asymmetric digital subscriber line
AMPS	Advanced mobile phone system
ARPU	Average revenue per user
BIAP	Broadband internet access provider
BWA	Broadband wireless access
CATV	Cable TV
CDMA	Code division multiple access
CMTS	Cellular mobile telephone system
DAB	Digital audio broadcasting
DECT	Digital enhanced cordless telecommunications
DDoS	Distributed denial-of-service
DoS	Denial-of-service
DSL	Digital subscriber line
DTH	Direct-to-home
DTTV	Digital terrestrial TV
DVB	Digital video broadcast
DVB-H	Digital video broadcast – handheld
DVB-T	Digital video broadcast – terrestrial
ECN	Electronic communications network
ECS	Electronic communications service
EDGE	Enhanced data rates for GSM evolution
FAC	Full allocated historical cost
FBO	Facilities-based operator
FCL	Fixed carrier licence
FTNS	Fixed telecommunications network services

FTTC	Fibre to the curb
FTTH	Fibre to the home
FTTN	Fibre to the node
FTTx	Fibre to the <i>x</i>
FWA	Fixed wireless access
Gb/s	Gigabits per second
GB/s	Gigabytes per second
GSM	Global system for mobile communications
HDTV	High-definition TV
HITS	Headend in the sky
HSPA	High-speed packet access
IaaS	Infrastructure as a service
IAC	Internet access provider
ICP	Internet content provider
ICT	Information and communications technology
IPTV	Internet protocol TV
IPv6	Internet protocol version 6
ISP	Internet service provider
kb/s	Kilobits per second
kB/s	Kilobytes per second
LAN	Local area network
LRIC	Long-run incremental cost
LTE	Long Term Evolution (4G technology for both GSM and
	CDMA cellular carriers)
Mb/s	Megabits per second
MB/s	Megabytes per second
MMDS	Multichannel multipoint distribution service
MMS	Multimedia messaging service
MNO	Mobile network operator
MSO	Multi-system operators
MVNO	Mobile virtual network operator
MWA	Mobile wireless access
NFC	Near field communication
NGA	Next-generation access
NIC	Network information centre
NRA	National regulatory authority
OTT	Over-the-top (providers)
PaaS	Platform as a service
PNETS	Public non-exclusive telecommunications service
PSTN	Public switched telephone network
RF	Radio frequency
SaaS	Software as a service
SBO	Services-based operator
SMS	Short message service
STD-PCOs	Subscriber trunk dialling–public call offices
UAS	Unified access services

UASL	Unified access services licence
UCL	Unified carrier licence
UHF	Ultra-high frequency
UMTS	Universal mobile telecommunications service
USO	Universal service obligation
UWB	Ultra-wideband
VDSL	Very high speed digital subscriber line
VHF	Very high frequency
VOD	Video on demand
VoB	Voice over broadband
VoIP	Voice over internet protocol
W-CDMA	Wideband code division multiple access
WiMAX	Worldwide interoperability for microwave access

Chapter 29

UNITED STATES

John P Janka and Jarrett S Taubman¹

I OVERVIEW

This chapter provides an overview of telecommunications, broadband internet access and media regulation in the United States. Given the complexity of such regulation – which is constantly evolving in response to technological advances, market shifts and political dynamics – this chapter is not intended to be comprehensive. Rather, it is intended to demonstrate the nature and scope of such regulation, and to identify some of the more significant legal and policy developments of the past year.

II REGULATION

i The regulators

Regulation of telecommunications, broadband internet access and media in the United States is governed primarily by the following authorities, within parameters established under federal and state statutes and constitutions.

The Federal Communications Commission (FCC)

The FCC is an independent US regulatory agency established by the US Congress pursuant to the Communications Act of 1934, as amended (Communications Act). The FCC is charged with regulating all non-federal government use of the radiofrequency spectrum, all interstate telecommunications and all international telecommunications involving an end-point in the United States. Together with the US State Department Office of Communications and Information Policy, the FCC participates in international spectrum negotiations and related matters at the International Telecommunication Union (ITU).

¹

John P Janka is a partner and Jarrett S Taubman is counsel at Latham & Watkins LLP.

The National Telecommunications and Information Administration (NTIA)

The NTIA is an executive agency of the federal government within the US Department of Commerce. The NTIA has primary responsibility for regulating all use of the radiofrequency spectrum by federal government users, and works with the FCC to coordinate spectrum use between federal and non-federal users.

State and local regulators

Telecommunications within a single US state are governed by individual state regulatory agencies, typically having jurisdiction over telephone companies and other 'public utilities' providing services within the state, as well as over many consumer protection matters. State or local authorities typically issue franchises to operators of CATV systems whose service lines cross locally controlled, public rights-of-way. Such authorities also have jurisdiction over the siting of telecommunications facilities. The jurisdiction of state public utility commissions (PUCs) and of other state and local authorities over these types of matters is limited by state constitutions and statutes as well as by federal supremacy. For example, in the case of a conflict between the FCC and state or local regulations, the state or local authorities to enforce their own regulations. The FCC has effectively exercised exclusive jurisdiction over most matters involving internet access services, due to the interstate and international nature of the internet.

The Federal Trade Commission (FTC)

The FTC protects consumer interests in such areas as online marketing and telemarketing. Both the FTC and the FCC have oversight over certain telemarketing matters. Both the FTC and the US Department of Justice (DoJ) antitrust division police market concentration by examining mergers and other major transactions in the sector, along with the attorneys general of the 50 US states.

Other executive branch agencies

Other executive branch agencies play an important but less direct role in the regulation of traditional telecommunications, broadband internet access and media. First, these agencies often provide input as the FCC explores substantive issues and implements regulations through its rulemaking and licensing processes, occasionally engaging in public disagreements with the FCC over such matters. In addition, executive branch agencies with national security and law enforcement responsibilities typically are consulted (or may otherwise provide input) in connection with proposed transactions that would result in legally cognisable non-US ownership of FCC-regulated businesses. Notably, Team Telecom, an informal group made up of staff from the DoJ, the Federal Bureau of Investigation, the Department of Homeland Security and the Department of Defense, routinely participates in FCC proceedings reviewing such transactions and often gathering additional information from the parties. Because the FCC typically will not consent to such transactions until Team Telecom has 'signed off', Team Telecom effectively has the power to delay or block a transaction until its concerns are addressed. FCC-regulated businesses (like other US businesses) are also subject to potential review by the Committee on Foreign Investment in the United States (CFIUS), a multi-agency group with the statutory authority to review proposed investments in US businesses

from non-US sources. Because CFIUS can recommend that the President block or impose significant conditions on such transactions even after they have closed if they have not been 'cleared' by CFIUS, parties often request a CFIUS review on a 'voluntary' basis prior to closing.

ii Sources of federal telecommunications and media law and policy

In the US, federal telecommunications law is derived principally from statutes enacted by Congress (and signed by the President) as well as administrative regulations, orders and policies adopted by the FCC.

The Communications Act

The FCC's governing statute, codified in Title 47 of the United States Code, establishes the framework for federal regulation of traditional telecommunications, broadband internet access and media in the United States. The Communications Act, as amended, consists of seven major sections, or 'Titles'. The most significant of these are Title I (establishing the FCC and defining the scope of its authority), Title II (governing the activities of telecommunications carriers), Title III (governing the use of radio spectrum, including by wireless carriers and mass media broadcasters) and Title VI (governing the provision of cable television services). The Communications Act was substantially amended by the Telecommunications Act of 1996, which opened the US domestic market to greater competition in many respects.

Ancillary authority

Section 4(i) of the Communications Act provides that the FCC 'may perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this chapter, as may be necessary in the execution of its functions'. In a number of instances, the FCC has attempted to use this 'ancillary authority' to regulate subject matter outside of the traditional scope of its jurisdiction (e.g., VoIP services).

Forbearance authority

Section 10(a) of the Communications Act enables the FCC to 'forbear' from applying any provision of the Act to a Title II 'telecommunications' carrier or service (but not other types of services or providers) if the FCC determines that enforcement of such provision is not necessary to ensure just, reasonable and non-discriminatory rates, terms and conditions of service; enforcement of such provision is not necessary for the protection of consumers; and forbearance from applying such provision is consistent with the public interest. The FCC has used this authority to free telecommunications carriers from restrictive common carrier regulations, particularly where the relevant market sector is competitive. The FCC also used this authority in early 2015 in connection with its reclassification of broadband internet access service as a 'telecommunications service' (discussed in greater detail below).

FCC regulations and orders

In fulfilling its statutory mandate, the FCC plays a quasi-legislative role by promulgating administrative regulations, after providing notice to the public and an opportunity for

public comment, as required by the Administrative Procedure Act. The FCC also plays a quasi-judicial role in interpreting existing law in evaluating any number of disputes and applications (e.g., licence applications or petitions for interpretation of the law). The resulting orders and regulations constitute an extensive body of administrative law governing telecommunications, broadband internet access and media in the United States.

Judge-made law

The judicial branch of the government also plays an important role in US lawmaking at both the state and the federal level, reviewing administrative agency decisions for consistency with the governing statutes, and reviewing statutory law for compliance with the federal and state constitutions. Any party with a legally cognisable interest in the matter may seek review of an FCC action in a federal court of appeals. The courts review FCC decisions for consistency with its governing statutes and the US Constitution. In general, the FCC is entitled to deference in interpreting the Communications Act where it is ambiguous and capable of more than one reasonable interpretation. In addition, the courts review FCC decisions to ensure that they are not 'arbitrary or capricious' – for example, the FCC may not depart from its own precedent without a reasoned basis for doing so, and more generally must have a reasoned basis for its decisions.

The FCC's National Broadband Plan (Plan)

The Plan, published in 2010, was intended to serve as a comprehensive blueprint for US broadband policy, and includes a number of recommendations for expanding access to broadband services in areas deemed 'unserved' or 'underserved' by the FCC's standards. Initially, the Plan recommended that all Americans should have dedicated internet access at speeds of at least 4Mb/s downstream and 1Mb/s upstream. The Plan also recommended that 100 million Americans should have access to 100Mb/s downstream and 50Mb/s upstream broadband transmission capability by 2020, and sought to facilitate the deployment of wireless broadband services in particular. The Plan makes only recommendations; the FCC must seek public comment before adopting any new rules to implement the Plan. The FCC has a number of proceedings pending regarding proposals that seek to achieve these goals. While the Plan is now somewhat dated, and reflects the views of a prior chairperson, it remains the only comprehensive FCC statement with respect to broadband policy.

iii Regulated activities

Among other things, the Communications Act requires a party to obtain authority from the FCC prior to constructing or operating an 'apparatus for the transmission of energy or communications or signals by radio' or engaging in the provision of interstate or international telecommunications services. The specific procedures for obtaining such authority vary based on a number of factors, including the nature of the underlying authorisation, the nature of the proposed service and the sub-organisation of the FCC with primary responsibility for that service.

In most cases in which an applicant must file an application to obtain authority from the FCC, that application must be placed on 'public notice', giving interested parties an opportunity to comment during a specified period (e.g., 30 days). Certain types of applications (e.g., many non-common carrier wireless applications, requests for short-term authority or experimental licences) are subject to more streamlined processing, which may circumvent the need for public notice and comment in the first instance. Notably, the FCC now permits most applications to be filed electronically, and also allows the public to track the status of such applications through electronic filing systems (databases) accessible over the internet.

The FCC has granted certain types of operating authority by rule, obviating the need for individual users to seek and obtain separate authority from the FCC. For instance, the FCC has authorised by rule all common carriers to provide domestic interstate telecommunications services (this does not obviate the general need for wireless service providers to obtain separate spectrum licences, as discussed below) and, in certain cases, has eliminated the requirement to obtain authority before constructing radio facilities. The FCC also has permitted certain wireless operations to proceed on an 'unlicensed' basis, provided that the equipment used in such operations has been evaluated and authorised in accordance with the FCC's procedures.

iv Ownership and market access restrictions

Foreign ownership restrictions

Sections 310(a) and (b) of the Communications Act restrict foreign ownership of common carrier, aeronautical and broadcast spectrum licences, and of US entities holding those licences. These statutory sections provide that foreign individuals and entities may not directly hold more than 20 per cent of the equity or voting interests in an entity that holds one of these types of FCC licences. Higher levels of indirect foreign ownership of a licensee are permissible where such ownership is held through US entities. More specifically, where the FCC licensee is owned and controlled directly by another US company, the 20 per cent limit effectively increases to 25 per cent, and the FCC may allow foreign ownership in excess of 25 per cent at or above the US parent company level where it determines that allowing such ownership would serve the 'public interest'. In addition, as the result of a forbearance order issued in 2012 (which effectively overrides certain arcane language in the text of the Communications Act), the FCC will now permit higher levels of indirect foreign ownership in common carriers held through a non-controlling US company where the FCC concludes that such ownership would serve the 'public interest'. Often, the FCC has permitted up to 100 per cent foreign ownership of common carriers. The FCC has found that higher levels of foreign ownership from WTO member states presumptively serve the 'public interest'.

Historically, the FCC generally has not waived the 25 per cent limit with respect to broadcast licensees. However, in late 2013, the FCC indicated that, in order to facilitate foreign investment, it would consider such waivers on a case-by-case basis, taking into account any concerns raised by other executive branch agencies with respect to national security, trade policy and law enforcement. In May 2015, the FCC granted such a waiver to Pandora Radio LLC to allow Pandora to buy a radio station, and sustained that waiver against a legal challenge that was resolved in September 2015.

Even transactions that are consistent with the foreign ownership limits described above may be scrutinised, and effectively blocked, as a result of review by Team Telecom or CFIUS (described above).

Market access

Generally, the FCC does not authorise facilities located entirely outside of the United States to serve the US market. An exception arises with respect to non-US licensed satellites, which may serve the US if the satellite is licensed by a non-US jurisdiction that permits US satellites to serve that jurisdiction without undue restrictions (such access is presumed where the non-US jurisdiction is a WTO member); the satellite complies with the same FCC technical and service requirements that apply to US satellites; and the satellite's operation would not give rise to any national security, spectrum policy or other policy concerns. In reviewing requests for US market access, the FCC increasingly considers the extent to which the relevant non-US licensed satellite enjoys 'priority' to the spectrum in question as a result of filings made by its licensing administration with the ITU.

Multiple or cross-ownership

With the exception of its broadcast licences, the FCC generally does not limit the number of spectrum licences that may be held by or 'attributed' to (i.e., deemed to be held by) a single individual or entity. However, in evaluating the likely competitive effects of significant wireless transactions, the FCC has utilised a 'spectrum screen' to identify local markets that merit closer scrutiny by looking at the total amount of spectrum that would be controlled by one individual or entity, and the FCC has initiated a proceeding to re-examine its use and definition of such spectrum screens. The FCC has also imposed certain limitations on the ability of authorised parties of one type to hold licences or authorisations of another type. For example, the FCC's rules prohibit cable service providers from holding an attributable interest in the incumbent local exchange carrier serving the same market, and vice versa. The FCC has explicit limits on the number of broadcast stations (radio and TV) an individual or entity can own in a given local market, as well as the percentage of households nationwide that can be covered by television stations attributable to a single individual or entity. The FCC has also adopted rules limiting the cross-ownership of radio and television stations, as well as the cross-ownership of broadcast stations and newspapers. Several of these rules are under review by the FCC and the courts.

v Transfers of control and assignments

Under Section 310(d) of the Communications Act, FCC approval must be obtained prior to assigning most types of radiofrequency-based licences, permits or authorisations from one party to another, or transferring 'control' of a holder of such radiofrequency authority from one party to another. Exceptions exist for certain *pro forma* transactions, and certain types of licences. Similarly, under Section 214 of the Communications Act, FCC approval is required prior to assigning interstate or international telecommunications authorisations, or transferring control of a US carrier that provides interstate or international telecommunications services. In reviewing such applications, the FCC typically attempts to gauge whether the application will serve the 'public interest, convenience, and necessity' by weighing the expected benefits of the proposed transaction against its expected harms, including the effects on competition and consumers. Most states have similar requirements applicable with respect to intrastate activities, and some require prior approval or notice regarding the issuance of debt by, or changes in the debt structure of, entities that are subject to their jurisdiction. State statutes sometimes require that other factors be considered as well, such as the expected effect on jobs in the state.

The time frames for obtaining FCC approvals in connection with mergers, acquisitions or other major transactions can vary widely. The FCC's non-binding goal is to process combined applications for major transactions within six months. The FCC has exceeded this time frame on many occasions, typically when a transaction poses competitive concerns or is contested by third parties, in which case approval can take nine to 12 months, or possibly longer. More routine transactions often are processed in a shorter period, but there can be no assurance that the FCC will act by any deadline.

Within the past year, the FCC has completed its review of several major telecommunications and media transactions. Most notably:

- *a* In September 2015, the FCC approved a series of applications through which Frontier Communications Corporation and Verizon Communications Inc sought FCC consent to transfer to Frontier certain authorisations related to long-distance and broadband services provided by Verizon in California and Texas. The FCC found that the transaction was unlikely to result in any public interest harms but was likely to result in public interest benefits, including cost savings and increased infrastructure investment.
- *b* In July 2015, the FCC approved a series of related applications through which AT&T Inc (the largest provider of mobile and fixed wireline telephone services in the US) and DirecTV (a leading BSS operator) sought FCC consent to AT&T's acquisition of DirecTV. In granting such consent, the FCC imposed conditions on the combined company (e.g., with respect to fibre deployment) to mitigate certain harms that the FCC believed otherwise might have resulted from the transaction.
- *c* In April 2015, Comcast Corp (a broadcasting, CATV and BIAP company) and Time Warner Cable Inc (a CATV and BIAP company) withdrew applications in which they had sought FCC consent to Comcast's acquisition of Time Warner Cable. The parties' decision was made in the face of intense scrutiny of the proposed transaction by the FCC and the DoJ, and likely efforts by one or both of those agencies to try to block the transaction.

The FCC has also initiated but not yet completed its review of several other major transactions. For example:

- *a* In May 2015, Charter Communications Inc, Time Warner Cable Inc and Advance/ Newhouse Partnership (all CATV and BIAP companies) filed applications seeking FCC consent to the acquisition by Charter of Time Warner Cable and Bright House Networks (a subsidiary of Advance/Newhouse Partnership). The transaction was pursued soon after the termination of Time Warner Cable's transaction with Comcast (discussed above).
- *b* In June 2015, Altice SA (a Luxembourg-based provider of telecommunications services with extensive operations in Europe and other foreign markets) and Cequal Corporation d/b/a Suddenlink Communications (a CATV and BIAP company) filed applications seeking FCC consent to the acquisition of Suddenlink by Altice. Subsequently, in September 2015, Altice publicly announced its plans acquire Cablevision (a CATV operator serving metropolitan New York and four

western states). Upon consummation, the two acquisitions would give Altice a significant foothold in the US.

c In April 2015, LightSquared Subsidiary LLC (which holds satellite and terrestrial authorisations from the FCC) filed applications seeking FCC consent to emerge from bankruptcy with a new ownership and control structure. The FCC's consent will allow the company to successfully reorganise and end a bankruptcy proceeding that persisted for over three years and that commenced soon after an interference dispute with GPS interests left the company unable to move forward with its business plan.

III TELECOMMUNICATIONS AND INTERNET ACCESS

i Internet and internet protocol regulation

Prior to 2015, the United States has used a relatively light touch with respect to the regulation of ISPs and BIAPs, relying largely on market forces instead of prescriptive regulation. By many accounts, this 'hands-off' approach has contributed to the rapid growth of the US internet-based sector over the past 15 years. Recent activity at the FCC now suggests that it intends to play a more active role in the regulation of internet-based services.

ii Universal service

The Communications Act directs the FCC to take steps to facilitate the universal availability of essential telecommunications services through, among other things, the use of a federal universal service fund (USF). The USF supports various programmes that seek to promote the availability of quality telecommunications services at just, reasonable and affordable rates on a nationwide basis to high-cost areas, low-income individuals, schools, libraries and rural health-care facilities. The USF is funded through revenue-based contributions from all providers of interstate and international telecommunications'. The contribution factor (essentially, that rate at which interstate and international revenues are assessed for USF contribution purposes) fluctuates during the course of the year, but has been around 17 per cent of covered revenues for most of 2015. Universal service programmes and contribution obligations are administered by the Universal Service Administrative Company, an independent legal entity that is subject to the FCC's oversight.

The National Broadband Plan recommends that the FCC modify existing 'universal service' subsidy programmes to target broadband expansion into areas where the FCC asserts BIAPs would not find it economically viable to provide broadband service, in the absence of this type of financial support. Consistent with this recommendation, the FCC has established a new Connect America Fund (CAF) to support the deployment of broadband infrastructure to areas that are currently 'unserved', and to phase out legacy universal service support mechanisms in the process. Under the FCC's implementing rules, certain wireline incumbents called 'price cap carriers' enjoy significant funding preferences through, among other things, a 'right of first refusal' in connection with available funding. These rules, in their current form, would also result in a significant

reduction in the level of support available to competitive providers. That said, the FCC has acknowledged that the framework established by these rules may need to be modified, and the agency is now examining ways to increase participation by competitive providers. Although incumbent price cap carriers have exercised preferential rights to receive approximately US\$1.5 billion of funding, in the aggregate, for each of the next six years, an estimated approximately US\$500 million of additional annual funding remains to be awarded. Currently, the FCC is implementing Phase II of the CAF programmes for price cap carriers, including the process for deciding how the FCC will distribute funding in areas where the incumbents declined preferential funding. In addition, the FCC is beginning to develop CAF rules for 'rate of return' incumbent carriers. These changes are being coupled with changes to the existing – and exceedingly complex – 'intercarrier compensation' scheme by which local and long-distance service providers pay or receive compensation for traffic that is handed off to each other's networks.

The FCC also must decide whether and how the requirement to contribute to the universal service fund should be extended to BIAPs – the principal subject of a proceeding begun by the FCC in April 2012 but not yet completed. In reclassifying broadband internet access service as a 'telecommunications service,' the FCC exercised forbearance authority to avoid subjecting BIAPs to any immediate obligation to contribute to the USF. However, over time there may be mounting pressure for the FCC to examine this contribution question more closely.

The FCC's initial implementing rules on extending the reach of its universal service programme remain subject to administrative reconsideration and judicial appeals – although certain of these appeals have been resolved in the past year (in the agency's favour). Regardless of exactly how these questions are resolved, the FCC's decision to subsidise broadband internet access services may provide a foundation for the eventual regulation of such services – whether or not supported with universal service funds.

iii Restrictions on the provision of service

Common carriage

The Communications Act subjects all providers of 'telecommunications services' to common carrier regulation (e.g., the duty to provide service to all members of the public, including other carriers, without unreasonable discrimination). 'Telecommunications services' are defined to include the provision of 'telecommunications' to the public for a fee. 'Telecommunications', in turn, are defined to include the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received. Notably, this definition does not encompass the creation or publication of mere 'content'. Traditional telecommunications carriers tend to be heavily regulated by both the FCC and the state PUCs.

In contrast, 'information services' are defined to include the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilising or making available information via telecommunications. These services typically involve what is called a 'net protocol conversion' – essentially, a change in the form, structure or substance of the underlying communication. Providers of 'information services' are not subject to common carrier regulation, and traditionally have been lightly regulated at the federal level. State and local jurisdiction over internet services is severely circumscribed, as the services are considered 'interstate' for most purposes.

As communications technologies have continued to evolve, the lines between 'telecommunications services' and 'information services' have blurred, and the FCC has been slow to classify new service offerings. The FCC thus far has declined to classify VoIP services, creating uncertainty as to which regulations apply at both the federal and state levels. This uncertainty has been exacerbated by the FCC's attempted use of its 'ancillary' authority to extend a number of common carrier-type requirements to such otherwise-unregulated services.

Because the classification of a service is of critical importance in determining the regulations applicable to that service, the reclassification of a service can have significant consequences. The FCC's treatment of internet access services provides a vivid illustration of this fact. Broadband internet access services require, among other things, the transmission of data between an end-user and an ISP, and any number of other individuals or entities. For years, the FCC viewed this transmission capability as a 'telecommunications service', and required BIAPs to offer it to competitors on a stand-alone, common carrier basis. However, in a series of orders issued during the 2000s, the FCC reclassified broadband internet access services as 'information services' functionally integrated with a 'telecommunications' component, such that BIAPs are no longer required to make the transmission capability available to competitors (unless that capability is offered to the public voluntarily on a non-integrated, stand-alone basis).

More recently, the pendulum has swung in the opposite direction. In February 2015, the FCC reclassified retail broadband internet access service as a 'telecommunications service' in the latest phase of the FCC's net neutrality proceeding. While this action was taken for the stated purpose of creating a clearer jurisdictional basis for the imposition of net-neutrality rules on BIAPs, and not for the purpose of generally imposing common-carrier requirements on BIAPs, it is not clear that ultimately will be the case. While the FCC used its forbearance authority to free BIAPs from many specific common-carrier regulations that otherwise would apply under Title II, it left BIAPs subject to the broad requirements to charge 'just and reasonable rates' and provide service without undue discrimination. The reclassification of broadband internet access service is under challenge in the courts and, if it remains in effect, is likely to create ripple effects in many other areas of FCC regulation for years to come.

Price regulation

The Communications Act gives the FCC the authority to regulate the rates charged by common carriers in connection with the telecommunications services they provide, and ensure that those rates are 'just and reasonable'. Prior to the passage of the Telecommunications Act in 1996, rate regulation was accomplished through the filing of tariffs with the FCC and state PUCs. More recently, the FCC has eliminated much of its tariffing regime and instead relied upon market competition (backed by a complaint mechanism) to ensure that rates are 'just and reasonable'. Now that retail broadband internet access service is classified as common carriage, it too is subject to these same general 'just and reasonable' requirements that apply to traditional telecommunications services.

Net neutrality

In recent years, one of the most significant policy debates at the FCC has focused on an 'open internet policy' or 'net neutrality'. Although the meaning of 'net neutrality' is itself a subject of debate, net neutrality advocates generally aim to constrain the rights of broadband network providers to block, filter or prioritise lawful internet applications, websites and content.

The FCC's direct involvement with net neutrality policy began in 2005 with the issuance of its Broadband Policy Statement. Although the FCC's authority under the Communications Act to regulate the internet was not clearly articulated, the Broadband Policy Statement expressed four principles that the FCC indicated were intended to preserve the 'open' nature of the internet for consumers, without discouraging broadband deployment by network operators. The FCC stated that consumers are entitled to:

- *a* gain access to the lawful internet content of their choice;
- *b* run applications and use services of their choice, subject to the needs of law enforcement;
- c connect their choice of legal devices that do not harm the network; and
- *d* benefit from competition among network providers, application and service providers, and content providers, all subject to a service provider's right to engage in 'reasonable network management'.

In 2008, the FCC ruled that Comcast, the largest US CATV company, had violated the Broadband Policy Statement by inhibiting users of its high-speed internet service from using BitTorrent and other file-sharing software – a practice Comcast claimed was a type of 'reasonable network management' designed to block pirated content and alleviate network congestion. Comcast appealed this decision, arguing, among other things, that the FCC lacked the statutory authority to adopt or enforce net-neutrality requirements. In early 2010, a US Court of Appeals agreed with Comcast and vacated the FCC's order. In doing so, the court rejected the FCC's attempt to rely on its 'ancillary' authority as a basis for its enforcement of the Broadband Policy Statement against Comcast, insofar as the FCC had failed to identify a source for such authority in the Communications Act. The FCC then adopted new rules on broadband internet access services, applicable only to 'mass-market retail services', that:

- *a* required all broadband internet access service providers to disclose the network management practices, performance characteristics, and terms and conditions of their services;
- *b* prohibited fixed broadband internet access providers from blocking lawful content, applications, services or non-harmful devices;
- *c* prohibited mobile wireless broadband internet access providers from blocking lawful websites, or applications that compete with their voice or video telephony services; and
- *d* prohibited fixed broadband internet access providers from unreasonably discriminating in transmitting lawful network traffic.

In 2014, the US Court of Appeals for the District of Columbia Circuit vacated the FCC's 'anti-discrimination' and 'anti-blocking' rules, finding that they amounted to impermissible common-carrier regulation of internet access services since the FCC

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had classified those services as 'information services' not subject to Title II of the Communications Act (the court upheld the FCC's disclosure requirements). However, the court also suggested that the FCC could adopt modified versions of these rules under Section 706 of the Telecommunications Act of 1996, which potentially grants the FCC relatively broad authority to promote the 'virtuous circle' of internet-related innovation.

In May 2014, the FCC launched a new rulemaking proceeding to explore whether new 'net neutrality' rules could be adopted pursuant to Section 706, or whether the FCC instead should regulate BIAPs as 'Title II' common carriers. In 2015, the FCC opted for the latter approach, reclassifying retail broadband internet access service as a 'telecommunications service' subject to Title II. At the same time, the FCC exercised its forbearance authority to free BIAPs from much of the regulation that otherwise would apply under Title II (such as tariffing obligations and mandatory federal universal service contributions). Notably, this reclassification still results in the effective imposition of several other core common carrier regulations, including statutory requirements that 'charges' and 'practices' be just, reasonable and not unreasonably discriminatory, requirements to maintain the privacy of customer information, and the right of consumers to seek damages, and pursue complaints in courts, for claimed violations by common carriers. Soon after the FCC's ruling, a broad coalition of BIAPs and trade associations filed an appeal in federal court, which remains pending.

The FCC's new substantive net-neutrality rules are different in some respects than those adopted in 2010. The rules apply equally to fixed and mobile BIAPs, and broadly prohibit blocking access to legal content, applications, services, or non-harmful devices; and impairing or degrading lawful internet traffic on the basis of content, applications, services, or non-harmful devices (i.e., 'throttling'). In each of these two cases, the prohibition is subject to the ability of BIAPs to engage in 'reasonable network management.' The new rules also broadly prohibit 'paid prioritisation' arrangements (e.g., favouring some lawful internet traffic over other lawful traffic in exchange for value provided), notably without regard to any reasonable network management exception. The FCC reaffirmed and enhanced its transparency requirements. Significantly, the FCC also adopted a new 'catch-all' standard of conduct to allow it to police, on a case-by-case basis, BIAP practices that 'unreasonably interfere with or unreasonably disadvantage the ability of consumers to reach the internet content, services, and applications of their choosing or of edge providers to access consumers using the internet'. The FCC clarified that these net-neutrality rules do not apply to commercial interconnection and peering arrangements, but it indicated that such arrangements are subject to general Title II oversight.

The scope and application of these new rules likely will become clearer only as the FCC applies them on a case-by-case basis in response to complaints, as the FCC further articulates its policies with respect to many of the specific requirements, and after the pending appeal to the courts is resolved.

iv Security

US regulatory approach to emergency preparedness

Because US commercial communications networks are privately owned, the FCC's role in ensuring emergency preparedness primarily is one of gathering and disseminating information and coordinating among different governmental agencies. For more than 15 years, the FCC has also required facilities-based telecommunications service providers to participate in industry-run working groups focused on developing best practices to ensure network reliability, to report network outages and to be prepared to restore network services as rapidly as possible in the event of an outage. The recommendations of this group do not have the binding force of law, but have played an important role in shaping industry practice and have prompted some limited FCC rulemaking activity. For example:

- *a* FCC rules now require all wireline and wireless telecommunications service providers to maintain on site a back-up power source (typically, a generator) capable of keeping networks functioning for a minimum number of hours. In addition, earlier this year the FCC adopted rules to require providers of fixed residential voice services (including interconnected VoIP) to offer customer premises equipment along with a backup power source.
- *b* Under the Telecommunications Service Priority programme, service providers must afford priority service to federal, state and local governments and other critical institutions.
- *c* The FCC has adopted outage reporting rules, which require network operators to notify the FCC of significant outages that may impact end-user communications, and recently extended these rules to VoIP providers.
- *d* The FCC has established rules governing the Emergency Alert System, a national public warning system that requires broadcasters, CATV operators, satellite broadcasters and others to provide communications capability to the President to address the American public during a national emergency. The system also may be used by state and local authorities to deliver important emergency information, such as AMBER alerts and weather information targeted to specific areas.

The FCC is also responsible for the emergency preparedness of US network operators, the radiofrequency spectrum needs of non-federal 'first responders' (police, fire, ambulance and emergency medical teams), and coordination among network operators and various governmental organisations to address cybersecurity concerns. Much of this activity has focused on ensuring adequate spectrum for public safety users and ensuring the interoperability of different public safety networks.

Congress has authorised the creation of a nationwide, interoperable, high-speed network dedicated to public safety applications. This network will be managed by FirstNet, a newly formed independent entity within the NTIA that is overseen by a board including representation from the public safety community, wireless experts, and current and former federal, state and local government officials. Notably, a significant portion of FirstNet operations will be funded by the proceeds of spectrum auctions.

The Communications Assistance for Law Enforcement Act (CALEA)

CALEA requires 'telecommunications carriers' to implement specific capabilities in their networks to permit law enforcement agencies to intercept call identifying information and call content pursuant to a lawful authorisation. For this purpose, the term 'telecommunications carriers' is defined broadly to include interconnected VoIP providers (as well as facilities-based BIAPs, consistent with the FCC's reclassification decision in the net-neutrality context). CALEA establishes both minimum capacity requirements and capability requirements. CALEA does not specify the means by which providers must comply with these capability requirements, but creates a safe harbour for carriers that implement industry standards. CALEA does not grant law enforcement agencies any surveillance authority beyond what otherwise exists under US law.

Cybersecurity

US cybersecurity policy following the completion of the federal government's Cyberspace Policy Review has sought to create or enhance shared situational awareness of network vulnerabilities, threats, and events, and the ability to act quickly to reduce current vulnerabilities and prevent intrusions; enhance US counterintelligence capabilities and increase the security of the supply chain for key information technologies; and strengthen the future cybersecurity environment by expanding cyber education, coordinating and redirecting research and development efforts, and working to define and develop strategies to deter hostile or malicious activity in cyberspace. Consistent with these goals, the FCC has explained that one of its core objectives is 'to strengthen the protection of critical communications infrastructure'.

In August 2010, the FCC proposed developing a two-year plan to address 'vulnerabilities to communications networks or end-users and to develop countermeasures and solutions in preparation for, and response to, cyberthreats and attacks' in coordination with other US federal agencies such as the Department of Homeland Security and the Federal Bureau of Investigation. The FCC has not yet developed or released a plan of this type. The FCC has also attempted to educate consumers and small businesses about the importance of cybersecurity.

Online protections for children

The Children's Online Privacy Protection Act of 1998 restricts the ability of website operators to collect personal information from children under 13 years of age. The type of 'verifiable parental consent' that is required before collecting and using information provided by children under 13 is based upon a 'sliding scale' set forth in an FTC regulation that takes into account the manner in which the information is being collected and the uses to which the information will be put. While children under 13 can legally give out personal information with their parents' permission, many websites disallow underage children from using their services due to the regulatory burdens involved.

Protection of personal data and privacy

The Communications Act protects the privacy of 'customer proprietary network information', which includes the date, time, duration and location of a call, type of service used and other details derived from the use of a telecommunications service. US law also protects the contents of any telecommunications message from eavesdropping, recording, use or disclosure by a third party without a user's consent. Users of online services enjoy similar protection from eavesdropping or disclosure of their communications. Exceptions apply where access to, or use or disclosure of, such information is necessary for law enforcement, which in most cases requires prior approval by a judge. In addition, the NTIA has formed an Internet Policy Task Force, which has recommended the adoption of voluntary codes of conduct by industry participants, and continues to examine 'the nexus between privacy policy and innovation in the Internet economy'.

Notably, this legal framework is targeted at carriers and other private actors, as opposed to the government. However, in 2013 it was the policies and practices of the latter that prompted the most significant privacy concerns, and added fuel to the ongoing debate over how much privacy should be sacrificed by individuals in the name of national security. The controversy erupted in June 2013 when the British newspaper The Guardian published a series of exposés containing information leaked to it by Edward Snowden, who had been employed as a contractor for the US National Security Agency (NSA). More specifically, Snowden disclosed classified information regarding NSA surveillance programmes - including NSA efforts to compile a database containing the metadata for hundreds of billions of telephone calls made through the largest US carriers and collect stored internet communications from large internet companies like Google. While some of these activities apparently were authorised by special courts established under the Federal Intelligence Surveillance Act, the activities of these courts are not subject to public scrutiny and have been criticised as little more than a rubber stamp for proposed executive branch activities. While the full implications of the Snowden scandal remain to be seen, it is sure to affect policies and practices for years to come.

The FCC has also tried to ensure that consumers can effectively block calls and text messages that they do not wish to receive, using authority provided by Congress in the Telephone Consumer Protection Act (TCPA). For example, in June 2015 the FCC attempted to strengthen restrictions on the practice of 'robocalling' using 'automatic telephone dialing systems' (i.e., 'autodialers') by issuing a series of declaratory rulings. Among other things, the FCC ruled that a device is an impermissible autodialer if it could be used to store or produce telephone numbers to be called, using a random or sequential number generator; and to dial such numbers. Critics claim that the FCC's action actually obfuscates matters and unreasonably expands the reach of the TCPA, because, for example, a smartphone could be classified as an impermissible autodialer simply because it could use an autodialing application. Further clarifications of the FCC's policies are likely in the near term.

IV SPECTRUM POLICY

i Flexible spectrum use

In recent decades, the FCC increasingly has adopted a flexible approach to defining the uses to which a particular radiofrequency band may be put, or the optimal scope of licences that an entity can use to meet its business needs. For example, the FCC has granted many licensees (but not broadcasters) flexibility to redefine their own service territory, dividing or combining geographically bounded licences, and to subdivide their assigned spectrum and sell or lease a portion to another user. The FCC has also adopted more fluid service definitions, for example, permitting fixed and mobile operations, or terrestrial and satellite operations, in the same band.

The FCC has been examining ways to increase flexibility and efficiency in the use of available spectrum resources. It has recognised that one key failing of its spectrum policy is that administrative rigidities historically have prevented more efficient use of the spectrum resource. As a result, the FCC's spectrum policy has evolved towards more flexible and market-oriented regulatory models.

For example, to facilitate the development of secondary markets in spectrum usage rights involving terrestrial radiofrequency-based services, the FCC has adopted rules to facilitate two types of leasing arrangements: a 'spectrum manager' lease, in which a lessee is permitted to use spectrum subject to the oversight and control of the initial licensee; and a '*de facto* transfer' lease, in which the lessee assumes many of the obligations of a licensee, and exercises control over its own spectrum operations. The FCC also has examined ways to facilitate unlicensed use of certain spectrum bands, provided that such use does not interfere with licensed operations (if any) in those bands. Among other things, the FCC has adopted rules permitting certain devices to operate on a secondary, unlicensed basis in unused broadcast television spectrum, also known as 'white spaces'.

ii Broadband and next-generation mobile spectrum use

Federal law and policy have sought to encourage the growth of mobile broadband networks, including through access to additional spectrum. More specifically, Congress has directed the FCC and the NTIA to make additional federal government spectrum available for commercial use. In response to this and similar mandates, in November 2014 the FCC auctioned non-federal spectrum rights in the 1695–1710MHz, 1755–1780MHz and 2155–2180MHz bands (the AWS-3 bands). The winning bids in this auction totalled nearly \$45 billion – a result that underscores the premium value placed on underutilised spectrum suitable for mobile broadband applications.

The FCC and the NTIA are also exploring ways that commercial users might share federal government spectrum, consistent with recommendations offered in a report published by the President's Council of Advisors on Science and Technology (PCAST). That report concludes that the traditional practice of clearing portions of federally held spectrum for exclusive commercial use is not a sustainable basis for future spectrum policy, and recommends that the best way to increase the availability of commercial spectrum is to use new sharing technologies – including dynamic frequency management, spectrum databases and improved interference mitigation technologies. PCAST contends that this approach could increase the effective capacity of federal spectrum by a factor of 1,000. PCAST recommends that shared spectrum be organised into three tiers, consisting of:

- *a* incumbent federal users, which would be entitled to full interference protection from new spectrum users;
- *b* secondary users, which would receive short-term priority authorisations to operate within designated geographic areas and would have limited interference protection against other spectrum users; and
- *c* general access users, which would be entitled to use the spectrum on an opportunistic basis and would not be entitled to any interference protection at all.

The FCC has also identified existing commercial spectrum that could be reallocated and thus used more efficiently in support of mobile broadband services. In particular, the FCC has recognised that some of the most desirable spectrum for wireless communications (based on propagation characteristics) currently is being used by broadcast television stations. Because today's digital television signals do not require a broadcaster to use all of its spectrum for a single programming channel, the FCC has also recognised that a television station could transmit its historical programming channel over a narrower segment of spectrum without impacting the viewer experience significantly. In the alternative, the FCC has suggested that a broadcaster could cease free, over-theair broadcast transmissions altogether, and instead deliver its programming through a cable system, a phone company, a satellite company or over the internet, which could require existing television viewers to incur new costs to watch television. In either case, additional spectrum could be made available to be auctioned for mobile broadband use.

To this end, in 2012 Congress enacted legislation that allows television broadcasters to 'turn in' some of the spectrum they use for their television channels, in return for a portion of the proceeds when the spectrum is re-auctioned by the FCC for mobile broadband use. In 2014, the FCC adopted rules implementing this legislation. The FCC is continuing its efforts to plan the first broadcast 'incentive auction', which was not conducted in 2015 as initially expected. Instead, that auction currently is set to occur in 2016 (after auction procedures are finalised). It remains to be seen how many broadcasters will choose to take advantage of this opportunity once the specific structure of and procedures for the auction have been determined.

The FCC also is in the early stages of allocating 'millimeter-wave' spectrum (generally above 24GHz) for 5G wireless services that are expected to be deployed over the next decade.

iii Spectrum auctions and fees

Where spectrum is to be assigned to an individual licensee, and more than one party applies to use such spectrum (i.e., mutually exclusive applications are received by the FCC), the FCC may choose from several mechanisms under the Communications Act by which to designate the 'winning' licensee. Most new spectrum assigned since 1993 has been licensed through the use of competitive bidding (i.e., spectrum auctions). The statute excludes certain specific types of spectrum licences (international satellite, public safety, non-commercial broadcast, etc.) from the scope of the FCC's auction authority. The FCC has completed or scheduled almost 100 radiofrequency spectrum auctions to date.

Historically, proceeds from all spectrum auctions have gone to the US Treasury. In February 2012, Congress authorised a new type of auction, known as the incentive auction. Under this auction model (the first of which is now expected to occur in mid-2016), current licensees would have the option to contribute spectrum in exchange for a portion of the proceeds from the auction of that spectrum for mobile broadband use.

V MEDIA

i Regulation of media distribution outlets generally

The regulation of media distribution outlets and content varies depending on the business model and technology being used. As previously noted, internet-based content delivery is very lightly regulated in the US. Traditional media outlets historically have been regulated more heavily by the FCC.

Regulation of content and content providers

The First Amendment to the US Constitution guarantees the freedom of speech, and limits the ability of the government to regulate the content of a broadcaster's programming, or content providers directly. Several decades ago, the courts recognised the FCC's authority to prohibit 'indecent' programming by free, over-the-air broadcasters, based on the government's interest in ensuring that scarce spectrum rights are used in a manner that serves the public interest, and the unique pervasiveness of broadcast media in the lives of Americans and their children. As discussed below, those rules do not apply to CATV, and satellite video and audio service providers whose coverage extends throughout the US. It is unclear whether the FCC's rules remain constitutional in today's media-rich market where many different media outlets serve the same household.

In recent years, the FCC has fined stations that aired 'fleeting expletives' (incidental words or gestures that are broadcast despite the reasonable precautions taken by the licensee to avoid indecent broadcasting). For example, in 2006 the FCC fined affiliates of the ABC and Fox networks millions of dollars for airing such material during their programming. Both networks subsequently challenged these fines in the courts. In June 2012, the US Supreme Court invalidated the fines on due process grounds, finding that the FCC had not fully articulated its rule against fleeting expletives until after the programmes in question had been aired. In taking this approach, the Court left open broader questions as to whether the FCC's 'fleeting expletives' policy violates the First Amendment or otherwise is unconstitutional.

Terrestrial broadcasting

Television and radio stations broadcasting video content for free to listeners and viewers via terrestrial radiofrequency spectrum are subject to extensive regulation by the FCC, which has exclusive licensing authority for such stations in the United States. Among other things, the FCC has adopted detailed technical rules governing this type of broadcaster, restricted their ability to air 'indecent' programming, imposed political broadcasting and other 'public interest' obligations on them, and adopted multiple ownership restrictions. These regulations are largely premised on the idea that radiofrequency spectrum is a scarce resource, and thus the FCC should promote localism, diversity of ownership and service in the public interest.

Subscription media

Entities providing electronic media services by subscription – CATV, direct-broadcast satellite (DBS) service, subscription radio or even subscription over-the-air TV stations – generally are subject to less restrictive content regulation than terrestrial 'free over-the-air' broadcasters ('obscene' material is prohibited, but not material that is merely 'indecent'). Because subscribers pay for their service, by definition, arguments that they must be protected from unwittingly accessing 'indecent' content are less convincing. Subscription satellite radio providers and multichannel video programming distributors (MVPDs), such as DBS and CATV providers, remain subject to FCC regulation with respect to their use of radio frequency spectrum and certain other matters. Moreover, terrestrial CATV operators are also subject to franchising by state or local authorities for the use of public rights-of-way.

Carriage of broadcast television programming by MVPDs and other parties

When Congress imposed a variety of obligations on cable operators with respect to their carriage of local broadcast television signals in 1992, it was concerned that the MVPD industry posed a threat to broadcast TV stations (given better transmission quality, greater choice of programming, etc.). Congress was also concerned that MVPDs would become the predominant means of distributing video programming to consumers, and then could use that market position to preclude local broadcasters from reaching those consumers effectively. To address this concern, Congress established a statutory framework allowing each over-the-air TV station, on a local MVPD-by-MVPD basis, to elect either 'must carry' status (ensuring mandatory carriage on an MVPD serving the local market of that station) or 'retransmission consent' (requiring an MVPD to obtain the station's consent before carrying its signal). This new right supplemented the compulsory copyright licence established in the Copyright Act, under which content owners receive a statutory fee from MVPDs in connection with their retransmission of broadcast signals, but MVPDs do not need the consent of those content owners.

Initially, most local broadcasters were unable to negotiate cash compensation in exchange for granting 'retransmission consent' to MVPDs; at best, they typically were able to negotiate 'in kind' deals, such as commitments from MVPDs to purchase advertising time. More recently, local broadcasters have begun to demand cash compensation, and many have indicated they would withhold 'retransmission consent' from an MVPD unless they are paid for the carriage of their signal. For example, in 2013, the CBS network declined to extend its grant on retransmission consent on existing terms, and carriage of that network on a major MVPD was disrupted in a number of major US markets for several weeks. However, in March 2014 the FCC took action that should increase MVPDs' bargaining position somewhat: specifically, the FCC revised its rules to preclude the joint negotiation of 'retransmission consent' agreements by multiple broadcast television stations that are ranked among the top four stations in a local market and not commonly owned. The FCC explained that such action was necessary to ensure that broadcasters did not enjoy undue leverage in such negotiations. More recently, the FCC has proposed to re-examine rules and policies that govern more broadly the obligations of broadcasters and MVPDs to negotiate retransmission consent arrangements in good faith.

Legislation on this same topic has been introduced in both houses of Congress over the past year. These developing trends have caused much controversy. Broadcasters argue that the retransmission consent system is working as intended, and that the fees being demanded and paid merely reflect the substantial investments made in valuable programming and fair compensation for the very services for which MVPDs collect a monthly fee from their subscribers. MVPDs respond that Congress never intended retransmission consent fees to subsidise the provision of network programming over local TV stations. MVPDs have made a number of additional reform proposals. It remains to be seen how or even if the FCC or Congress will respond.

In addition to the 'retransmission consent' requirements described above, any party that retransmits broadcast programming must comply with US copyright law. Federal law creates compulsory licences allowing 'cable systems' and other MVPDs to retransmit such programming without obtaining specific licences from every relevant copyright holder in the programming stream. Other types of services do not benefit from this compulsory licence and must respect the relevant copyright – as the US Supreme Court confirmed in June 2014 when it released its decision in *American Broadcasting Cos v. Aereo, Inc*, which involved a service that leased each subscriber an individual remote antenna that allowed that subscriber to receive broadcast signals and retransmit that signal over the internet for near-live viewing. The court concluded that Aereo's retransmission of these signals constituted a 'public performance' of programming material that infringed on the rights of copyright holders. The *Aereo* decision does not address how US copyright law could apply to other 'retransmission' services on a going-forward basis, and in particular does not fully resolve whether modest changes to the structure of an Aereo-like service (e.g., recording programming for later viewing instead of engaging in near-live retransmission) would change the outcome.

ii Internet-delivered video content

The regulatory status of internet-delivered video content turns in part on whether it can be considered 'video programming' under the Communications Act. This term encompasses 'programming provided by, or generally considered comparable to programming provided by, a television broadcast station'. Much online video content does not fall into this category, and as such lies outside of the FCC's jurisdiction.

Also significant is the manner and form in which 'video programming' is delivered to the viewer. 'Video programming' may be subject to minimal regulation if it is incorporated into an 'information service' by virtue of the use of the internet or other broadband technologies as a delivery mechanism. Moreover, the FCC has identified a category of 'interactive television' services - defined as 'a service that supports subscriber-initiated choices or actions that are related to one or more video programming streams' - but it has not decided what requirements, if any, should apply to such services. The manner in which these classification issues are resolved can have significant implications in other regulatory areas. For example, IP-delivered video programming in the form of a traditional cable service arguably falls outside the scope of the FCC's net-neutrality rules. Notwithstanding general uncertainty with respect to the regulatory status of internet-delivered video content, IPTV services delivered by telecommunications companies have been subject to franchising as 'cable' systems under some state and local requirements. To expedite competitive entry into the IPTV market, and to facilitate competition to entrenched cable TV operators, several states have adopted state-wide franchising and have pre-empted separate approval requirements in individual municipalities. The FCC encourages rapid approval of competitive franchising requests and has indicated that it may pre-empt states that do not promptly act on such requests.

iii Mobile services

Consumer demand for access to audio and video programming through mobile platforms is one of the primary drivers of increased demand for mobile broadband access generally. As noted above, the National Broadband Plan aims to free additional spectrum resources for such services. The advent of these services, many of which would not use 'broadcast' spectrum, reflects increasing convergence in the communications industry, and could lead to increased pressure to reconcile regulatory frameworks that treat similar services differently.

VI CONCLUSIONS AND OUTLOOK

The net-neutrality order adopted earlier this year by the FCC reaffirmed its commitment to 'Open Internet' principles, but leaves many important details to be filled in through case-by-case adjudication or further FCC policy statements. More controversial is the FCC's corresponding decision to reclassify retail broadband internet access service as a 'telecommunication service' subject to Title II common carrier regulation, and thus subject BIAPs to a number of common carrier requirements to which they previously were not subject, and the full effect of which may only become clear after case-by-case applications of those requirements.

The FCC's efforts to extend broadband service to all Americans will continue to play a central role in US communications regulation for the foreseeable future. The FCC is likely to continue its efforts to repurpose certain spectrum for mobile broadband use, and the implementation of the first incentive auction will be a focus of agency activity and public scrutiny. At the same time, the FCC is likely to continue to explore other sources of potential spectrum, including spectrum previously and even currently allocated solely for federal government use (which would be made available through spectrum sharing initiatives). The FCC will need to reconcile competing commercial and governmental interests as it moves forward with its plans.

The FCC also will be required to continue to expend significant energy completing the implementation of its recently revised universal service and intercarrier compensation regimes. Again, the FCC will need to balance competing policy interests within a heavily politicised environment. Because there will be winners and losers no matter what the FCC does, and given the amount of money at stake, these issues will almost inevitably occupy the courts for years to come.

Looming on the horizon is the possibility that Congress will substantially modify the FCC's authority with respect to broadband services through a significant amendment (or even a rewrite) of the Communications Act, or that the federal courts will clarify the scope of the FCC's authority.

Appendix 1

ABOUT THE AUTHORS

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Mr Colahan is based in Latham & Watkins' London office and divides his time with the Brussels office. Prior to joining Latham & Watkins, Mr Colahan was the international antitrust counsel, based in London, for The Coca-Cola Company, where his responsibilities included advising all operating groups on strategic planning and implementation of a wide variety of international joint ventures and acquisitions as well as the conduct of international antitrust litigation and investigations. Mr Colahan has also served as a legal adviser on European law to the European secretariat of the UK Cabinet Office and has represented the UK in numerous cases.

He represents clients before the European Commission, national authorities in Europe and internationally, as well as conducting litigation in the European courts and numerous national courts. He has advised on a wide variety of international antitrust matters, including structuring and implementation of international mergers, acquisitions and joint ventures, cartel enforcement, single firm conduct and compliance counseling. Mr Colahan has worked in a broad range of sectors including fast-moving consumer goods, alcoholic and non-alcoholic beverages, retail, media and publishing, pharmaceuticals, aviation, manufacturing, agricultural, defence, bulk chemicals, maritime, energy, software, supply of professional services, telecommunications and finance.

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Gail Crawford is a partner in the London office. Her practice focuses primarily on technology, data privacy and security, intellectual property and commercial law, and includes advising on technology licensing agreements and joint ventures, technology procurement, data protection issues, and e-commerce and communications regulation. She also advises both customers and suppliers on multi-jurisdictional IT, business

process and transformation outsourcing transactions. Ms Crawford has extensive experience advising on data protection issues, including advising a global corporation with operations in over 100 countries on its compliance strategy, and advising a number of US e-commerce and web businesses as they expand into Europe and beyond. She also advises online businesses and providers of communications services on the impact of the UK and European restrictions on interception and disclosure of communications data.

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John P Janka is a partner in the Washington, DC office of Latham & Watkins LLP, where he served as a global leader of the communications law practice group for a decade. For almost three decades, Mr Janka has counselled international telecommunications operators and ISPs, content providers, investors and banks on a variety of regulatory, transactional and controversy matters. His experience includes the purchase, sale and financing of communications companies, the procurement and deployment of communications facilities, global spectrum strategies and dispute resolution, the provision of communications capacity, content distribution, strategic planning, and effectuating changes in legal and regulatory frameworks. His clients include satellite operators, broadband providers, wireless and other terrestrial communications companies, video programming suppliers, ISPs, television and radio broadcast stations, and firms that invest in and finance these types of entities.

Mr Janka has served as a United States delegate to an ITU World Radiocommunication Conference in Geneva, and as a law clerk to the Honorable Cynthia Holcomb Hall, United States Court of Appeals for the Ninth Circuit. Mr Janka holds a JD degree from the University of California at Los Angeles School of Law, where he graduated as a member of the Order of the Coif, and an AB degree from Duke University, where he graduated *magna cum laude*.

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Jean-Luc Juhan is a partner in the corporate department of the Paris office of Latham & Watkins.

His practice focuses on outsourcing and technology transactions, including business processes, information technology, telecommunications, systems and software procurement and integration. He also has extensive experience advising clients on all the commercial and legal aspects of technology development, licensing arrangements, web hosting, manufacturing, distribution, e-commerce, entertainment and technology joint ventures.

Mr Juhan is in particular cited in *Chambers Europe 2014*, *Option Droit & Affaires 2014* and *The Legal 500 Paris 2014*: 'Great negotiator' Jean-Luc Juhan, who is 'very sharp and down-to-earth' and has 'very good knowledge of the industry', advises high-profile French and international groups on large outsourcing, telecommunication and integration system projects'.

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Saori Kawakami is an associate of Latham & Watkins Gaikokuho Joint Enterprise in Tokyo and a member of the corporate department. Her practice focuses on M&A, project finance, general corporate, employment and telecommunications matters. Her representative experience in the telecommunications industry includes representing the underwriters in a US\$4.4 billion senior notes offering by SoftBank Group Corporation, the largest high yield bond offering in Asia by a leading mobile phone carrier in Japan; Perfect World Co Ltd, a leading online game developer and operator in China in purchasing C&C Media Co Ltd, an online game company in Japan for US\$21 million; Liberty Global Inc in the US\$4 billion sale of its stake in Jupiter Telecommunications Co Ltd (J:COM), a leading broadband provider of communications services in Japan; and Japan Entertainment Network KK, a subsidiary of Turner Broadcasting System Inc, in a stock purchase deal with Secom Co Ltd, the largest security company in Japan. Ms Kawakami is admitted to practise in Japan and is a member of the Daini Tokyo Bar Association. She is fluent in Japanese and English.

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Hiroki Kobayashi is a corporate partner of Latham & Watkins Gaikokuho Joint Enterprise in Tokyo. He advises on Japanese legal issues relating to a variety of areas of transactional practice, including corporate law and various government regulatory matters. He handles a number of cross-border M&A matters in collaboration with Latham & Watkins attorneys in other offices, and counsels clients on M&A transactions conducted under different business practices. His recent experience includes an acquisition by Turner Broadcasting System, Inc through its Japanese subsidiary Japan Entertainment Network KK of Japan Image Communications Co Ltd, a licensed operator of multiple TV channels, and a sale by Liberty Global of its US subsidiaries holding shares in Jupiter Telecommunications, Japan's largest cable television operator, to KDDI. Mr Kobayashi has spoken on the topic of privacy in cyberspace at a meeting of an academic society of computer scientists. Mr Kobayashi is admitted to practise in Japan and New York, and is a member of the Dai-ichi Tokyo Bar Association and the New York State Bar Association. He is a native speaker of Japanese and fluent in English.

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Chi Ho Kwan is an associate in the Hong Kong office of Latham & Watkins and a member of the litigation department.

Mr Kwan specialises in civil and commercial litigation and arbitration proceedings. He has assisted in various civil matters such as shareholders disputes, contractual disputes and debt recovery actions.

He also has experience in a variety of regulatory matters, including licensing matters, financial and corporate regulations and investigation, as well as white-collar defence and investigations.

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Mr Lipsky is a partner in the Washington, DC office of Latham & Watkins. He is internationally recognised for his work on both US and non-US antitrust and competition law and policy, and has handled antitrust matters throughout the world. He served as Deputy Assistant Attorney General for Antitrust during the Reagan Administration. Having served as chief antitrust lawyer for The Coca-Cola Company from 1992 to 2002, Mr Lipsky has incomparable experience with antitrust in the US, EU, Canada, Japan and other established antitrust-law regimes, as well as in new and emerging antitrust-law regimes in scores of jurisdictions that adopted free-market policies following the 1991 collapse of the Soviet Union. He has been closely associated with efforts to streamline antitrust enforcement around the world, advocating the reduction of compliance burdens and the harmonisation of fundamental objectives of antitrust law.

Mr Lipsky was the first international officer of the American Bar Association Section of Antitrust Law. He served on the editorial board of *Competition Laws Outside the United States* (2001), the most ambitious annotated compilation of non-US competition laws yet produced. He has held a variety of senior positions among the officers and governing council of the Section of Antitrust Law and continues to serve as co-chair of its International Task Force. He is admitted to practise before the US Supreme Court and various federal appellate courts.

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Mr Powell represents numerous multinational and local corporations in connection with a wide range of multi-jurisdictional and cross-border issues, including those operating in the telecommunications industry, and in relation to antitrust and competition issues and regulatory matters generally, with a particular focus on Hong Kong. Mr Powell is one of only a few solicitor-advocates in Hong Kong, giving him full rights of audience before all the Hong Kong civil courts (including the newly instituted Competition Tribunal, which has been set up as a part of the judiciary). He is also a fellow of the Chartered Institute of Arbitrators, and a CEDR accredited mediator. He sits on the Hong Kong Law Society's competition committee, which focuses on reviewing and commenting upon competition-related issues within Hong Kong.

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Myria Saarinen is a partner in the Paris office of Latham & Watkins. She has extensive experience in IP and IT litigation, including internet and other technology-related disputes. She is very active in litigation relating to major industrial operations and is involved in a broad range of general commercial disputes.

She has developed specific expertise in the area of privacy and personal data, including advising clients on their transborder data flows, handling claims raised by the French Data Protection Authority, and setting up training sessions on the personal data protection framework in general and on specific topics. She also has expertise in cross-border issues raised in connection with discovery or similar requests in France.

Ms Saarinen is named among leading practitioners in commercial litigation, data privacy and IT (*The Legal 500 Paris 2014*, *Chambers Europe 2013*, *Chambers Global 2013*).

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Daniel Senger is an associate of Latham & Watkins Gaikokuho Joint Enterprise in Tokyo. Mr Senger's practice focuses on project finance and general corporate matters. He has worked on a number of large international project financings in Japan and the greater Asia-Pacific region, as well as several M&A, corporate finance and other general corporate matters across various industries. Prior to joining Latham & Watkins, Mr Senger served as an associate at a major international law firm in New York. Mr Senger is admitted to practise in New York.

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Jarrett S Taubman is counsel in the Washington, DC office of Latham & Watkins LLP, where he represents providers of telecommunications, media, internet and other communications services (and their investors) before the Federal Communications Commission, state public utilities commissions and various courts. Mr Taubman assists clients in implementing strategies to facilitate the development of favourable regulatory policy, structuring transactions and securing required regulatory consents, and ensuring ongoing compliance with complex regulatory requirements. Much of his practice involves the navigation of the complex legal and policy issues raised by the advent of broadband services. Mr Taubman also represents both communications and non-communications clients before the Committee on Foreign Investment in the United States, a multi-agency group with the statutory authority to review and block proposed investments in critical US infrastructure from non-US sources.

Mr Taubman received his JD from New York University School of Law, a master's degree in public policy from Harvard University's Kennedy School of Government, and a BS from Cornell University's School of Industrial and Labor Relations.

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During her legal traineeship, she worked, *inter alia*, for the Ministry of Foreign Affairs, in the IP and unfair competition department of another major law firm, and in the legal department of a well-known online auction house. Subsequently, Dr Wunsch completed a master's degree (LLM) at the Technical University of Dresden and Queen Mary, University of London, specialising in intellectual property law.

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