

International **Comparative** Legal Guides



Telecoms, Media & Internet **2021**

A practical cross-border insight into telecoms, media and internet law

14th Edition

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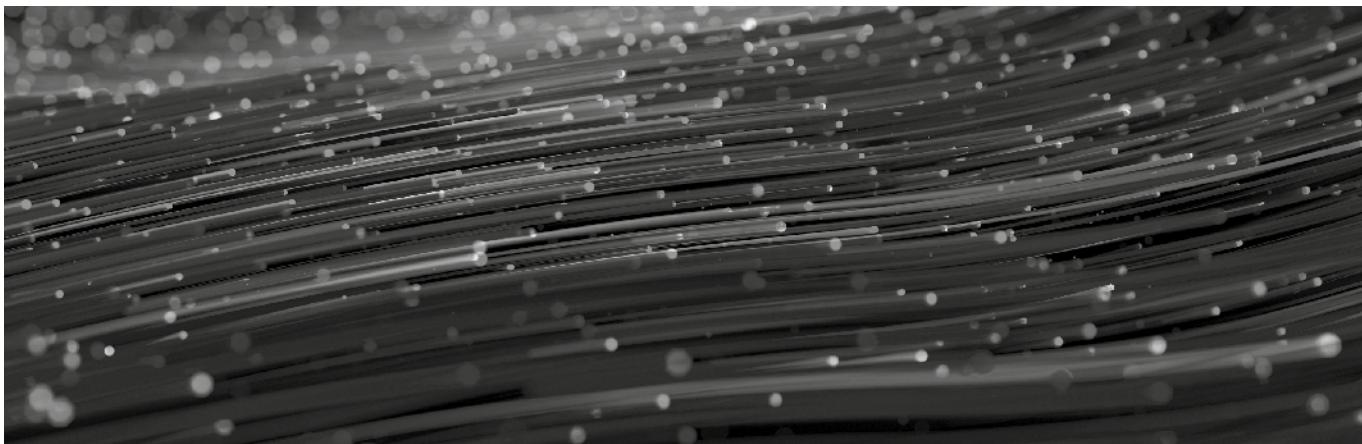
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1 Overview

1.1 Please describe the: (a) telecoms, including internet; and (b) audio-visual media distribution sectors in your jurisdiction, in particular by reference to each sector's: (i) annual revenue; and (ii) 3–5 most significant market participants.

Telecommunications is the largest communications sector in the United States. AT&T, Verizon, and T-Mobile are the largest and most diversified telecommunications companies in the United States. Each provides to residential and business customers local, long-distance, and international voice and data services, wireless services, broadband and internet access, and multichannel video programming. Although wireline services continue to experience contraction, the rapid growth of wireless services, particularly wireless data services, have ensured that the aggregate telecommunications sector continues to grow. The telecommunications sector is not subject to significant regulatory barriers to entry and is generally open to foreign investment.

In 2020, the wireline industry market decreased by nearly 8%, generating around \$58.3 billion in revenue, as reported by IBIS World. According to company Q3 2020 reports, Comcast, the largest internet access provider, has over 30 million broadband subscribers, while AT&T claims 14.1 million and Charter Communications serves approximately 28.6 million. Verizon had around 6.5 million broadband subscribers at the end of 2019.

The wireless industry continues to grow, as reported by IBIS World, generating approximately \$280 billion in revenues in 2020. According to an August 2020 report from the Wall Street Journal, the largest wireless operators are Verizon Wireless (119.9 million customers), T-Mobile USA (98.3 million customers), and AT&T (92.9 million customers).

The audio-visual media distribution sector has been experiencing a decline since its peak in 2016. The audio-visual media distribution sector includes traditional multichannel video programming distributors (MVPDs), such as cable and telephone companies, broadcast television stations, and online video distributors. According to 2020 company reports, AT&T is the largest provider in this sector (over 17.1 million video customers, which includes subscribers of its satellite television subsidiary DirecTV), followed by Comcast (20.1 million

video customers) and Charter Communications (16.2 million subscribers). MVPDs must obtain authority to provide service from local or state franchising authorities. There are no significant barriers to foreign investment for cable operators. For satellite, broadcast TV, and radio companies, special regulatory requirements apply for foreign entities seeking a greater than 25 per cent interest.

1.2 List the most important legislation which applies to the: (a) telecoms, including internet; and (b) audio-visual media distribution sectors in your jurisdiction and any significant legislation on the horizon such as the regulation of online harms or artificial intelligence (please list the draft legislation and policy papers).

The Communications Act of 1934, as amended (Communications Act) – which is codified at Title 47 of the U.S. Code – is the primary statute governing regulation of the telecommunications and media industries, including governance of the FCC, an independent federal agency. Most new telecommunications and media laws are adopted by Congress as amendments to the Communications Act, including the Cable Act of 1992 and the Telecommunications Act of 1996.

Any speculation of potential legislative initiatives will depend on the strategic priorities of (as of the date of this survey) the incoming administration of President-Elect Biden, which will unfold in time. Further, at this time, control of the U.S. Senate remains unknown while two open seats in the state of Georgia face run-off elections in early January 2021. If the Democrats gain control of the U.S. Senate, the Biden administration will have significantly greater ease in enacting its legislative priorities than if the Republicans maintain control. In any event, even prior to the election, both parties were contemplating a legislative amendment of Section 230 of the 1996 Communications Decency Act, which provides internet publishers that host or generate third-party content a shield against legal liability for such content. President Trump, in 2020, signed an executive order to limit legal protections offered by Section 230 and directed the National Telecommunications and Information Administration (NTIA) to file a petition with the FCC requesting clarification of certain provisions within Section 230. In addition to the ongoing process at the FCC, a few bills were introduced in Congress in 2020 proposing to modify Section 230 to

increase accountability on online content moderation practices. It is also reasonably likely that in 2021, there will be renewed efforts to enact broadband privacy legislation, particularly if the Democrats regain control of the Senate. Congress previously overturned the FCC's broadband privacy rules in 2017, relying on a legislative procedure provided by the Congressional Review Act (CRA). Under the CRA, the FCC is prohibited from adopting any regulations of a similar nature unless and until Congress provides the FCC with express authority to do so. There may also be new efforts to address net neutrality. The FCC repealed its net neutrality rules in 2018 that it had previously adopted in 2015. The FCC or Congress may also revisit whether to regulate 'over the top' (OTT) online video distributors in a manner similar to cable and satellite video providers. It is also likely that the FCC and Congress will continue to look for new sources of 5G spectrum, likely repurposed from federal government use, which the FCC could auction for commercial use by wireless network operators and unlicensed uses.

1.3 List the government ministries, regulators, other agencies and major industry self-regulatory bodies which have a role in the regulation of the: (a) telecoms, including internet; and (b) audio-visual media distribution sectors in your jurisdiction.

Traditional intrastate wireline telecommunications providers are primarily regulated by state public utility commissions (PUCs). Some PUCs also lightly regulate wireless companies and/or interconnected Voice over Internet Protocol (VoIP) providers. Cable operators are licensed and regulated by local or state-level franchising authorities.

In addition to being subject to state or local regulation, interstate telecommunications providers, wireless companies, interconnected VoIP providers, internet service providers (ISPs, which may be telephone companies, cable companies, or other types of providers), radio and TV broadcasters, cable providers, and satellite companies are also regulated by the FCC. The FCC is an independent agency that is directed by five Commissioners who are appointed by the U.S. President and confirmed by the Senate. No more than three Commissioners can be from the same political party, and one of the Commissioners of the majority party is appointed by the President to serve as Chair.

The FCC has exclusive jurisdiction over spectrum-based services used by all licensees other than the federal government, including wireless communications, satellite services and radio and television broadcasting services. Federal government use of radio spectrum is supervised and coordinated by NTIA, an executive branch agency within the Department of Commerce. The head of NTIA, the NTIA Administrator, is considered the voice of the executive branch on telecommunications policy matters.

Separately, another independent agency called the Federal Trade Commission (FTC) has jurisdiction over certain consumer protection laws that are applicable to telecommunications, media, and internet companies. In addition to FCC review, the FTC and the Department of Justice (DOJ) have authority to review proposed mergers and acquisitions of such entities under antitrust law.

1.4 In relation to the: (a) telecoms, including internet; and (b) audio-visual media distribution sectors: (i) have they been liberalised?; and (ii) are they open to foreign investment including in relation to the supply of telecoms equipment? Are there any upper limits?

Section 310(b) of the Communications Act provides that

common carrier wireless licensees and radio and television broadcast licensees may have direct foreign ownership of no more than 20 per cent and indirect foreign ownership of no more than 25 per cent without prior FCC approval, which generally is granted upon application. In addition, under Section 310(a), common carrier wireless licences and radio and television broadcast licences may not be directly held by a foreign government or its representatives. Non-common carrier wireless licensees, wireline providers (including internet access providers), television cable companies, and most satellite licensees are not subject to statutory foreign ownership caps.

Having said that, if a transfer of control, assignment, or common carrier wireline application proposes a 10 per cent or greater direct or indirect foreign owner, the FCC will generally submit that application to an interagency working group called Team Telecom. Team Telecom, which is comprised of members of the Departments of Justice, Defense, and Homeland Security, conducts reviews of any law enforcement or national security concerns raised by such foreign ownership. Team Telecom's review of the proposed foreign ownership is conducted independently, and the FCC will not approve the underlying application until Team Telecom completes its review. Team Telecom will often require the parties to such a transaction to enter into a national security agreement with the DOJ to mitigate any concerns raised by the transaction. To improve the transparency and timeliness of the cross-agency review, the FCC adopted rules in September 2020 formalising the Team Telecom process and established firm timeframes for the Team Telecom agencies to complete their review of applications and petitions for declaratory ruling that the Commission refers to them.

Separately, the Committee on Foreign Investment in the United States (CFIUS), which is an interagency committee led by the Department of Treasury and authorised by the 1988 Exon-Florio Amendment, reviews whether certain foreign investments in U.S. businesses pose risks to national security. CFIUS may impose conditions on a transaction or refer the transaction to the President, who may block the foreign investment. The scope of CFIUS's authority and the types of transactions subject to mandatory CFIUS review were significantly expanded by the Foreign Investment Risk Review Modernization Act of 2018, which was adopted into law in August 2018.

2 Telecoms

General

2.1 Is your jurisdiction a member of the World Trade Organisation? Has your jurisdiction made commitments under the GATS regarding telecommunications and has your jurisdiction adopted and implemented the telecoms reference paper?

The United States has been a WTO member since the WTO's inception in 1995. The United States has undertaken specific commitments under the General Agreement on Trade in Services (GATS) to provide market access and national treatment for a broad range of telecommunications services, with certain limited exceptions, as well as additional commitments to the procompetitive regulatory principles set forth in the reference paper on basic telecommunications services. The United States implemented these commitments through two companion orders issued by the FCC in November 1997. Together, these orders established a framework for facilitating entry into the U.S. market by foreign (or foreign-licensed) entities for the provision of telecommunications services.

2.2 How is the provision of telecoms (or electronic communications) networks and services regulated?

The regulatory framework applicable to communications networks and services varies greatly depending on the technology utilised by the service provider, the type of service, and the regulatory classification of the provider. Historically, wireline common carriers have been subject to the highest level of regulation. Incumbent local exchange carriers (ILECs), which enjoyed local monopoly status prior to the deregulation of local markets, remain highly regulated at the federal and state levels. Competitive carriers are subject to lighter regulatory requirements at the federal level and to varying degrees of regulation by the states.

Wireless operators are primarily regulated by the FCC. The states are precluded from regulating the entry of, or rates charged by, wireless operators, although they retain the right to regulate other terms and conditions of wireless service, such as consumer protection-related matters.

VoIP providers are subject to less regulation than traditional wireline operators. However, federal regulation of VoIP providers – particularly, those that interconnect with the public switched telephone network – has increased as they have gained market share. In addition, although state regulation of VoIP providers was initially largely preempted by the FCC, the FCC has recently been permitting increased state regulation. States have sought to regulate VoIP, although some of these efforts have been challenged in the courts.

2.3 Who are the regulatory and competition law authorities in your jurisdiction? How are their roles differentiated? Are they independent from the government?

The FCC has broad authority to regulate the telecommunications marketplaces to ensure that the ‘public interest, convenience, and necessity’ is served. The DOJ and the FTC hold more limited jurisdiction over antitrust, competition, and consumer protection issues, and, in addition to the FCC, one of these agencies typically reviews larger mergers and acquisitions of telecommunications carriers to determine whether the effect of a proposed transaction would substantially lessen competition. The FTC can also exercise continued oversight over various participants in the communications marketplace. Finally, state PUCs play a significant role in regulating intrastate telecommunications, including the review of mergers of intrastate providers. Each of these regulators acts independently, although they commonly take cues from one another when considering the propriety of a particular transaction.

2.4 Are decisions of the national regulatory authority able to be appealed? If so, to which court or body, and on what basis?

Many regulatory decisions at the FCC are initially made by staff-level civil servants who sit within subject matter-specific bureaus. Bureau decisions may be appealed to the FCC Commissioners, and decisions of the FCC Commissioners may be appealed to the federal courts. The U.S. courts of appeals have exclusive jurisdiction to enjoin, set aside, suspend, and determine the validity of final orders and decisions of the FCC. Generally, parties that appeal FCC decisions assert that the decisions are arbitrary and capricious under the standards set forth in the Administrative Procedures Act (e.g. they are not

sufficiently explained or do not take account of record evidence), outside the FCC’s statutory authority, inconsistent with underlying federal statutes, or contrary to the U.S. Constitution.

Licences and Authorisations

2.5 What types of general and individual authorisations are used in your jurisdiction?

Depending on the nature of the services that they provide, U.S. telecommunications service providers may be required to obtain regulatory authorisations. Operators providing only domestic interstate services generally need not seek an individualised authorisation to provide such service, but approval is needed if a carrier wishes to discontinue, reduce, or impair domestic service. To provide international common network operator services, U.S. operators must apply for and receive individualised authorisations under the Communications Act. The authorisations required to provide local exchange and intrastate long-distance services are established by state PUCs and vary by state.

Parties seeking to use radio spectrum to provide service are generally required to obtain a radio spectrum licence from the FCC, and most such licences are awarded by auction. However, no licence is required for the use of certain ‘unlicensed’ spectrum bands.

VoIP providers generally do not have to seek federal authorisation to provide service, although they are required to seek federal permission to discontinue service. In other respects, FCC regulation of interconnected VoIP services has increased. In addition, some states require VoIP providers to register as local exchange carriers (LECs) in order to offer interconnected VoIP services to the public, and some VoIP providers elect to obtain state authorisations in light of particular regulatory considerations.

2.6 Please summarise the main requirements of your jurisdiction’s general authorisation.

The United States does not issue general telecommunications authorisations. Instead, specific state and federal authorisations are required to be obtained to provide certain types of telecommunications. (See questions 2.5 and 2.7.)

2.7 In relation to individual authorisations, please identify their subject matter, duration and ability to be transferred or traded. Are there restrictions on the change of control of the licensee?

The FCC issues radio spectrum licences that cover particular radio spectrum frequencies and geographic areas. Although their terms vary depending on the type of licence, many last for eight to 10 years and are subject to a renewal expectancy. Satellite authorisations (covering spectrum access and launch and operation of satellites) are granted by the FCC for a period of 15 years and also, generally, are subject to a renewal expectancy.

Intrastate wireline services generally are licensed by individual state PUCs, and the rules for obtaining such licences, as well as the rules to which the licensees are subject, vary widely among the states. Interstate wireline services generally fall under a blanket licence issued by the FCC that does not expire. Individual Section 214 licences are issued by the FCC to providers of international service and also do not expire.

The transfer of individual authorisations is generally permitted following approval of such transfers by the FCC and/or relevant state PUC, and the process for securing these approvals varies

significantly depending on the type of licence and the type of transfer. Certain transfers of simple wireless licences are subject to immediate approval, while approval of large wireless transactions can take six months or considerably longer if opposed. (See question 3.5.) For wireless licences, the FCC permits operators to engage in the secondary market, with opportunities to sublease, partition, or disaggregate spectrum. (See question 3.6.)

2.8 Are there any particular licences or other requirements (for example, in relation to emergency services) in relation to VoIP services?

As noted in response to question 2.5, VoIP providers are generally not required to seek federal authorisation to provide service, although they are subject to authorisation or registration requirements in certain states. The degree of regulation to which VoIP providers are subject depends on whether the service provided is non-interconnected VoIP or interconnected VoIP. Non-interconnected VoIP providers are lightly regulated – their principal obligations come in the form of contributing to the Telecommunications Relay Service fund (which supports communications for individuals with disabilities), making their services accessible to individuals with disabilities generally, and filing an annual report on international traffic. Interconnected VoIP providers must comply not only with these requirements but also with many of the requirements that apply to wireless operators. Such requirements include transmitting 911 calls to emergency call centres, protecting customer proprietary network information (CPNI) from unauthorised access, and enabling law enforcement authorities to intercept communications on the service.

Public and Private Works

2.9 Are there specific legal or administrative provisions dealing with access and/or securing or enforcing rights to public and private land in order to install telecommunications infrastructure?

The siting of telecommunications facilities historically has been governed by state and local land use law. Today, the Communications Act largely preserves state and local authority over the siting of telecommunications facilities but sets limitations on that authority. Specifically, state and local governments may not unreasonably discriminate among providers of functionally equivalent services or adopt regulations that have the effect of prohibiting the provision of service. They must also act on siting requests within a reasonable period of time.

Pursuant to the Communications Act, the FCC has undertaken several efforts aimed at streamlining the deployment of 5G and other next-generation wireless services, including by expediting siting timeframes, limiting excessive fees charged by state and local governments for siting applications, and updating infrastructure rules to give broadband service providers easier and faster access to utility poles. Congress and inter-agency working groups also have ongoing efforts to streamline the siting of infrastructure, including on federal lands.

Access and Interconnection

2.10 How is wholesale interconnection and access mandated? How are wholesale interconnection or access disputes resolved?

All telecommunications operators are required to interconnect with each other, either directly or through other operators'

facilities. The Communications Act places more stringent requirements on ILECs, which must provide interconnection to other operators at any technically feasible point on their network and at regulated rates. ILECs are also required to offer other operators access to network elements on an unbundled basis at cost-based rates, although the FCC has discretion to refrain from applying this requirement in markets deemed to be competitive. Disputes regarding interconnection are resolved at the state level by PUCs, whose decisions are then reviewable in relevant federal district courts.

2.11 Which operators are required to publish their standard interconnection contracts and/or prices?

State PUCs are required to approve interconnection agreements entered into by ILECs and certain other operators. These agreements must be made publicly available, and other similarly situated operators have the right to 'opt in' to any current interconnection agreement.

2.12 Looking at fixed, mobile and other services, are charges for interconnection (e.g. switched services) and/or network access (e.g. wholesale leased lines) subject to price or cost regulation and, if so, how?

Historically, charges for the exchange of telecommunications traffic have varied based on the type of traffic (e.g. local or long-distance, intrastate or interstate) and the types of operators involved (e.g. wireline or wireless). LECs are permitted to charge certain operators regulated rates for traffic originated and terminated on local exchange networks. State PUCs establish the rates associated with the origination and termination of local and intrastate traffic, and the FCC establishes the rates associated with interstate traffic. Wireless operators lack the ability to require long-distance operators to pay them for the origination and termination of traffic on their networks, and thus most such traffic is settled pursuant to privately negotiated agreements.

As of July 2020, the FCC transitioned to a 'bill and keep' framework, pursuant to which all operators recover their costs directly from their customers rather than from other operators.

In addition, ILECs are required to provide interconnection and network access to other operators at rates, terms, and conditions that are just, reasonable, and non-discriminatory. ILECs are also required to offer other operators access to network elements on an unbundled basis at cost-based rates, although the FCC has discretion to refrain from applying this requirement in markets deemed to be competitive.

2.13 Are any operators subject to: (a) accounting separation; (b) functional separation; and/or (c) legal separation?

Due at least in part to existing and expired regulatory requirements, companies that trace their history to the break-up of the Bell Telephone Company (e.g. AT&T, Verizon) often utilise separate business entities for the provision of different services, with such separations maintained through a combination of structural, transactional, and accounting safeguards. In addition, other ILECs subject to rate regulation are also subject to accounting rules to allocate costs between local, intrastate, and interstate services, and thereby enable the relevant regulatory authorities to establish just, reasonable, and non-discriminatory rates.

2.14 Describe the regulation applicable to high-speed broadband networks. On what terms are passive infrastructure (ducts and poles), copper networks, cable TV and/or fibre networks required to be made available? Are there any incentives or 'regulatory holidays'?

Broadband facilities generally do not have to be unbundled. Although the FCC in 2015 ruled that broadband providers would be regulated like public utilities, the agency reversed itself three years later and eliminated most of its net neutrality rules, except for requirements governing the disclosure of ISPs' network management practices. (See question 6.3.) The FCC also has established notice and other requirements relating to copper retirement, in order to facilitate operators' transition from legacy technologies to next-generation networks that use Internet Protocol-based technologies.

One of the FCC's primary objectives has been to spur the deployment of additional broadband facilities, using a variety of methods that include regulatory streamlining and the provision of grants and financing. The FCC is currently pursuing a series of initiatives to promote the deployment of broadband infrastructure, including by launching rulemaking proceedings governing wireline and wireless infrastructure. Thus far, the FCC has taken various steps in those proceedings that are intended to promote broadband deployment, such as the adoption of new rules to facilitate and expedite pole attachments. The FCC's pole attachment rules govern in approximately 30 states; the remaining states have exercised their right under the Communications Act to regulate pole attachments themselves. The FCC may take further action in its pending infrastructure proceedings.

Price and Consumer Regulation

2.15 Are retail price controls imposed on any operator in relation to fixed, mobile, or other services?

Wireline ILECs generally are subject to retail rate regulation. Rates charged by competitive wireline and wireless operators are not regulated, but are subject to requirements that they be just, reasonable, and non-discriminatory. ISPs' rates are not regulated. The FCC has eliminated pricing regulation for certain high-capacity offerings that are generally targeted to business customers and government institutions, known as business data services, although such services may still be subject to regulation in areas deemed non-competitive.

2.16 Is the provision of electronic communications services to consumers subject to any special rules (such as universal service) and if so, in what principal respects?

Communications services are subject to substantial state and federal regulation. As an initial matter, common carriers must provide telecommunications services on a non-discriminatory basis at just and reasonable rates and terms. Telecommunications service providers must also pay a percentage of their interstate and international end-user revenues to the Universal Service Fund, which subsidises telecommunications services for residents living in rural areas, low-income consumers, rural health-care providers, schools, and libraries. In addition, wireline and wireless common carriers are subject to the FCC's truth-in-billing requirements that loosely govern the presentation and the level of disclosure required in invoices. Further, wireline, wireless, and VoIP providers are required to establish

sophisticated protections of CPNI. They are restricted with respect to the purposes for which they can use such information without customer consent. The FCC and FTC also administer a variety of marketing regulations, such as the Do Not Call list, which limit the use of certain telecommunications for solicitations without prior consumer consent. More recently, the FCC ruled that telephone companies may, as a default, block unwanted robocalls before they reach consumers, and it adopted rules pursuant to the TRACED Act that enhanced civil penalties for unlawful robocalls and increased the statute of limitations for pursuing corresponding enforcement actions. The agency continues to explore additional steps to limit robocalling.

The FCC has entered into consent decrees with various wireless providers, pursuant to which the providers agreed to provide certain billing and usage alerts. Many state PUCs also apply similar state consumer telecommunications protections to intrastate telecommunications providers.

Numbering

2.17 How are telephone numbers and network identifying codes allocated and by whom?

The FCC has plenary jurisdiction over U.S. telephone numbers in Country Code 1. Nevertheless, the Commission has delegated day-to-day administrative numbering duties to neutral third-party administrators pursuant to four contracts (two for the assignment of standard telephone numbers, one for the administration of toll-free telephone numbers, and one for the administration of number portability), subject to the FCC's extensive numbering rules and oversight. In 2015, the FCC reassigned the number portability contract from Neustar, Inc. (which had held that position since 1997) to Telcordia Technologies Inc. In 2018, the FCC announced that the two standard telephone number administration contracts – for North American Numbering Plan Administrator (NANPA) and the Pooling Administrator (PA) – which had also been held by Neustar, Inc. since the late 1990s, would be re-bid. The FCC awarded one-year bridge contracts to Somos, Inc., which also holds the toll-free number administration contract. The FCC subsequently determined it would merge the NANPA and PA functions with oversight of the newly proposed Reassigned Numbers Database.

2.18 Are there any special rules which govern the use of telephone numbers?

Only regulated telecommunications carriers and interconnected VoIP providers are allowed to obtain telephone numbers from the numbering administrator, based on a showing of need. Providers holding numbers must report semi-annually on their use. Unused numbers in provider inventories are subject to reclamation.

2.19 Are there any special rules relating to dynamic calling line identification presentation?

Dynamic calling line identification presentation is commonly referred to as 'caller ID' in the United States. The Truth in Caller ID Act of 2009 prohibits anyone from causing a caller ID service to knowingly transmit misleading or inaccurate caller ID information (also known as 'spoofing') with the intent to defraud, cause harm, or wrongly obtain anything of value. In 2018, Congress passed the RAY BAUM'S Act, which aimed to address gaps regarding the scope of the Truth in Caller ID

Act. The FCC adopted rules in 2019 implementing the RAY BAUM'S Act's charge, prohibiting malicious spoofing activities directed at consumers in the United States from foreign actors and expanding the scope of covered communications services to reach caller ID spoofing using alternative voice and text messaging services.

2.20 Are there any obligations requiring number portability?

All wireline operators, mobile operators, and interconnected VoIP providers that hold telephone numbers must allow their customers to port their numbers to another provider. This includes porting between and among the three types of providers. There are currently geographic restrictions on porting, based on the physical limitations of providers' network infrastructure.

The FCC has developed specific processes and timelines for various types of intramodal and intermodal porting.

3 Radio Spectrum

3.1 What authority regulates spectrum use?

Radio spectrum licensed for private, commercial, and state and local government use is regulated by the FCC, and the use of radio spectrum by the federal government, including all federal agencies, is coordinated by NTIA.

3.2 How is the use of radio spectrum authorised in your jurisdiction? What procedures are used to allocate spectrum between candidates – i.e. spectrum auctions, comparative 'beauty parades', etc.?

The FCC uses auctions to assign most commercial spectrum licences. Congress first authorised the award of such licences through a competitive bidding (i.e. auction) process in 1993, based on the concept that awarding licences to the bidders who value them most highly will result in spectrum being put to its most efficient use in the marketplace.

As an initial matter, the FCC must determine the type of use for which it is allocating a particular band of spectrum. For instance, in the broadcast incentive auction, the FCC sought to reallocate portions of the current TV band for use by commercial wireless services.

Once a particular frequency band is allocated for a particular use, the FCC adopts technical and service rules to govern the use of that band, including a 'band plan', that sets forth the bandwidth of each licence and the geographic area it will cover, which, in turn, determines how many licences will be awarded. The FCC then schedules an auction and settles on the auction procedures to be employed, which can vary among auctions. The FCC may apply certain bidding or eligibility restrictions on potential auction participants.

FCC spectrum auctions usually involve multiple rounds of bidding and can take weeks (and sometimes even months) to complete. In order to encourage entry by smaller businesses, the FCC typically enables bidders below a certain size to take advantage of bidding credits, making it easier for them to outbid larger entities. Relatedly, the FCC has adopted a rural business bidding credit for that purpose.

3.3 Can the use of spectrum be made licence-exempt? If so, under what conditions? Are there penalties for the unauthorised use of spectrum? If so, what are they?

The FCC reserves certain spectrum bands for unlicensed uses, such as Wi-Fi and Bluetooth. Any entity may utilise unlicensed spectrum, provided that the user's equipment is certified by the FCC and operated in conformity with the FCC's rules. Users of unlicensed spectrum are not afforded the types of interference protections available to holders of licensed spectrum, although the FCC's rules are designed to minimise the potential for interference.

The FCC has authority to impose penalties for the unauthorised use of spectrum. Section 301 of the Communications Act of 1934 states that no person shall transmit communications or signals by radio within the United States without a licence granted by the Commission. Section 503 of the Act specifies forfeitures (i.e. fees) for those who wilfully or repeatedly fail to comply with the provisions of the Act. The specific amount of the forfeiture is dictated by the particular violation committed, and these forfeiture figures are subject to inflation adjustment each year. In addition to imposing forfeitures, the FCC also has authority to order that noncompliant devices be brought into compliance or else be removed from the marketplace.

3.4 If licence or other authorisation fees are payable for the use of radio frequency spectrum, how are these applied and calculated?

As explained in response to question 3.2, the FCC awards most commercial spectrum licences through competitive bidding. Once a licence is awarded, it is not subject to ongoing spectrum user fees, though federal legislation has been considered for this purpose. Licensees in many FCC radio services are required to pay annual regulatory fees, which typically are calculated based on the number of licences held, or the number of end users being served.

3.5 What happens to spectrum licences if there is a change of control of the licensee?

Transfers of control of spectrum licensees generally are treated the same as assignments of spectrum licences: both are permitted with prior FCC approval (in some cases, *pro forma* transactions require a post-closing notification only). The FCC has established procedures that provide for immediate processing of most non-controversial transactions – those that involve insignificant foreign ownership, require no rule waivers, and raise no competitive or other public policy concerns. Conversely, applications that do not meet these streamlining criteria are subject to the FCC's general approval procedures, which include a public comment period and greater scrutiny by the FCC.

The FCC uses a 'spectrum screen', or aggregate per-market threshold, to trigger its review of potential competitive harm from transfers of most bands of commercial wireless spectrum. The screen is set at approximately one-third of spectrum in a given market that is suitable and available for mobile telephony/mobile broadband services, and is periodically updated when the FCC allocates additional spectrum for these services.

The FCC did not include millimetre wave (mmW) bands in the existing spectrum screen. But, similarly to the spectrum screen used for review of secondary market transactions

involving lower frequency spectrum bands, the FCC adopted a mmW spectrum threshold for secondary markets review that identifies those markets that may warrant further competitive analysis. The mmW threshold is 1850 megahertz.

The FCC does not consider the screen to be a cap on spectrum acquisitions, however, and it has approved transactions which result in granting one licensee control of more than one-third of the available spectrum in a market. Conversely, the FCC may find that competitive harm from a transaction is likely even though the spectrum screen would not be exceeded and may in that case impose licence divestiture requirements or other conditions on its approval, which are intended to prevent such competitive harm. The FCC could potentially revisit its policies and rules to ensure the competitiveness of the wireless industry in the United States.

3.6 Are spectrum licences able to be assigned, traded or sub-licensed and, if so, on what conditions?

Spectrum licences generally cannot be assigned or transferred without the prior consent of the FCC, as discussed in question 3.5 above. That said, the FCC has encouraged the development of a robust secondary market for spectrum leasing, including for 'partitioned' and 'disaggregated' portions of spectrum licences. Where authorised by FCC rules, certain spectrum licensees are permitted to lease spectrum to eligible third parties without prior FCC consent, provided that the spectrum lessors remain fully responsible for compliance with the FCC's applicable rules governing the lessors' spectrum licences.

4 Cyber-security, Interception, Encryption and Data Retention

4.1 Describe the legal framework for cybersecurity.

Currently, there is no generally applicable federal cybersecurity law in the United States. There are narrower laws focused on enhancing security and sharing information about cyber threats, and presidential-level Executive Orders have dictated the direction of some cybersecurity policy initiatives.

Enforcement agencies such as the FTC and state attorneys general can bring actions against companies that deceive consumers about their security practices, or cause harm to consumers through security practices that rise to the level of being unfair. In addition, the FCC enforces and penalises regulated telecoms under its jurisdiction that allow unauthorised third-party access to CPNI. Finally, the U.S. Securities and Exchange Commission increasingly has sought to hold public companies accountable for cybersecurity practices through disclosure requirements. Meanwhile, numerous states have adopted information security laws, and every state now has a data breach law.

To date, much of the framework for cybersecurity has been driven by the development of best practices and guidance by industry, often in collaboration with agencies such as NTIA and the National Institute of Standards and Technology (NIST), both under the Department of Commerce. The voluntary Cybersecurity Framework, developed by NIST in conjunction with the private sector, supplies the preeminent framework for the development of standards, guidelines, and best practices to manage cybersecurity-related risk. Industry also is active in publishing its own cybersecurity best practices, including through the Communications Security, Reliability and Interoperability Council (an advisory committee to the

FCC that includes public and private sector representatives), and in response to a Trump Administration initiative to promote action against botnets and other automated threats.

4.2 Describe the legal framework (including listing relevant legislation) which governs the ability of the state (police, security services, etc.) to obtain access to private communications.

Governmental access to private communications, whether in the course of transmission of those communications or from electronic storage, is governed at the federal level by the Electronic Communications Privacy Act (ECPA) and the Foreign Intelligence Surveillance Act (FISA). Those statutes also define the circumstances and means by which federal law enforcement agencies may compel access to subscriber information and information concerning the time, place, and addressing and routing of communications. In 2018, the United States enacted the Clarifying Lawful Overseas Use of Data Act (or CLOUD Act), which primarily amended ECPA to allow law enforcement to compel U.S.-based companies to provide data stored even if on foreign servers. Separately, constitutional protections under the Fourth Amendment apply, and the Supreme Court recently held that a warrant is required for cellsite location records. Most states also have laws that define the circumstances under which state law enforcement agencies may require access to private communications.

4.3 Summarise the rules which require market participants to maintain call interception (wire-tap) capabilities. Does this cover: (i) traditional telephone calls; (ii) VoIP calls; (iii) emails; and (iv) any other forms of communications?

Under ECPA and FISA, telecommunications carriers, providers of wire and electronic communication services, and remote computing services must cooperate with lawful wiretap requests and requests for access to stored call data and subscriber information. In order to facilitate cooperation with such requests, the Communications Assistance for Law Enforcement Act (CALEA) requires telecommunications carriers to ensure that their equipment, facilities, or services are capable of expeditiously isolating and delivering wire and electronic communications and call-identifying information to the government, pursuant to lawful authorisation. CALEA requirements do not apply to information services or to private networks and interconnection services and facilities. However, the FCC has found that interconnected VoIP services, and the underlying switching and transport components of facilities-based broadband internet access services, are not information services for purposes of CALEA, and therefore are subject to CALEA requirements. Email and other OTT messaging services continue to be classified as information services not subject to CALEA assistance capability requirements, but providers of such services generally are electronic communication service providers and are required to comply with subpoenas and other processes requesting access to their customers' email messages under ECPA.

4.4 How does the state intercept communications for a particular individual?

Law enforcement agencies may obtain compelled, real-time access to individuals' private communications by serving wiretap orders or other legal processes on their service providers. The

technical methods by which interception is accomplished vary: for a wiretap on a voice telephone line, the law enforcement agency may arrange with the service provider for a physical access line, attached to the individual subscriber's telephone line, that effectively makes the law enforcement agency a party to the individual's telephone conversations. For emails and other non-voice electronic communications, interception capabilities may be implemented by routing an individual's communications to a server that is controlled by or accessible to the law enforcement agency.

4.5 Describe the rules governing the use of encryption and the circumstances when encryption keys need to be provided to the state.

Nothing prevents individuals from encrypting their communications, and service providers are permitted to make encryption available to their customers. CALEA does not require telecommunications carriers to facilitate decryption of customers' communications for the benefit of law enforcement unless the telecommunications carrier provided the encryption capability. The legal obligation of non-telecommunications carriers to provide encryption keys to the government is currently a subject of some uncertainty and debate. Likewise, there is some debate about the ability of law enforcement, under the Fifth Amendment to the United States Constitution and its prohibition against compelled self-incrimination, to require individuals to decrypt their communications or provide law enforcement with the means to do so.

4.6 Are there any specific cybersecurity requirements on telecoms or cloud providers? (If so, please list the relevant legislation.)

Currently, the United States has no generally applicable federal cybersecurity law that imposes specific requirements on telecom companies. There are restrictions on 5G infrastructure used in connection with executive agency information systems. Specifically, the Federal Acquisition Supply Chain Security Act of 2018 protects federal systems from supply chain risks in covered articles, including but not limited to telecommunications equipment and services.

Additionally, in 2019, the President signed an executive order declaring a 'national emergency' under the International Emergency Economic Powers Act (IEEPA) in connection with threats posed by the acquisition or use of 'information and communications technology or services' that are 'designed, developed, manufactured, or supplied by' entities owned or controlled by 'foreign adversaries'. Generally, the executive order prohibits a range of transactions involving such technologies or services if the Secretary of Commerce, in consultation with other agencies, determines that the transactions pose a security risk. In 2020, the White House issued a National Strategy to Secure 5G, which further demonstrated the United States' commitment to facilitate the evolution and security of 5G.

4.7 What data are telecoms or internet infrastructure operators obliged to retain and for how long?

Telecommunications carriers, providers of wire or electronic communication services, and providers of remote computing services are required to retain call data and other subscriber information. These categories encompass wireline and wireless telephone companies, ISPs, and providers of email and other internet-based services. Carriers that provide toll services are required to retain certain billing-related records for 18 months.

In addition, various state PUCs require operators to retain certain call records for up to three years. Under ECPA, a governmental entity may require a provider of wire or electronic communication service to preserve records and other evidence in its possession for up to 180 days, pending the issuance of a court order or other process requiring disclosure to the governmental entity. Also, pursuant to a court order or subpoena obtained in accordance with ECPA, a service provider may be required to retain a back-up copy of the contents of electronic communications in order to preserve those communications.

Finally, the FCC's CPNI rules require that telecommunications carriers maintain records of certain disclosures of customer information, and of customers' permissions for such disclosures, for a minimum of one year.

5 Distribution of Audio-Visual Media

5.1 How is the distribution of audio-visual media regulated in your jurisdiction?

The basic regulatory framework for audio-visual media rests on the identity of the programming provider's technology, rather than on the content itself. Television broadcasters operate under licences issued by the FCC pursuant to Title III of the Communications Act and are subject to fairly extensive regulatory obligations at the federal level. Cable operators are regulated under Title VI of the Communications Act and face a different array of FCC obligations. Cable operators are also regulated by local community or state regulators via franchises (i.e. agreements setting forth certain rights and obligations). Like broadcasters, satellite TV providers, also called direct broadcast service (DBS) providers, operate pursuant to FCC licences under Title III of the Communications Act, but DBS licences differ from broadcast licences in that they are subject to certain obligations applicable to all MVPDs, including cable providers, as well as a few mandates unique to DBS. Wireline telephony providers that provide a subscription multichannel video service via fibre or hybrid fibre/copper networks are generally subject to most Title VI regulations applicable to cable operators. Finally, although the FCC sought public comment on whether OTT providers (including facilities-based providers that seek to offer separate online offerings) should be treated as MVPDs, it took no further action, leaving these providers generally unregulated.

5.2 Is content regulation (including advertising, as well as editorial) different for content broadcast via traditional distribution platforms as opposed to content delivered over the internet or other platforms? Please describe the main differences.

The degree of content regulation in the United States differs depending on the type of distribution technology used and the type of content at issue. As a general matter, broadcasters are subject to greater content regulation than other platforms (e.g. cable operators and DBS operators). For instance, only terrestrial radio and television broadcasters are subject to FCC rules prohibiting 'indecent' content and guidelines concerning educational/informational children's programming. Similarly, the FCC's sponsorship identification rules apply to broadcasters and cable operators (at least to a limited extent) but not to DBS operators and online video providers. However, the FTC has guidelines for endorsements and testimonials that apply to any service. Broadcasters, cable operators, and DBS operators are all subject to the same commercial limits in children's programming. Online video providers generally are not subject to content regulation.

5.3 Describe the different types of licences for the distribution of audio-visual media and their key obligations.

The regulatory and licensing requirements imposed on providers of video programming differ depending on the type of programming. First, TV broadcasters are licensed by the FCC with the right to use a particular frequency in a specific community to transmit a free, over-the-air video service, subject to various technical requirements. TV broadcasters face the most regulatory obligations of any video programming provider, including requirements to air political candidate advertising, educational programming for children, emergency alerts, and programming that serves the ‘needs and interests’ of the broadcasters’ community. The FCC has also adopted a variety of restrictions on the ability of TV licensees to own multiple media outlets (i.e. TV and radio stations and daily local newspapers) in a market, although these rules have been the subject of repeated court challenges.

Second, although cable operators hold some FCC licences and are subject to FCC regulations, their authorisations come from state and local cable franchising authorities. These franchising authorities generally impose certain territorial coverage obligations, as well as require that cable operators reserve certain channels for public, educational or governmental programming and/or local programmers. The FCC requires cable operators to carry every local TV station’s main programming signal if the station has opted for guaranteed carriage. In addition, federal regulations require cable operators that also own cable programming networks to sell their programming to rival MVPDs on non-discriminatory terms, and to avoid favouring their own programme networks over unaffiliated networks seeking carriage.

Third, DBS operators are licensed by the FCC with the rights to use particular satellite frequencies to transmit video programming on a nationwide basis. DBS licensees must devote four per cent of their capacity to non-commercial ‘educational or informational’ programming. They also are required to use their spot-beam capabilities to retransmit local TV signals into the broadcasters’ local markets.

5.4 Are licences assignable? If not, what rules apply? Are there restrictions on change of control of the licensee?

Transfers of control and assignments of all spectrum licences, including over-the-air broadcast radio and television licences, satellite licences, and wireless licences, require prior FCC consent. The FCC has established procedures that provide for immediate processing of most non-controversial transactions – those that involve insignificant foreign ownership, require no rule waivers, and raise no competitive or other public policy concerns. Conversely, applications that do not meet these streamlining criteria are subject to the FCC’s general approval procedures, which include a public comment period and greater scrutiny by the FCC.

6 Internet Infrastructure

6.1 How have the courts interpreted and applied any defences (e.g. ‘mere conduit’ or ‘common carrier’) available to protect telecommunications operators and/or internet service providers from liability for content carried over their networks?

Common carriers and ISPs are generally immune from liability arising from the content of the communications that they transport on behalf of their customers. However, ISPs may

be required to comply with certain safe harbour provisions set forth in the Digital Millennium Copyright Act (DMCA) to ensure such immunity against copyright infringement by their customers.

6.2 Are telecommunications operators and/or internet service providers under any obligations (i.e. to provide information, inform customers, disconnect customers) to assist content owners whose rights may be infringed by means of file-sharing or other activities?

Telecommunications operators and/or ISPs are not under any general obligation to assist content owners in prosecuting claims concerning their intellectual property. However, content owners may seek a court order under the DMCA for the identity of an alleged infringer. If the court grants such an order, the alleged infringer’s ISP must disclose the requested information to the copyright owner or person authorised by the copyright owner. This process may only be used to obtain the identity of alleged infringers who post content on an ISP-hosted server for access by others.

The DMCA also provides several safe harbours for ISPs, which insulate ISPs from liability for the infringing activities of their subscribers. Under the DMCA, ISPs must implement reasonable policies to terminate the accounts of repeat copyright infringers and must inform all users of this policy. Failure to execute and enforce such policies could remove safe harbour protections and expose an ISP to secondary liability for copyright infringement. ISPs are not liable for the automatic transmission, routing, connecting, or for temporarily storing infringing content at the direction of users.

6.3 Are there any ‘net neutrality’ requirements? Are telecommunications operators and/or internet service providers able to differentially charge and/or block different types of traffic over their networks?

‘Net neutrality’ has been a highly controversial topic in the United States for several years. In 2018, the FCC released an order repealing its net neutrality decision of 2015. Under the 2015 decision adopting the net neutrality rules, the FCC had reclassified ISPs as common carriers under Title II of the Communications Act, which effectively meant that they had to comply with many (but not all) of the regulations applicable to telecoms operating in the United States. The 2017 repeal essentially reclassified broadband internet access services again, but this time as an unregulated information service. The 2017 order specifically repealed the 2015 Order’s: (i) bright-line prohibitions on blocking or throttling (i.e. impairing or degrading) lawful online traffic; (ii) ban on ‘paid prioritisation’ arrangements (i.e. those favouring certain traffic in exchange for compensation or some other benefit); and (iii) general ‘internet conduct standard’ (under which the FCC investigated, on a case-by-case basis, certain ISP practices for unreasonable interference and/or the disadvantaging of consumers/edge providers). The repeal order did, however, maintain a revised transparency requirement on ISPs, mandating public disclosure of practices including blocking, throttling, affiliate prioritisation, paid prioritisation, congestion management, application-specific behaviour, device attachment rules, security practices, performance characteristics, and commercial terms. The repeal order also purported to block states from adopting net neutrality rules of their own, although a few states, including California, adopted net neutrality rules anyway and such rules are currently the subject of pending litigation.

In October 2019, a federal appeals court upheld much of the 2017 repeal, including in particular the rules noted above, but vacated the portion of the Order that barred states from imposing their own net neutrality rules and directed the FCC to give further consideration to the rules’ impact on public safety issues, pole attachment rights, and the Lifeline programme (which subsidises communications services for low-income customers). The FCC conducted an additional review and addressed the court’s concerns in a 2020 Order on Remand, which reaffirmed the rules in the FCC’s net neutrality repeal order concerning public safety, pole attachment regulation, and the Lifeline programme.

6.4 Are telecommunications operators and/or internet service providers under any obligations to block access to certain sites or content? Are consumer VPN services regulated or blocked?

No, except where such sites or content have been deemed unlawful under U.S. criminal laws, such as purveyors of ‘obscene’ content (e.g. child pornography) or illegal financial transactions (e.g. unlicensed gambling sites). Following the repeal of the FCC’s net neutrality rules, as discussed above, telecommunications operators are generally not restricted from blocking access to lawful traffic where they provide notice of such practices to their customers.



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