<u>AUSTRALIA</u>

1.1 What are the overall policies and objectives for the electronic communications industry and have these been published in draft or final form? What legislation is relevant to telecommunications and radio frequencies?

The primary objects of Australia's telecommunications regulatory framework are to promote the long-term interests of end-users of carriage services and the efficiency and international competitiveness of the Australian telecommunications industry.

The key legislation governing the telecommunications Industry includes:

- the Telecommunications Act 1997 ("Telecommunications Act"), which deals with licensing and the rights and obligations of carriers and service providers;
- the Telecommunications (Consumer Protection and Service Standards) Act 1999 ("Consumer Protection Act"), which establishes the universal service obligation and consumer protection regulation;
- the Telecommunications (Interception and Access) Act 1979 ("Interception Act"), which regulates interception and law enforcement;
- the Radiocommunications Act 1992 ("Radiocommunications Act"), which regulates radiofrequency spectrum management and licensing; and
- the Trade Practices Act 1974 ("Trade Practices Act"), which provides both general competition regulation and a telecommunications-specific competition regulation regime.

There is also a degree of industry self-regulation. Various industry codes, developed primarily by the industry body Communications Alliance, address consumer issues (e.g. billing and privacy issues) and technical issues (e.g. wiring requirements for end-user equipment).

Broadcasting and content is regulated separately under the Broadcasting Services Act 1992 ("Broadcasting Services Act"). The Broadcasting Services Act is relevant to telecommunications providers with respect to subscription television regulation, online content regulation (for internet service providers) and data casting.

1.2 Is Australia a member of the World Trade Organization? Has Australia made commitments under the GATS/GATT regarding telecommunications and has Australia adopted the WTO Basic Telecommunications Agreement?

Australia has been a member of the WTO since 1 January 1995. Australia has adopted the WTO Basic Telecommunications Agreement and made commitments under the Fourth Protocol on Basic Telecommunications.

1.3 How is the provision of electronic communications_networks or services regulated? Is the provision of electronic communications networks or services open to competition in Australia?

Electronic communications networks and services are regulated under the legislation mentioned in question 1.1 above. The Telecommunications Act and the Trade Practices Act are intended to promote open competition for the provision of electronic communications networks and services by carriers and carriage service providers ("CSPs").

1.4 Which are the regulatory and competition law authorities? How are their roles differentiated? Are they independent from the government?

The primary regulators are:

- the Australian Competition and Consumer Commission ("ACCC"), which handles competition-related issues and some consumer issues; and
- the Australian Communications and Media Authority ("ACMA"), which handles technical regulation and technical consumer issues.

Those regulators generally act independently of the Federal Government. However, the Communications Minister has residual regulatory powers including the ability to:

• impose carrier licence conditions, which may used to regulate specific carriers and carriers generally; and

direct ACCC and ACMA in the performance of their regulatory powers in certain respects.

Industry bodies (comprising members of the telecommunications industry) also develop industry codes and standards that can be registered with, and enforced by, ACMA under the Telecommunications Act.

1.5 Are decisions of the national regulatory authority able to be appealed? To which court or body?

Decisions made by ACMA may be appealed to:

- the Administrative Appeals Tribunal, on the merits of the decision; and
- the Federal Court of Australia, for judicial review on administrative law grounds

While some ACCC decisions may be appealed to the Australian Competition Tribunal on the merits of the decision, there are certain decisions (e.g. decisions made in telecommunications access arbitrations) that may only be appealed to the Federal Court of Australia, for judicial review on administrative law grounds.

2 Licensing

2.1 If a licence or other authorisation is required to install or operate electronic communications networks or provide services over them, please briefly describe the process, timescales and costs.

The Telecommunications Act distinguishes between:

- carriers, being entities that own telecommunications infrastructure;
- CSPs, being entities that supply carriage services using a carrier's infrastructure; and
- content providers.

These categories are not mutually exclusive, so most carriers are also regulated as CSPs. Carriers must be licensed by ACMA. A licence applicant must be a corporation, eligible partnership or public body, and must provide information regarding its ownership, structure, history and the proposed network. Applications are typically processed in less than 20 business days. There are no individual licensing or registration requirements for CSPs.

2.2 What other requirements, permits or approvals must be met or obtained before networks may be installed or operated and services provided?

As outlined in question 3.1 below, installation of network infrastructure may require approval from landowners or government authorities. In addition, wireless communications are subject to radiocommunications licensing requirements (see section 8 below).

2.3 May licences or other authorisations be ransferred and if so under what conditions?

Although there is no express prohibition against the transfer of carrier licences in the Telecommunications act, ACMA's view is that carrier licences are not transferable.

2.4 What is the usual or typical stated duration of licences or other authorisations?

Carrier licences issued under the Telecommunications Act are granted indefinitely.

3 Public and Private Works

3.1 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?

Yes. The Telecommunications Act empowers carriers to enter public and prvate land to install, inspect and maintain telecommunications facilities, provided statutory notification and objection procedures are observed.

The power to install telecommunications infrastructure is limited to the installation of "low impact facilities". Examples of "low impact facilities" include certain types of below-ground cabling, public payphones and radio communications antennae. Carriers may also install telecommunications facilities where a facility installation permit has been granted, but this is uncommon in Australia.

The power to install telecommunications facilities implicitly confers rights of land tenure upon carriers. Compensation may be payable by the carrier

in some cases to the owners or occupiers of land on which the facilities are installed.

In circumstances where the above powers and immunities do not apply, rights of land access and tenure must be negotiated with the landowner and any relevant authorities.

3.2 Is there a specific planning or zoning regime that applies to the installation of telecommunications infrastructure?

Yes. When relying upon statutory rights to install telecommunications facilities, carriers enjoy immunity from certain State and Territory laws dealing with matters such as planning and the use of land. In such cases, carriers will not need to comply with the requirements of any planning controls applying to the land on which the facilities are being installed.

Where carriers' powers and immunities do not apply (such as where carriers are installing facilities that are not categorised as "low impact"), the installation of facilities will be subject to the planning laws of the State or Territory in which the facility is being installed. These laws may require a planning permit or development consent to be obtained before the installation can proceed.

3.3 Are there any rules requiring established operators to share their infrastructure, e.g. masts, sites, ducts or cables (i.e. dark fibre)? Are there any proposals to mandate 'passive access' to such basic infrastructure?

Yes. Under the Telecommunications Act, a carrier must provide other carriers with access to facilities such as mobile phone towers, pits, conduits, and telephone exchange buildings. There are limitations on the obligation to give access including that the request must be reasonable.

The terms upon which access will be granted must be agreed between the access seeker and the facility owner, and are determined by an arbitrator if agreement cannot be reached.

The Telecommunications Act also contains provisions relating to access between facility owners and access seekers to telecommunications transmission towers and underground telecommunications facilities.

4 Access and Interconnection

4.1 Is network-to-network interconnection and access mandated, and what are the criteria for qualifying for the benefits of interconnection?

Yes. It is a standard carrier licence condition that carriers ensure any-to-any connectivity with any other interconnected telecommunications network. ACCC may "declare" certain telecommunications services under the Trade Practices Act if it considers that the declaration would promote competition, any-to-any connectivity and the economically efficient investment in telecommunications infrastructure. Once a service is declared, the service provider is required to make the service available on request by access seekers and to:

- provide the service to access seekers and allow interconnection of facilities;
- take all reasonable steps to ensure the quality of the service and fault handling is equivalent to what the service provider
- provides to itself; and
- provide billing information to the access seeker.

ACCC has declared services including PSTN originating and terminating access, unconditioned local loop service, line sharing service, mobile terminating access, domestic transmission capacity and local carriage services.

4.2 How are interconnection or access disputes resolved? Does the national regulatory authority have jurisdiction to adjudicate and impose a legally binding solution?

The terms and conditions of access to declared (i.e. regulated) access and interconnection services are determined through commercial negotiation and, if negotiation fails, through binding arbitration by ACCC.

In connection with its arbitral role, ACCC is obliged to publish:

- model terms and conditions relating to "core services"; and
- pricing principles relating to the price of access for declared services. ACCC must have regard to the model terms and conditions (if applicable) and the pricing principles when exercising its arbitral powers. ACCC may also publish indicative access prices for some services.

Access providers may also submit an "access undertaking" to ACCC. If accepted as reasonable, the undertaking will determine the terms, prices and conditions on which the service will be provided to access seekers.

4.3 Are any operators required to publish their standard interconnection contracts and/or prices?

No. Operators are not required to publish their standard interconnection contracts or prices.

4.4 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?

Although carriers are generally free to determine prices for interconnection and network access (provided such prices are not anti-competitive):

the Communications Minister has power under the Trade Practices Act to make a "Ministerial pricing declaration" setting out principles dealing with price-related terms and conditions of access; and ACCC has power to arbitrate the terms and conditions of access to declared services, including access pricing, failing agreement between an access provider and an access seeker.

ACCC determines access pricing having regard to relevant pricing principles (see question 4.2 above) and any applicable indicative access pricing. Generally, ACCC sets access pricing based on either the Total Service Long-Run Incremental Cost method or the Retail Minus Retail Costs method.ACCC is currently conducting an inquiry into a new cost model for fixed-line services.

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

Yes. The incumbent, Telstra Corporation Ltd ("Telstra"), is subject to accounting and operational separation. The Federal Government is considering whether further separation of Telstra is necessary - see section 13 below.

4.6 How are existing interconnection and access regulatory conditions to be applied to next generation (IP-based) networks?

The existing interconnection and access regulatory conditions apply to next generation networks. However, the Federal Government is currently considering changes to the regulatory regime to facilitate the rollout of a national broadband network ("NBN") - see question 4.8 and section 13 below.

4.7 Are owners of existing copper local loop access infrastructure required to unbundle their facilities and if so, on what terms and subject to what regulatory controls? Are cable TV operators also so required?

ACCC has declared the unconditioned local loop service and the line sharing service, requiring Telstra to provide access seekers with access to its local loop infrastructure.

There are no general obligations on cable TV operators to provide third-party access to their facilities. Cable TV operator Foxtel's digital set top box service is the subject of an access undertaking that was accepted by ACCC in 2007.

4.8 Are there any regulations or proposals for regulations relating to next-generation access (fibre to the home, or fibre to the cabinet)? Are any 'regulatory holidays' or other incentives to build fibre access networks proposed?

Yes. In April 2009, following the termination of its competitive tendering process for the rollout of a national broadband network, the Federal Government announced that it would establish a public private partnership to construct the NBN. The Government committed up to \$22 billion in public funding, and to make any necessary regulatory changes to facilitate rollout. It is intended that the NBN will operate on a wholesale-only, open access basis, providing:

- 90% of Australian homes and businesses with fibre-to-thepremises connections with speeds of up to 100 Mbps;
- And the remaining 10% with wireless and satellite connections with speeds of up to 12 Mbps.

Details about the NBN rollout and operational arrangements will be determined by the Government's NBN implementation study, which is expected to be completed in the first quarter of 2010. The Government intends that the NBN provider will be subject to regulation that:

- Prevents any one entity from obtaining a controlling interest in the NBN provider greater than around 20%; and
- Establishes a new access regime for the NBN to be overseen by ACCC.

In conjunction with the NBN process, the Government is conducting a broader review of the Australian telecommunications regulatory regime - see section 13 below.

5 Price and Consumer Regulation

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

Yes. For retail prices of Telstra, the Communications Minister has power under the Consumer Protection Act to issue price controls on Telstra for any carriage or content services. All service providers are required to provide consumers and charities with an option for untimed local calls.

5.2 Is the provision of electronic communications services to consumers subject to any special rules and if so, in what principal respects?

Yes. As indicated in question 1.1 above, Communications Alliance has developed and registered with ACMA a number of industry codes. The industry codes include requirements relating to, amongst other things, advertising of services, provision of information to customers, billing processes, credit assessment, transfer of services between service providers, complaint handling, privacy protection, and the provision and promotion of mobile premium services.

ACMA also requires communications services to enable preselection (to change carriers automatically for certain calls or by dialling an override code) and phone number portability.

6 Numbering

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

Under the Telecommunications Act, ACMA is required to establish a Numbering Plan. Telephone numbers and network identifying codes are allocated and managed by ACMA in accordance with the Numbering Plan.

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

The Numbering Plan provides rules on:

- the format of particular types of telephone numbers;
- the requirement for CSPs to provide number portability; and
- the requirement for certain calls to be charged at local call rates.

Communications Alliance has also established industry codes dealing with rights of use of numbers and number portability.

6.3 How are telephone numbers made available for network use and how are such numbers activated for use by customers?

Carriers and CSPs may apply for blocks of telephone numbers from ACMA for an application fee. Carriers and CSPs are responsible for activating and allocating numbers for customer use. Certain premium rate and freephone local rate numbers are managed by Industry Number Management Services Ltd on behalf of ACMA.

6.4 What are the basic rules applicable to the 'porting' (i.e. transfer) of telephone numbers (fixed and mobile).

The Numbering Plan requires CSPs to enable number portability for local, freecall, premium rate and mobile numbers. Carriers and CSPs are required to assist customers to port their number and the incoming provider must provide an "equivalent service" to porting and nonporting customers. The Numbering Plan and Communications Alliance codes set out procedures for porting numbers.

7 Submarine Cables

7.1 What are the main rules governing the bringing into Australia's territorial waters, and the landing, of submarine cables? Are there any special authorisations required or fees to be paid with respect to submarine cables?

The Telecommunications Act requires that carriers obtain an installation permit from ACMAprior to installing a submarine cable within Australian Waters (other than in Coastal Waters which are not part of a declared protection zone).

The type of installation permit required and applicable fees vary depending on whether the cable is to be installed in a declared protection zone.If ACMAgrants an installation permit, the carrier must comply with any conditions attached to that permit.

8 Radio Frequency Spectrum

8.1 Is the use of radio frequency spectrum specifically regulated and if so, by which authority?

Yes. The radio frequency spectrum is regulated by ACMA primarily under the Radiocommunications Act. The Communications Minister also has some powers relating to radio frequency spectrum planning and allocation.

The use of spectrum for broadcasting services is subject to a separate planning and licensing regime administered by ACMA under the Broadcasting Services Act.

8.2 How is the use of radio frequency spectrum authorised in Australia? What procedures are used to allocated spectrum between candidates - i.e. spectrum auctions, comparative 'beauty parades', etc.?

The use of the spectrum is authorised by way of licences primarily issued under the Radiocommunications Act.

ACMA issues licences subject to the spectrum and any relevant frequency band plans. The spectrum and frequency band plans specify how particular frequencies may be used, and are generally consistent with the International Telecommunications Union's Radio Regulations and Table of Frequency Allocations.

There are three types of licences available under the Radiocommunications Act:

- spectrum licences, which authorise use of a particular frequency range in an area. Spectrum licences can be issued for a period of up to 15 years and are generally allocated by auction;
- apparatus licences, which authorise operation of particular devices in an area. Apparatus licences may be issued for a period of up to 5 years, and are generally allocated on application to ACMA on an over-the-counter, firstin-first- served basis; and
- class licences, which authorise use of devices under a common set of conditions as "shared spectrum". To date, "beauty parades" have not been a feature of the Australian regime, but are permitted.

8.3 Are distinctions made between mobile, fixed and satellite usage in the grant of spectrum rights?

As indicated in question 8.2 above, the allocation of licences is subject to restrictions in spectrum and frequency band plans. The plans may, for example, restrict the use of a frequency for a particular service.

Generally, spectrum licences authorise the use of spectrum on a technology neutral basis (subject to the requirements of the spectrum and frequency band plans). Apparatus licences authorize the use of spectrum based on particular categories of devices.

8.4 How is the installation of satellite earth stations and their use for uplinking and down-linking regulated?

Satellite earth stations for telecommunications purposes may be authorised by obtaining:

- earth apparatus licences for each earth station; or
- a space apparatus licence for the satellite (so that all linked earth stations are automatically covered by a class licence).
- Installation of satellite earth stations is also subject to the same restrictions as other telecommunications infrastructure (see section 3 above).

8.5 Can the use of spectrum be made licence-exempt? If so, under what conditions?

The use of spectrum can only be made licence-exempt for specified defence, intelligence, law enforcement and emergency purposes. ACMA may also issue class licences that authorise the use of spectrum by any person essentially as "shared spectrum" for particular radiocommunications devices, subject to the conditions of the class licence.

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

Licence fees are payable for apparatus and spectrum licences. The fees vary depending on the type of licence and the method of allocation. For example, fees for:

- spectrum licences allocated by way of auction will be determined based on the highest bid; and
- apparatus licences allocated over-the-counter are intended to encourage efficient use and recover ACMA's administrative costs.

ACMA is currently consulting on a proposal to introduce opportunity cost pricing for administratively allocated licences.

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

Spectrum and apparatus licences may be traded or sub-licensed by private treaty. However, such transactions only take effect upon registration with ACMA.

9 Data Retention and Interception

9.1 Are operators obliged to retain any call data? If so who is obliged to retain what and for how long? Are there are data protection (privacy rules) applicable specifically to telecommunications?

Although there are provisions specifically dealing with the access to call data retained by carriers, there are no express data retention obligations on carriers.

The disclosure of call data is currently regulated by the Interception Act, the Telecommunications Act, and the *Privacy Act 1988*. The Federal Government is currently considering the introduction of specific call data retention obligations.

9.2 Are operators obliged to maintain call interception (wiretap) capabilities?

Yes. Carriers are required to ensure their networks are capable of interception for law enforcement purposes. Carriers must prepare annual Interception Capability Plans detailing their compliance with the obligation to provide interception capability.

9.3 What is the process for authorities obtaining access to retained call data and/or intercepting calls? Who can obtain access and what controls are in place?

The circumstances in which authorities may direct carriers to intercept calls and may retain call data are set out in the Interception Act.

10 The Internet

10.1 Are conveyance services over the internet regulated in any different way to other electronic communications services? Which rules, if any, govern access to the internet at a wholesale (i.e. peering or transit) and/or retail (i.e. broadband access) level? Are internet service providers subject to telecommunications regulation?

Both carriers and CSPs are subject to the legislation set out in question 1.1.

10.2 Is there any immunity (e.g. 'mere conduit' or 'common carrier') defence available to protect telecommunications operators and/or internet service providers from liability for content carried over their networks?

Yes. Under the *Copyright Act 1968* ("**Copyright Act**") carriers and CSPs will not have authorised any infringement of copyright merely because another person uses their facilities to infringe that copyright. Carriers and CSPs may also be exempt from penalties for misleading and deceptive conduct if the entity is merely passing on information in the course of their business.

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

The Copyright Act requires CSPs to:

- implement policies that provide for termination, in appropriate circumstances, of the accounts of repeat copyright infringers;
- expeditiously remove or disable access to cached copyright material upon notification that the material is removed or access has been disabled at the originating site; and

 expeditiously remove or disable access to copyright material residing on its system where the material infringes copyright.

However, these obligations do not require CSPs to actively monitor their services.

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

Australia does not regulate the ability of service providers to discriminate between different types of network traffic. There are presently no "net neutrality" requirements.

10.5 How are 'voice over IP' services regulated?

VoIP services are generally subject to the same legislative regulations as PSTN voice services.

10.6 Are there any rules to prevent, restrict or otherwise govern internet or email communications, in particular, marketing and advertising communications?

Electronic communications are regulated by the *Spam Act 2003*, which prohibits unsolicited commercial messages via other means, including emails, SMS, and instant messaging, and requires that commercial electronic messages include sender information and an unsubscribe facility.

<u>11 USO</u>

11.1 Is there a concept of universal service obligation; if so how is this defined, regulated and funded?

Yes. The universal service obligation ("USO") is funded by a levy imposed on all carriers in proportion to their eligible revenue. The default USO provider, Telstra, is required to:

- take all reasonable steps to provide reasonable access to a "standard telephone service" (generally being a fixed line service) to all persons in Australia on an equitable basis; and
- provide reasonable access to payphones throughout Australia.

Any carrier may apply to provide the USO services in certain areas, and receive funding for doing so. To date, no carriers have applied to provide USO services.

12 Foreign Ownership Rules

12.1 Are there any rules restricting direct or indirect foreign ownership interests in electronic communications companies whether in fixed, mobile, satellite or other wireless operations?

Although approval is required for foreign investments above a certain threshold, the Federal Government's policy is to encourage foreign investment in Australia. The Federal Government may reject a proposed investment which is not in the national interest.

Telstra is subject to specific foreign-ownership restrictions. No more than 35% of its shares can be held by foreign entities, and no single foreign entity may own more than 5% of its shares.

13 Future Plans

13.1 Are there any imminent and significant changes to the legal and regulatory regime for electronic communications?

As indicated in question 4.8 above, the Federal Government has announced it will establish a public-private partnership to construct the NBN. The NBN provider will be required to provide nondiscriminatory access on a wholesale basis, under a new access regime.

In conjunction with the NBN process, the Government has also foreshadowed a significant overhaul of the Australian telecommunications regulatory regime. The Government released a discussion paper in April 2009 — *Regulatory reform for 21st century broadband* — seeking submissions on potential changes to the regulatory regime.

In particular, the Government is considering whether changes are necessary to promote competition for the NBN rollout.

The Government is currently considering submissions in response to the discussion paper. Details of the changes to be implemented have not yet been announced, and will be subject to passage through the Federal Parliament.

CHINA

1.1 What are the overall policies and objectives for the electronic communications industry and have these been published in draft or final form? What legislation is relevant to telecommunications and radio frequencies?

The overall objectives governing telecommunications policy are set forth in the 11th Five-year Plan (covering 2006-2011) and the 2006 to 2020 National Informatization Development Strategy and include developing more extensive telecommunications infrastructure coverage, significantly enhancing the capacity for technological innovation, adopting next-generation technologies, optimizing the structure of the information technology industry, and improving information security.

1.2 Is China a member of the World Trade Organisation? Has China made commitments under the GATS/GATT regarding telecommunications and has China adopted the WTO Basic Telecommunications Agreement?

Yes, China's commitments under GATS/GATT allow for foreign investment in the telecommunications industry; however, these concessions still limit the amount of foreign equity participation in most areas (i.e. joint ventures with Chinese partners are required), and foreign investors as well as their Chinese partners must meet specific qualifications to apply. (See question 12.1.)

1.3 How is the provision of electronic communications networks or services regulated? Is the provision of electronic communications networks or services open to competition in China?

The *Telecommunications Law* (effective 20 September 2000) divides the industry into two sectors: basic telecommunications and value-added telecommunications services ("VATS"). The basic telecommunications sector includes fixed-network domestic long distance and local telephony, mobile network voice and data services, satellite communications, internet and other data transmission, sale and leasing of bandwidth and other network elements, international communications infrastructure, and reselling of basic telecommunications services.

Value-added telecommunications services include email, online database storage and retrieval, online data processing, internet access services, and internet information services. It is important to note

access services, and internet information services. It is important to note that, unlike other jurisdictions, China regulates services such as the provision of internet content as a form of telecoms service, thus triggering discretionary regulatory approvals for operating licences under the *Telecommunications Licensing Management Measures* (as revised effective 10 April 2009).

Companies providing basic telecommunications services must be at least 51% state-owned. Currently the basic telecommunications sector is dominated by three state-owned enterprises: China Telecom; China Unicom; and China Mobile. On the face of national regulations, the VATS sector is relatively more open to competition - foreign investors are allowed to hold up to 50% of the equity interest of a company in this sector – although due to policy restrictions foreign investors often choose to participate in the market through indirect investment. (See question 12.1.)

Chinese telecoms companies with foreign shareholders are commonly called FITEs, an acronym for "foreign invested telecommunications enterprises". As indicated above, FITEs can only be established as joint venture enterprises between qualified Chinese and foreign parties.

1.4 Which are the regulatory and competition law authorities? How are their roles differentiated? Are they independent from the government?

There is a polyarchy of regulatory authorities in China which have jurisdiction over various aspects of the telecommunications industry, including:

- (1)the Ministry of Industry and Information Technology ("MIIT"), which is the primary authority with jurisdiction over the telecoms sector, including the approval of licenses to operate in the telecommunications industry;
- (2) the State Administration of Radio, Film and Television ("SARFT"), which has jurisdiction over the content of video and audio broadcast over the internet and the coaxial cable infrastructure, and claims authority over any telecommunications uses of that infrastructure;
- (3) the State Administration for Industry and Commerce ("SAIC"), which is the national commercial registration authority for issuing business licences;

- (4) the Ministry of Commerce ("MOFCOM"), which has authority to approve foreign investment projects and mergers and acquisitions, including those in the telecommunications industry; and
- (5) the National Development and Reform Commission ("NDRC"), which has authority over project approval and other preliminary approvals. The Ministry of Construction ("MOCON") has regulatory authority over licensing construction enterprises (necessary for companies building telecommunications infrastructure), with additional industry specific construction licences required from MIIT.

The Anti-monopoly Law (effective 1 August 2008) created three regulatory bodies for enforcing competition law: (1) an Anti- monopoly Commission (under MOFCOM) with authority to issue guidelines and policies and evaluate proposed mergers and acquisitions; (2) an Anti-monopoly Law Enforcement Agency (under the SAIC) with authority to investigate monopolistic practices and execute enforcement actions; and (3) a Price Supervision and Inspection Division (under the NDRC) charged with investigating and enforcing anti-competitive pricing practices.

1.5 Are decisions of the national regulatory authority able to be appealed? To which court or body?

Under the *Administrative Licensing Law* (effective 1 July 2004) decisions relating to administrative licensing can be appealed to an administrative hearing board within the agency, affording the parties an opportunity to present evidence and conduct cross-examinations.

In addition, decisions of regulatory authorities are generally subject to appeal before the administrative division of the trial-level People's Court at the place where the disputed administrative act (or omission) took place, subject to the *Administrative Procedure Law* (effective 1 October 1990). Higher-level People's Courts may assert jurisdiction over matters which are deemed important. However, certain administrative acts are not subject to appeal before the people's Courts, including those involving issues of national security (which could in some instances be a consideration in the telecommunications industry).

To date, few, if any, Chinese companies or foreign investors have sought judicial review for a decision by national regulatory authorities denying an operating permit for a FITE.

2 Licensing

2.1 If a licence or other authorisation is required to install or operate electronic communications networks or provide services over them, please briefly describe the process, timescales and costs.

Companies seeking to install or operate an electronic communications network must first obtain appropriate licences from the agencies listed above. Foreign companies directly investing in the telecommunications industry must procure approval for establishing a FITE, and obtain the corresponding business license and operating permits. Companies with wholly Chinese equity ownership need only complete registration procedures, procure an appropriate business scope in their business licence and obtain the requisite operating licences.

The process for approving a FITE is time consuming and the numerous requirements have deterred direct foreign investment. There are slightly varying application processes for FITEs depending on (1) whether the FITE will conduct basic or value added telecommunications services, and (2) whether it operates on an inter-provincial scale, or solely within a province, autonomous region or directly administered city. In general, the Chinese party to the joint venture must first apply to MIIT for approval of the venture which will be approved or denied within 30-180 days depending on the proposed FITE's business scope and its investors. (See question 12.1.)The MIIT has interpreted its regulations and China's WTO accession documents in a manner enabling the Ministry to withhold approvals for FITEs in certain VATS sectors. A slightly more relaxed alternative is available for foreign VATS investors qualifying for special treatment under the Closer Economic Participation Agreement between Hong Kong and the PRC.

2.2 What other requirements, permits or approvals must be met or obtained before networks may be installed or operated and services provided?

Besides obtaining a FITE business licence and a telecommunications operating licence covering the company's intended business activities, a number of additional licences must be acquired for certain activities. For example: importing telecommunications network equipment requires a Telecommunications Network Equipment Licence (requiring the applicant to demonstrate adequate quality control and after-sales service prior to connection with the PSTN); telecommunications equipment deployed in areas prone to severe earthquakes must receive an additional certification from MIIT under the *Administrative Measures for Seismic Performance Testing of Telecommunications Equipment* (effective 10 April 2009), and companies building telecommunications networks must apply for a Telecommunications

Construction Supervision Company Certificate from MIIT and additional certifications from MOCON.

2.3 May licences or other authorisations be transferred and if so under what conditions?

Generally, telecommunications operating licences and other authorisations cannot be transferred. If the equity structure of a company holding certain telecommunications licences changes, MIIT must be notified of the change and the licence's validity will be reviewed.

2.4 What is the usual or typical stated duration of licences or other authorisations?

A basic telecommunications operating licence will be valid for either 5 or 10 years, depending on the company's business scope. A VATS operating licence will be valid for 5 years

3 Public and Private Works

3.1 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?

Article 46 of the *Telecommunications Law* provides that basic telecommunications providers can install power and telecommunications lines, and wireless stations for public use on private land in exchange for a fee. The fee amount will be determined prior to construction by reference to the provincial-level MIIT standards at the place of installation.

3.2 Is there a specific planning or zoning regime that applies to the installation of telecommunications infrastructure?

There are no specific planning or zoning regulations addressing installation of network infrastructure. Rather, basic telecommunications providers draft plans in consultation with MIIT for approval on an individual project basis. The *Circular on Strengthening Management of Telecommunications Infrastructure and Network Construction* (effective 6 July 2005) states generally that no entity may interfere with the network construction activities of basic telecommunications providers.

3.3 Are there any rules requiring established operators to share their infrastructure, e.g. masts, sites, ducts or cables (i.e. dark fibre)? Are there any proposals to mandate 'passive access' to such basic infrastructure?

Basic telecommunications operating companies are required to lease, sell, or swap excess capacity with other licensed providers to ensure efficient use of resources subject to the *Circular on Strengthening Management of Telecommunications Infrastructure and Network Construction*.

4 Access and Interconnection

4.1 Is network-to-network interconnection and access mandated, and what are the criteria for qualifying for the benefits of interconnection?

Interconnection of public telecommunications networks is mandated for basic telecommunications services operators under the *Public Telecommunications Network Connectivity Rules* ("Connectivity Rules", effective 10 May 2001). No measures may be taken which limit or delay access to third party telecommunications providers. To qualify for interconnection, an enterprise must have a basic telecommunications operating license.

4.2 How are interconnection or access disputes resolved? Does the national regulatory authority have jurisdiction to adjudicate and impose a legally binding solution?

The *Telecommunications Network Connectivity Dispute Resolution Measures* (effective 1 January 2002) grant MIIT jurisdiction to mediate interconnectivity and access disputes, and the authority to impose binding administrative decisions.

4.3 Are any operators required to publish their standard interconnection contracts and/or prices?

MIIT sets pricing standards for interconnectivity of telecommunications networks depending on the originating and receiving party according to the *Public Telecommunications Network Interconnectivity Pricing Measures* (as amended from time to time).

4.4 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?

Interconnection charges for optical fibres and other telecommunications lines are regulated through a government guidance price (setting forth a base price and permissible fluctuation range) under the Circular on *Charging for Telecommunications Services to be Co-managed by Local Telecommunications and Price Authorities* (effective 6 August 2002).

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

Accounting is separated for different operators and rules on cost sharing are provided in the *Connectivity Rules and the Allocation Measures for Settlement and Relay Costs between Connected Public Telecommunications Networks* (effective 1 November 2003). Article 36 of the Connectivity Rules provides that operators shall clearly divide operation and maintenance obligations between connected networks. The Connectivity Rules further presume the independent legal status of separate operators.

4.6 How are existing interconnection and access regulatory conditions to be applied to next generation (IP-based) networks?

On 6 January 2009, the MIIT issued 3G licences to China Mobile, China Unicom and China Telecom, the three major state-owned basic telecommunications services providers. No regulations have yet been published specifically on interconnection for nextgeneration networks.

4.7 Are owners of existing copper local loop access infrastructure required to unbundle their facilities and if so, on what terms and subject to what regulatory controls? Are cable TV operators also so required?

Currently there are no published legal requirements for owners of copper local loop access or cable TV infrastructure to unbundle their facilities.

4.8 Are there any regulations or proposals for regulations relating to next-generation access (fibre to the home, or fibre to the cabinet)? Are any 'regulatory holidays' or other incentives to build fibre access networks proposed?

Though no formal proposals for regulations on next-generation access have yet been published, a June 2009 report in *China Communications Weekly*, an official paper of the MIIT, indicated that the three major basic telecoms operators in China are implementing pilot projects for next-generation access and probably will use EPON technology.

5 Price and Consumer Regulation

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

Yes, the MIIT may order price controls under the *Telecommunications Law*. Specific price controls are found in a number of regulations including the *Circular Reforming Certain Telecommunications Fees* (effective 1 January 2005), and the *Circular Limiting Roaming Fees for Mobile Telephone Customers* (effective 13 February 2008).

5.2 Is the provision of electronic communications services to consumers subject to any special rules and if so, in what principal respects?

Yes, rules applicable to providers of telecommunications services are found in a MIIT *Circular on Telecommunications Service Coverage* (effective 20 April 2005), regulating quality and setting standards for fixed line and wireless telephone, internet, satellite and other services. Requirements for obtaining administrative licences in these areas are listed in the *Administrative Licensing Item List* (effective 10 April 2009). National and regional consumer protection laws also provide avenues for consumers opposing unilateral actions by operators.

6 Numbering

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

Applications for telephone numbers should be made to MIIT in accordance the *Telecommunications Network Number Resource Management Measures* ("Network Resource Measures", effective 1 March 2003). Special "short" telephone numbers and network identifying codes are also allocated by MIIT.

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

The Network Resource Measures restrict use of certain telephone numbers. For example, numbers starting with "1" are reserved for cellular phone use, and five-digit telephone numbers starting with "95" are reserved for use by services companies such as travel agencies.

6.3 How are telephone numbers made available for network use and how are such numbers activated for use by customers?

Basic telecommunications providers will assist users in activating their telephone numbers within ten working days of signing a service agreement. Following activation, the basic telecommunications service provider will register the number and its use with MIIT.

6.4 What are the basic rules applicable to the 'porting' (i.e. transfer) of telephone numbers (fixed and mobile).

"Number portability" has not yet been adopted as a business custom and there are no specific regulations allowing single users to port telephone numbers from one service provider to another. However, the Network Resource Measures prohibit telephone number users from selling or transferring or changing the use of their telephone numbers without MIIT approval.

7 Submarine Cables

7.1 What are the main rules governing the bringing into China's territorial waters, and the landing, of submarine cables? Are there any special authorisations required or fees to be paid with respect to submarine cables?

There are no published laws regarding the fees for bringing submarine cables into PRC territorial waters or for landing them; however, only basic telecommunications operating companies (i.e. majority state-owned enterprises) may operate international telecommunications networks under the *Telecommunications Licensing Management Measures*. Foreign companies signing cooperative agreements with PRC companies to engage in installation or maintenance of submarine cables must receive approvals from MIIT, the State Planning Committee and MOFCOM, as required by the *International Communications Facilities Construction Management Measures* (effective 1 August 2002).

8 Radio Frequency Spectrum

8.1 Is the use of radio frequency spectrum specifically regulated and if so, by which authority?

The use of radio frequency spectrum is jointly regulated by the Radio Management Department of the Military Affairs Committee and the MIIT. Detailed regulations on the radio frequency spectrum are found in the *Radio Management Measures* (issued by the Military Affairs Committee, effective 11 September 1993) and the *Radio Frequency Distribution Rules* (issued by MIIT, effective 5 September 2006). Individual amateur radio hobbyists may also apply to the MIIT for permits following certification under the *Amateur Radio Call Sign Management Measures* (effective 27 April 2007) and the *Provisional Measures for Foreigners Operating Amateur Radio Stations* (effective 1 February 2001).

8.2 How is the use of radio frequency spectrum authorised in China? What procedures are used to allocated spectrum between candidates - i.e. spectrum auctions, comparative 'beauty parades', etc.?

Radio frequencies are allocated on a centralised basis under the *Radio Management Measures* by the state radio regulatory entity and its local counterparts.

8.3 Are distinctions made between mobile, fixed and satellite usage in the grant of spectrum rights?

The *Radio Frequency Distribution Rules* distinguish mobile, fixed and satellite usage in granting spectrum rights, designating primary and secondary usage categories for each frequency.

8.4 How is the installation of satellite earth stations and their use for up-linking and down-linking regulated?

Satellite earth stations and their use for up-linking and downlinking are regulated pursuant to the *Rules on Establishing Satellite Communication Networks and Installing Earth Stations* (effective 10 April 2009). Earth stations sending or receiving signals from foreign countries, Hong Kong, Taiwan and Macau must be approved by MIIT.

8.5 Can the use of spectrum be made licence-exempt? If so, under what conditions?

No, it cannot.

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

Nominal registration fees for radio frequency spectrum use are payable as set forth in the *Radio Fee Management Rules* (effective 1 April 1998) and supplemented by the NDRC and Ministry of Finance effective 1 January 2004.

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

Transfer or lease of radio frequency spectrum (or accomplishing an effective transfer or lease by other means) is prohibited under the *Rules on Strengthening Radio Frequency and Station Management* (effective 7 February 1994).

9 Data Retention and Interception

9.1 Are operators obliged to retain any call data? If so who is obliged to retain what and for how long? Are there data protection (privacy rules) applicable specifically to telecommunications?

Telecoms operators must preserve original data on long-distance call charges, mobile phone call charges, mobile phone message fees and IP telephone call charges for at least for 5 months under the *Norms for Telecommunications*

Services (effective 13 March 2005). Email service providers must record the IP addresses, email addresses and sending or receiving times of all emails and preserve the information for 60 days under the *Email Services Management Measures* (effective 30 March 2006).

There are currently no comprehensive privacy laws applicable to telecommunications, but telecoms operators are generally obliged to preserve the confidentiality of information collected by various regulations governing particular sectors of the industry. A draft *Personal Information Privacy Law* which would affect electronic communications and record-keeping has been in circulation since 2003; however, there is no announced date for a vote before the National People's Congress.

9.2 Are operators obliged to maintain call interception (wiretap) capabilities?

Yes, telecommunications operators are required to build and operate their networks to comply with national security requirements, including allowing the authorities to examine the contents of communications in the course of a lawful investigation.

9.3 What is the process for authorities obtaining access to retained call data and/or intercepting calls? Who can obtain access and what controls are in place?

National security authorities may initiate electronic surveillance following an internal approval process under the *National Security Law* (effective 22 February 1993). The people's courts, procurates, and the Public Security Bureaux have the right to collect evidence and conduct surveillance in the course of an investigation under the *Criminal Procedure Law* (effective 1 January 1997).

10 The Internet

10.1 Are conveyance services over the internet regulated in any different way to other electronic communications services? Which rules, if any, govern access to the internet at a wholesale (i.e. peering or transit) and/or retail (i.e. broadband access) level? Are internet service providers subject to telecommunications regulation?

Provision of information services over the internet is subject to specific regulation by MIIT and websites are divided by the *Internet Information Services Measures* (effective 20 September 2000) into two types: Operating Internet Information Services ("OIIS"); and Non-operating Internet Information Services ("NIIS"). OIIS websites include any provision of online information in exchange for payment, and require a VATS operating licence. NIIS registration is available for websites providing free information online upon filing a form containing information about the person responsible for the online content, as listed in the *NIIS Registration Measures* (effective 20 March 2005). For all websites, an Internet Content Provider ("ICP") number will be issued to the site's operator following registration with MIIT. Websites must list their ICP number and a link to the MIIT website at the bottom centre of the front page.

Internet access providers must operate in accordance with the *Internet Website Management Work Details* (effective 1 December 2005), requiring that access providers collect accurate information on content providers and not allow customers to upload content without an ICP number.

10.2 Is there any immunity (e.g. 'mere conduit' or 'common carrier') defence available to protect telecommunications operators and/or internet service providers from liability for content carried over their networks?

There is no immunity defence for internet service providers. Under the *Internet Information Services Measures*, internet information service providers may not produce, reproduce, disseminate or broadcast information with content prohibited by law. The *Telecommunications Licensing Management Measures* further provide telecommunications operators are responsible for monitoring content which they host and notifying the authorities of any illegal content.

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

The Administrative Measures for Protecting Copyrights on the Internet (effective 30 May 2005) require internet service providers to immediately remove infringing content upon receiving notice from the copyright holder. The ISP must further record the content of the information provided, the time of publication and the internet address or domain name used for publishing such information, along with information on the account of the user posting the infringing content.

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

Telecommunications operators may charge different rates for certain types of traffic over their networks. According to the *Telecommunications Regulations*, charges for telecommunications services for which there is sufficient competition can be charged at a market price. However, charges for certain basic telecommunications services shall be fixed by the government.

Telecommunications operators cannot refuse, delay or terminate the provision of telecommunications services to a telecommunications subscriber without a legitimate reason. However, telecommunications operators are obligated to block content contravening China's laws and regulations.

10.5 How are 'voice over IP' services regulated?

VOIP services are categorised as basic telecommunications services under the *Catalogue of Telecommunication Services* (as revised effective 21 February 2003); providers therefore require a Basic Telecommunications Services Operating Licence from the MIIT.

According to the Circular on Adjusting Management of Charges for Some Telecommunications Services (effective 1 October 2005), there are no government mandated price controls for VOIP services. Additional compulsory technical standards are found in the Norms for Telecommunications Services.

10.6 Are there any rules to prevent, restrict or otherwise govern internet or email communications, in particular, marketing and advertising communications?

There are a number of restrictions on internet communications under the current regulatory regime. Unsolicited email advertisements are illegal and all email advertisements must contain the word "AD" or its Chinese equivalent in the subject line: violators are subject to fines of up to RMB 30,000 if the sender receives "illegal proceeds" from his actions, subject to the Email Services Management Measures. Other marketing and advertising communications on the internet are subject to the same general regulations as offline advertising, under the jurisdiction of SAIC. Websites with bulletin board services must apply to MIIT as described in the Internet Bulletin Board Service Measures (effective 8 October 2000). Article 15 of the Internet Information Services Measures prohibits publication or distribution of certain types of information, including that which harms national security, causes loss to the nation's reputation or interests, promotes ethnic discrimination or hatred, or has pornographic content. Content relating to news, publishing, education, medicines or medical devices and other regulated information must be approved by the relevant PRC government authority.

<u>11 USO</u>

11.1 Is there a concept of universal service obligation; if so how is this defined, regulated and funded?

Article 44 of the *Telecommunications Law* creates a duty to provide universal service and authorises MIIT to consult with the Ministry of Finance to enact *Measures for Managing the Telecommunications Universal Service Fund* (which have not yet been published). Some service obligations of telecommunications providers are listed in detail in the MIIT *Circular on Telecommunications Service Coverage* mentioned above.

12 Foreign Ownership Rules

12.1 Are there any rules restricting direct or indirect foreign ownership interests in electronic communications companies whether in fixed, mobile, satellite or other wireless operations?

The Rules on Foreign Investment in Telecommunications Companies (as amended effective 10 September 2008) and the Telecommunications Licensing Management Measures (as revised effective 10 April 2009) set out application procedures for foreign invested companies seeking to invest in

out application procedures for foreign invested companies seeking to invest in basic or value-added telecommunications services. Companies providing basic telecommunications services must be at least 51% state-owned. Companies providing value-added telecommunications services may be up to 50% foreign-owned.

FITEs may only be established as joint venture companies with PRC companies and there are a number of restrictions which have made establishing FITEs impractical, including: (1) the minimum registered capital of a FITE engaging in inter-province basic telecommunications must be at least RMB 1 billion; (2) the primary foreign investing party must be registered to provide similar telecommunications services in its home country (a restriction precluding investment by venture capitalists); and (3) the primary Chinese investing party must also be registered to provide telecommunications services similar to those provided by the FITE, limiting the number of potential partners for foreign investors.

Onerous restrictions on direct foreign investment in the telecommunications industry have led many foreign investors to enter the market through a "CCF" structure involving three parties: (1) a wholly domestic-owned Chinese party with the necessary licenses and approvals; (2) a foreign-owned Chinese entity effectively controlling the first enterprise through a series of contracts; and (3) the foreign party which owns and controls the second enterprise.

13 Future Plans

13.1 Are there any imminent and significant changes to the legal and regulatory regime for electronic communications?

Publicly available information from MIIT indicates that a new *Telecommunications Law* is scheduled for approval before the end of the current five-year plan in 2011; however, no drafts have yet been published. Draft *Measures on Internet Safety and Supervision* were published on 18 August 2009 and propose requiring telecoms operators and domain name service providers to implement network "supervision systems" connecting to central systems operated by MIIT. The draft measures are intended to improve "internet safety", including ensuring stable services and preventing unlawful tampering or access to online information.

India

1.1 What are the overall policies and objectives for the electronic communications industry and have these been published in draft or final form? What legislation is relevant to telecommunications and radio frequencies?

The National Telecom Policy of 1994 ("1994 Policy") laid down the foundation for the growth of the electronic communications industry in India. The key objective of the 1994 Policy was to provide basic telecom services to all at affordable prices. The 1994 Policy also aimed at bringing the quality of telecom services in India at par with high global standards and also making India a significant exporter of telecom equipment.

In order to revamp the Policy of 1994, the government replaced it with the New Telecom Policy in 1999 ("1999 Policy"). In addition to laying down the framework to achieve the targets as set in the 1994 Policy in a more effective manner, the 1999 Policy also aims to usher the development of a modern telecommunications infrastructure based on the convergence of synergies of the IT, media, telecom and consumer electronics industries.

The Indian Telegraph Act, 1885 and the Indian Wireless Telegraphy Act, 1933 are the statutes most relevant to telecommunications and radio frequencies in India.

1.2 Is India a member of the World Trade Organisation? Has India made commitments under the GATS/GATT regarding telecommunications and has India adopted the WTO Basic Telecommunications Agreement?

India has been a member of the World Trade Organisation since January 1, 1995. Though India is a signatory to the WTO Basic Telecommunications Agreement, it has restricted its commitments to the minimum by binding itself to observe only regulatory principles of its own creation.

1.3 How is the provision of electronic communications networks or services regulated? Is the provision of electronic communications networks or services open to competition in India?

The provision of electronic communications or services is regulated by two primary legislations, *viz*, The Indian Telegraph Act, 1885 and The Indian Wireless Telegraphy Act, 1933. Besides, the Information Technology Act, 2000 governs the electronic commerce industry in India.

With the aim to increase the quality of electronic communications services and also to provide the same at the cheapest possible rates, the government has encouraged competition in this sector. Multiple licences have been issued to basic telephone, cellular, ISP, satellite and cable TV operators to create a competitive electronics communications infrastructure.

1.4 Which are the regulatory and competition law authorities? How are their roles differentiated? Are they independent from the government?

The Telecom Regulatory Authority of India (TRAI) is an autonomous body regulating the telecommunications framework in India. TRAI was constituted under the Telecom Regulatory Authority Of India Act of 1997 with a view to provide an effective regulatory framework and adequate safeguards to ensure fair competition and protection of consumer interests.

In order to bring in functional clarity, strengthening the regulatory framework and the disputes settlement mechanism in the telecommunication sector, the TRAI Act of 1997 was amended in the year 2000.

The amendment of 2000 gave birth to Telecom Disputes Settlement & Appellate Tribunal (TDSAT) to adjudicate disputes arising in the telecommunications sector. The formation of TDSAT was one of the most important developments in the history of telecommunications sector in India as disputes with government could now be decided without prejudice owing to the independent stature of TDSAT.

The Monopolies and Restrictive Trade Practices Commission (MRTPC) is the authority having jurisdiction on matters relating to competition law. Until very recently, MRPTC was the only authority to regulate issues relating monopolistic and restrictive trade practices. In May 2009 the government issued notifications to bring the Competition Commission of India (CCI) into force, which was originally proposed under the Competition Act of 2002 to replace the ageing MRPTC. However, since the Monopolies and Restrictive Trade Practices Act, 1969 has still not been repealed, MRTPC and CCI co-exist in the current scenario. CCI will have the power to initiate cases against enterprises involved in anticompetitive agreements and where these enterprises indulge in abusing their dominance in the relevant market.

The Ministry of Communications and Information Technology, Department of Telecommunication ("DOT") is the regulatory authority of the Government of India that makes policies, issues licences and generally oversees telecom related matters in India.

1.5 Are decisions of the national regulatory authority able to be appealed? To which court or body?

TDSAT has jurisdiction to hear and dispose any appeal against any decision, direction or order of TRAI. A further appeal lies to the Supreme Court from any order of TDSAT, not being an interlocutory order, but only if the appeal involves a substantial question of law.

2 Licensing

2.1 If a licence or other authorisation is required to install or operate electronic communications networks or provide services over them, please briefly describe the process, timescales and costs.

The Department of Telecommunications (DOT) under the Ministry of Telecommunications regulates the licensing regime in the telecom sector. In furtherance with the New Telecom Policy of 1999, DOT has been issuing separate licences for cellular mobile service providers, fixed service providers, cable service providers, radio paging service providers, national long distance operators, international long distance operators, V-Sat based service providers and also for several other telecommunication services. Due to the convergence of new technologies in the last few years and also for the proper conduct of telecommunication services, DOT has introduced two new licenses, namely the Unified Licence for Telecommunication Services (ULTS) permitting the licensee to provide all telecommunication services covering various geographical areas using any technology and the Licence for Unified Access (Basic and Cellular) Services permitting Licensee to provide Basic and/or Cellular Services using any technology in a defined service area.

The process, timescales and costs involved in obtaining each of the above mentioned licences vary as per separate guidelines issued by DOT for each of these services.

2.2 What other requirements, permits or approvals must be met or obtained before networks may be installed or operated and services provided?

Several approvals from civic bodies and local government in a citymust be obtained by an operator for setting up of infrastructure for a specific telecommunication service. Generally, in the license agreement with DOT, the onus is on the licensee to obtain these ancillary approvals.

2.3 May licences or other authorisations be transferred and if so under what conditions?

DOT does allow transfer of license rights but only with its prior written consent and in accordance with the terms and conditions as laid down in a specific license agreement. For Example, one of the conditions for transfer of an International Long Distance Service License (ILD) is that all the dues should be fully paid by the transferor and the transferee should undertake to pay all future dues to the Licensee.

2.4 What is the usual or typical stated duration of licences or other authorisations?

The duration of a telecom licence depends on the nature of service. For example, the International Long Distance Service License and the National Long Distance Service License are valid for 20 years, whereas the duration for an Internet Service Provider License is 15 years from the effective date.

3 Public and Private Works

3.1 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 provisions dealing with access and/or securing or enforcing rights to public and private land in order to install telecommunications structure are laid down in the Indian Telegraph Act, 1885 (ITA). Part III of the ITA confers powers upon the regulatory authority to place and maintain telegraph lines and posts upon any immovable property. Part III of the ITA also contains provisions to harmonise the powers granted to the regulatory authority to set up telecom infrastructure with that of the powers of the local authorities under whose jurisdiction the management of the immovable property lies.

3.2 Is there a specific planning or zoning regime that applies to the installation of telecommunications infrastructure?

Installation of telecommunications infrastructure is controlled by TRAI and the local civic bodies in each state. Several approvals at different stages have to be sought from the local civic bodies under the local state laws where the infrastructure is intended to be set up.

3.3 Are there any rules requiring established operators to share their infrastructure, e.g. masts, sites, ducts or cables (i.e. dark fibre)? Are there any proposals to mandate 'passive access' to such basic infrastructure?

Currently, Indian telecom companies are permitted to share only passive infrastructure such as towers, repeaters, shelters and generators. Both TRAI as well as operators feel that, where radio access networks of operators are shared, better intra-circle roaming can be achieved. There are companies that have started setting-up passive infrastructure as a source of revenue. Companies such as Quipo are aiming to build at least 5,000 towers to lease out to mobile operators in India. TRAI, in its recent recommendations on growth of telecom services in rural India, prescribes infrastructure sharing as the solution for improving rural tele-density. The DOT has issued guidelines on infrastructure sharing among the Service Providers and Infrastructure Providers thereby facilitating further reduction in tariff.

4 Access and Interconnection

4.1 Is network-to-network interconnection and access mandated, and what are the criteria for qualifying for the benefits of interconnection?

TRAI regulates network-to-network interconnection service between different service providers. The Unified Access Service license granted by the DOT mandates the licensee to provide interconnection to all eligible telecom service providers.

4.2 How are interconnection or access disputes resolved? Does the national regulatory authority have jurisdiction to adjudicate and impose a legally binding solution?

TDSAT has jurisdiction on all telecom disputes including those relating to interconnection or access.

4.3 Are any operators required to publish their standard interconnection contracts and/or prices?

Yes, TRAI makes it mandatory for all operators to publish their standard interconnection contracts and/or prices.

4.4 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?

The Telecommunication Interconnection (Charges and Revenue Sharing) Regulation 1999 regulates arrangements among service providers for interconnection charges and revenue sharing, for all Telecommunication Services throughout the territory of India, as well as those originating in India and terminating outside India. The legislation lays down that Interconnection charges shall be cost based, for which the main basis of consideration shall be "incremental or additional" costs directly attributable to the provision of interconnection by the interconnection provider. It also prohibits service providers from discriminating between service providers in the matter of levying of charges for interconnection.

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

Service providers are subject to accounting separation vide notification no. 16-31/2004-FA, 'The Reporting System on Accounting Separation (fourth amendment) Regulation, 2006(4 of 2006)'. Similarly, as per the Revised "Terms and Conditions - Other Service Provider (OSP) Category", issued by the Department of Telecommunications, (Carrier Services Cell), OSP is required to ensure that there will be a logical separation between the Telecom Resources for OSP and the Telecom Resources for their other activities. There shall be no voice / non-voice traffic flow between them. Also, Interconnectivity of the International OSP with Domestic OSP is not permitted.

4.6 How are existing interconnection and access regulatory conditions to be applied to next generation (IP-based) networks?

Guidelines for issue of permission to offer internet telephony services through IP based protocol were issued by DOT on 1st April, 2002, allowing the use and provision of 'internet telephony' in India.

4.7 Are owners of existing copper local loop access infrastructure required to unbundle their facilities and if so, on what terms and subject to what regulatory controls? Are cable TV operators also so required?

Recommendations for mandatory unbundling of copper local loop access were made by TRAI to the Government of India; however the same has not yet been implemented.

4.8 Are there any regulations or proposals for regulations relating to next-generation access (fibre to the home, or fibre to the cabinet)? Are any 'regulatory holidays' or other incentives to build fibre access networks proposed?

TRAI had made recommendations with respect to introduction and licensing of the next generation network services. Besides, Centre for Development of Telematics (C-DOT) is the Telecom Research and Development Centre of the Government of India. C-DOT's current focus is on the development and deployment of next generation networks and cost effective rural wireless solutions. Currently, C-DOT's scheme focuses on design and development of Gigabit Passive Optical Network (G-PON). Two types of ONTs, namely, NT-1 related to SFU (Small family Unit) for residence application and ONT-2 related to SOHO (Small Office/Home Office) for business application to deliver triple play services have been completed with the prototypes ready and integration testing in the lab is in progress.

5 Price and Consumer Regulation

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

Price fixation is regulated by TRAI in the telecom sector in India. Telecom operators are required to follow guidelines issued by TRAI from time to time in relation to tariff for fixed telephony, cellular services, DTH services, cable services, etc. All telecom operators have to keep TRAI updated with their tariff schemes as implemented by them in accordance with the guidelines mandated by TRAI.

5.2 Is the provision of electronic communications services to consumers subject to any special rules and if so, in what principal respects?

One of the key objectives leading to the formation of TRAI was protection of consumer interest. With rapidly changing technology and the nature of consumer demands, TRAI regularly issues guidelines for telecom operators in relation to standards for quality of service. Provisions of Value Added Services for enhanced transparency with regard to taking explicit consent of consumers and preventing accidental subscription to value added services is an example of such guidelines issued by TRAI from time to time. A very recent step taken by TRAI in the interest of consumers has been the introduction of Mobile Number Portability for mobile phone subscribers to

switch from one operator to another while retaining their original mobile phone number.

6 Numbering

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

The National Numbering Plan of 2003 (NNP) governs the allocation of telephone numbers and network identifying codes. The NNP was issued by DOT and is amended at regular intervals to meet the challenges of multi-operator, multi-service environment.

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

As mentioned in the answer to question 6.1, the NNP formulated by DOT govern the use of telephone numbers in India.

6.3 How are telephone numbers made available for network use and how are such numbers activated for use by customers?

Telephone numbers are made available for network use according to the National Numbering Scheme (NNS) under the NNP which provides for national and international codes and formats. Customers get access to these numbers through the services operators they subscribe to.

6.4 What are the basic rules applicable to the 'porting' (i.e. transfer) of telephone numbers (fixed and mobile).

DOThas formulated guidelines for Mobile Number Portability (MNP) allowing mobile phone subscribers to switch from one telecom service provider to another while retaining their existing mobile numbers. To facilitate a smooth MNP process, DOT has granted licences to neutral third parties to build, own and operate MNP systems. As of now only two neutral third parties have been granted MNP licences to operate in separate zones in India. MNP will be first implemented in the states of Delhi, Maharashtra, Gujarat, Tamil Nadu, Kolkata, Andhra Pradesh and Karnataka by September 20, 2009. MNP is the first initiative of DOT for porting of telephone numbers and the DOT is yet to formulate guidelines for transfer of fixed line numbers.

7 Submarine Cables

7.1 What are the main rules governing the bringing into India's territorial waters, and the landing, of submarine cables? Are there any special authorisations required or fees to be paid with respect to submarine cables?

DOT has issued guidelines for setting up of submarine cable landing stations for international gateways for internet. Amongst other rules prescribed, the primary directives for setting up a landing station are that the international gateway for Internet shall be used only for carrying internet traffic and shall not be used for any activity which is against public interest. For setting up a submarine cable landing station for international gateway for internet, a prescribed form issued by DOT has to completed and submitted in order to obtain an approval from the Ministry of Communications.

8 Radio Frequency Spectrum

8.1 Is the use of radio frequency spectrum specifically regulated and if so, by which authority?

The Wireless Planning & Coordination Wing (WPC) of DOT, created in 1952, is the National Radio Regulatory Authority responsible for Frequency Spectrum Management in India. WPC specifically regulates radio frequency spectrum in India.

8.2 How is the use of radio frequency spectrum authorised in India? What procedures are used to allocated spectrum between candidates - i.e. spectrum auctions, comparative 'beauty parades', etc.?

For the grant of appropriate radio frequency spectrum, an application to WPC is required to be made as per the prescribed procedure and the same is granted subject to the spectrum availability. Recently, DOT has issued detailed guidelines for auction and allotment of spectrum for broadband wireless access services and 3G services.

8.3 Are distinctions made between mobile, fixed and satellite usage in the grant of spectrum rights?

The grant of frequency spectrum varies as per the usage of a system for mobile, fixed or satellite based services.

8.4 How is the installation of satellite earth stations and their use for uplinking and down-linking regulated?

DOT Satellite Cell issues licences for operation of telecom/broadcast service using satellite media in India, and any entity interested in installation of satellite earth stations and their use for up-linking and down-linking needs to apply to

DOT Satellite Cell and seek permission for the same. Besides, clearances would also be required from WPC and Network Operations Control Centre. Thereafter such an entity would be required to get space segment allotted or reserved from Department of space or another authorised satellite operator.

8.5 Can the use of spectrum be made licence-exempt? If so, under what conditions?

WPC through its notifications G.S.R 45 and 46 (E) dated 28th January 2005 called the "Use of low power Equipment in the frequency band 2.4 GHz to 2.4835 GHz (Exemption from Licensing Requirement) Rules, 2005" and the "Indoor Use of low power wireless equipment in the frequency band 5 GHz (Exemption from Licensing Requirement) Rules, 2005" has exempted certain specified frequency bands (such as, 2.4GHz to 2.4835 GHz, 5 GHz and 5.825 GHz to 5.875 GHz) from the licensing requirement for the purpose of their usage for low power wireless equipments.

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

According to the Financial Conditions laid down under the License Agreement for Captive VSAT Services Closed User Group Domestic Data Network Using INSAT Satellite System the applicant company will be required to pay a one-time entry fee of Rs. 30 lakhs before signing the License Agreement. Entry fee will not be applicable for the migration to new regime by existing licensees.

License Fees:

In addition to the Entry Fee, the licensee shall also pay a licence fee annually at @ Rs. 10,000 per annum per VSAT installed. The total number of VSATs shall include all types of VSATs (receive only/transmit only/receive & transmit both etc.).

Radio Spectrum Charges

In addition, the LICENSEE shall also pay fees and Royalty for the use of Radio frequencies as per the details prescribed by WPC. The Licensee shall also pay the space segment charges as applicable from time to time and secure them through a Financial Bank Guarantee.

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

In India trading or sub-licensing of spectrum licences is not permitted as of date

9 Data Retention and Interception

9.1 Are operators obliged to retain any call data? If so who is obliged to retain what and for how long? Are there are data protection (privacy rules) applicable specifically to telecommunications?

The "Security Conditions" laid down under the ILD and NLD license Agreements oblige operators to maintain all records including called and calling numbers, date, duration and time, etc. with regard to the communications exchanged on the network for a period of one year or as directed for scrutiny by DOT or the security agencies.

The "Security Conditions" under the NLD and ILD license Agreements as well as the "Guidelines for Issue of Licence for National Long Distance Service" issued by the DOT No.10- 21/2005-BS-I/ 47, dated, 14th December 2005, order that the NLD service licensee shall ensure protection of privacy of communication and ensure that unauthorised interception of messages does not take place.

9.2 Are operators obliged to maintain call interception (wiretap) capabilities?

As per the "Security Conditions" laid down under the ILD and NLD license Agreements, operators are required to make available on demand to the agencies authorised by the Government of India, full access to the gateways, switching centres, transmission centres, servers and routers for technical scrutiny and for inspection which can be visual inspection or an operational inspection. Besides they are also obliged to provide, without any delay, tracing facility to trace nuisance, obnoxious, offensive or malicious calls, messages or communications transported through his equipment and network. In addition, a designated person of the Central/State Government as conveyed to the operator from time to time shall have the right to monitor all telecommunication traffic in every Gateway Switch, MSC, BSC and any other point in the network set up by the operator. The operator is required to make arrangements for monitoring simultaneous communication traffic (at least 210 channels) by Government security agencies at a location individually desired by the Central Government and the State Government/Union Territory. The requisite infrastructure in terms of hardware/software required for monitoring of all telecommunication traffic

shall be engineered, provided, installed and maintained by the operator at its own cost.

9.3 What is the process for authorities obtaining access to retained call data and/or intercepting calls? Who can obtain access and what controls are in place?

The direction for interception is conveyed to designated officers (who must be Indian residents) of the telecom operator, in writing. Such directions may remain in force, unless revoked earlier, for a period not exceeding sixty days from the date of issue. Such instructions may be renewed but same shall not remain in force beyond a total period of one hundred and eighty days. Copies of the intercepted message or class of messages are required to be destroyed when no longer required. The telecom operator is also required to destroy records pertaining to directions for the interception of messages within two months of discontinuance of the interception of such messages.

10 The Internet

10.1 Are conveyance services over the internet regulated in any different way to other electronic communications services? Which rules, if any, govern access to the internet at a wholesale (i.e. peering or transit) and/or retail (i.e. broadband access) level? Are internet service providers subject to telecommunications regulation?

The Information Technology Act 2000, as amended by the Information Technology (Amendment) Act 2008, regulates all forms of electronic communication in India. While DOT issues two types of licences which govern the provision of internet/broadband services i.e. Internet Service Provider License ("ISPL") and a Universal Access Service License ("UASL"). Besides the ISPL and the UASL, the provision of such services is also governed by the guidelines issued by DOT.

10.2 Is there any immunity (e.g. 'mere conduit' or 'common carrier') defence available to protect telecommunications operators and/or internet service providers from liability for content carried over their networks?

The Information Technology Act 2000, as amended by the Information Technology (Amendment) Act 2008, under section 79, provides for exemption from liability of intermediary in certain cases for any third party information, data, or communication link hosted by him if:

- (a) its function is limited to providing access to a communication system over which the information is transmitted or temporarily stored;
- (b) the intermediary does not:
- (i) initiate the transmission;
- (ii) select the receiver of the transmission; and
- (iii) select or modify the information contained in the transmission; or
- (c) in cases where the intermediary observes due diligence and follows such other guidelines prescribed by the Central Government.

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

The Internet Service Provider licence and the Universal Access Service Licence lay down an obligation on the ISP to prevent the flow of unauthorised messages or any other content infringing copyrights, intellectual property right and international & domestic cyber laws in any form over its network. As provided under the 'security provisions' of these license agreements, once specific instances of such infringement are reported to the licensee by the authorised agencies, the licensee shall ensure that the carriage of such material on his network is prevented immediately.

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

TRAI issued a direction on "Quality of Service (Code of Practice of meterering and Billing Accuracy) Regulation 2006" dated 29th June 2005, whereby all operators are obliged to inform customers in writing within a week of activation of service, complete details of the tariff plan. Before a customer is enrolled as a subscriber of any telecommunication service, he shall be provided in advance with detailed information relating to the tariff for using that service, in accordance with TRAI's Direction No.301-26/2003-TRAI (Eco) dated 2nd May, 2005 and No.301-49/2005-Eco dated 16th September 2005.

Besides, according to the 31st amendment of Telecom Tariff Order (TTO) dated 7th July 2004 issued by TRAI, a tariff plan once offered by a service provider shall be available to a subscriber for a minimum period of 6 months from the date of his enrolment into that tariff plan. During this 6-month period, the service provider is free to reduce the tariff; an increase in any item of tariff in the plan is not permitted. However, the subscriber is free to choose any other tariff plan even during the 6-month period and the Customer has the right to

move from one tariff to another plan offered by his service provider any time without having to pay any fee for the migration. Asubscriber's request for a change of tariff plan shall be accepted and implemented immediately or from the start of the next billing cycle according to the 4th amendment to TTO dated 28th July 1999 and Directive dated 15th March 2001

10.5 How are 'voice over IP' services regulated?

VOIP Services are regulated through regulations made by the Telecom Regulatory Authority of India. Besides DOT, through its notification No.820-1/2006-LR, dated 24th Aug, 2007, has issued certain "Guidelines and General Information for Grant of Licence for Operating Internet Services", and also issued "Guidelines for Issue of Permission to Offer Internet Telephony Services", which regulate the provision of VoIP services in India. Besides, on the 15th November 2002, TRAI issued a notification No.402-30/2001- FN titled "Regulation on Quality of Service for VOIP based International Long Distance Service, 2002" which is applicable to all the International Long Distance Service Providers using VOIP based networks. This regulation lays down detailed Quality of Service (QoS) Benchmarks and End-to-End QoS Parameters besides providing for Test & Measurement Setup and VoIP ILD Equipment Performance measurement. The QOS parameters can also be reviewed by the Authority from time to time.

10.6 Are there any rules to prevent, restrict or otherwise govern internet or email communications, in particular, marketing and advertising communications?

The Information Technology Act 2000, as amended by the Information Technology under Section 66A, provides for "Punishment for sending offensive messages through communication service, etc." making it a punishable offence (with imprisonment up to three years and fine) for sending via electronic message "information that is grossly offensive or has menacing character" or any false information, or for the purpose of causing annoyance or inconvenience or to deceive or to mislead the addressee or recipient.

Besides, both the Internet Service Provider License and the Universal Access Service License lay down an obligation on the ISP to prevent the flow of offensive and unauthorised messages or any other content infringing copyrights, intellectual property right and international & domestic cyber laws in any form over its network.

12 Foreign Ownership Rules

12.1 Are there any rules restricting direct or indirect foreign ownership interests in electronic communications companies whether in fixed, mobile, satellite or other wireless operations?

The cap for Foreign Direct Investment (FDI) in the telecom sector was raised from 49% to 74% in the year 2007 which bolstered investment in the Indian telecommunications industry. No approval for investment up to a limit of 49% is required as such investment falls under the automatic route of FDI. However, for any FDI exceeding the limit of 49%, a prior approval of the Foreign

Investment Promotion Board (FIBP) is mandatory.

13 Future Plans

13.1 Are there any imminent and significant changes to the legal and regulatory regime for electronic communications?

The future policies of government are as follows:

- a. Government's broad policy of taxes and regulation for the telecom sector has been promotional in nature with optimum growth.
- b. The policy governing spectrum allocation and licensing has been designed in such a way that a scarce resource should be used optimally and does not become a constraint for growth

SOUTH AFRICA

1.1 What are the overall policies and objectives for the electronic communications industry and have these been published in draft or final form? What legislation is relevant to telecommunications and radio frequencies?

The Electronic Communications Act, 2005 (ECA) is the primary legislation regulating the electronic communications industry. It deal with a number of areas including licensing, spectrum, interconnection, rights of way, numbering, broadcasting, competition, universal service and consumer issues.

In addition to the ECA, there is other legislation that regulates certain aspects of the industry:

- Electronic Communications and Transactions Act (ECTA);
- Competition Act; and
- Regulation of Interception of Communications and Provision of Communication-Related Information Act (RICA).

In addition to regulating the industry, the government has interests in licensees, *inter alia*, Telkom, Sentech, the South African Broadcasting Corporation, and Broadband Infraco.

1.2 Is South Africa a member of the World Trade Organisation? Has South Africa made commitments under the GATS/GATT regarding telecommunications and has South Africa adopted the WTO Basic Telecommunications Agreement?

South Africa is a member of the World Trade Organisation. In 1994, SA made commitments to open up the value added market segment to competition. In 1997, SA made commitments in terms of the Fourth Protocol on Basic Telecommunications, to open up other market segments, and to establish an appropriate regulatory environment as set out in the Reference Paper.

1.3 How is the provision of electronic communications networks or services regulated? Is the provision of electronic communications networks or services open to competition in South Africa?

Electronic communications networks and services are primarily regulated by the Independent Communications Authority of South Africa (ICASA) in terms of the ECA. However, the Minister of Communications (Minister) is responsible for making policy and issuing policy directions to ICASA and for making key regulatory decisions regarding licensing and spectrum.

There currently exists some competition in the provision of networks and services. However, SA is still transitioning from a regulatory framework protecting certain licensees to a competitive industry. Although nearly 400 licences were converted to individual electronic communications network services (ECNS) and electronic communications services (ECS) licences comparable to the service licences of the incumbents, the establishment of a regulatory framework effectively facilitating competition remains hampered by a number of factors, including that certain key provisions in the ECA are not clear, for example, regarding interconnection, facilities leasing and competition matters.

1.4 Which are the regulatory and competition law authorities? How are their roles differentiated? Are they independent from the government?

ICASA must regulate the electronic communications industry in terms of the ECA, including in respect of competition matters.

The Competition Act relates to competition matters across all industries, including the electronic communications industry. The Competition Act establishes the Competition Commission primarily with investigative powers, the Competition Tribunal with adjudicative powers, and the Competition Appeal Court

There is concurrent jurisdiction between ICASA and the competition authorities in respect of competition matters in the electronic communications industry. However, exactly how this is supposed to work has not been finally determined, contributing to the limited effectiveness of both regulators.

ICASA is in name, independent. However, in key respects its independence is lacking, i.e., in the appointment procedure (the Minister appoints ICASA Council), and the funding mechanism (ICASA's budget is submitted to Parliament through the Minister). Similar issues arise in respect of the Competition Commission.

1.5 Are decisions of the national regulatory authority able to be appealed? To which court or body?

ICASA's decisions are not appealable; however, its decisions, as well as those of the Competition Commission, may be taken on review to the High Court

Decisions of the Competition Commission may be heard on appeal or review by the Competition Tribunal. The Competition Appeal Court hears appeals and review decisions of the Competition Tribunal.

2 Licensing

2.1 If a licence or other authorisation is required to install or operate electronic communications networks or provide services over them, please briefly describe the process, timescales and costs.

The provision of ECNS, ECS and broadcasting services (BS) requires either an individual or class licence or must be exempt from licensing. ECNS, ECS and BS licences are either individual or class. Those licensees that are individual include ECNS of national or provincial scale, and voice telephony ECS that use numbers allocated by ICASA. Licence applications for individual licences may only be made in response to an invitation and in respect of individual ECNS

licences, only after a policy direction issued by the Minister. Class licences include ECNS of municipal scale, data ECS and voice ECS where numbers are sub-allocated by licensees. ICASA must act on class registration applications within 60 days and it if fails to do so, there is a deemed registration.

ICASA has prescribed that certain services may be exempt from licensing, including non-profit ECS, resellers of ECS and private ECNS; service providers must nevertheless apply for exemptions. Application and licence fees are set out in regulations, with application fees for individual licences left to be decided at the time an invitation is issued. The licence fee for most licences is 1.5 percent of gross profit. Community and public BS licensees and licensees with an annual turnover of less than R13,000,000 are exempt from paying licence fees.

2.2 What other requirements, permits or approvals must be met or obtained before networks may be installed or operated and services provided?

In addition to service licensing, if a service provider intends to use spectrum, that provider must obtain the required spectrum licence. All equipment must be type approved by ICASA.

2.3 May licences or other authorisations be transferred and if so under what conditions?

Individual or class licences may be assigned, ceded or transferred with the prior permission of ICASA.

2.4 What is the usual or typical stated duration of licences or other authorisations?

Individual ECNS licences are issued for twenty years, ECS licences for fifteen years, and BS licences for from ten to fifteen years. Class ECNS and ECS licences are issued for ten years, and class BS licences for seven years.

3 Public and Private Works

3.1 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 ECA grants to all ECNS licensees certain rights regarding access to land, including, *inter alia*: to enter upon any land and construct and maintain facilities, subject to environmental regulations; to use underground conduit pipes; to construct and maintain facilities under streets, roads and footpaths; to place gates on property owners' fences; and to cause trees or vegetation to be cut, subject to environmental regulations. ECNS licensees must exercise their rights in accordance with regulations to be prescribed by ICASA.

3.2 Is there a specific planning or zoning regime that applies to the installation of telecommunications infrastructure?

No; however, the Minister is required, in consultation with the Ministers of Provincial and Local Government, Land Affairs, Environmental Affairs, *inter alia*, to "develop guidelines for the rapid deployment and provisioning of electronic communications facilities", facilitating governmental approvals, e.g., zoning approval, and resolving disputes with landowners.

3.3 Are there any rules requiring established operators to share their infrastructure, e.g. masts, sites, ducts or cables

(i.e. dark fibre)? Are there any proposals to mandate 'passive access' to such basic infrastructure?

There are no existing or proposed rules requiring the sharing of or access to facilities. Interconnection regulations made in terms of the Telecommunications Act require Telkom to co-locate unless it is not 'technically feasible'; however, these regulations, now functionally obsolete, have never been enforced.

4 Access and Interconnection

4.1 Is network-to-network interconnection and access mandated, and what are the criteria for qualifying for the benefits of interconnection?

In terms of chapters 7 and 8 of the ECA, every licensee must interconnect and every ECNS licensee must provide facilities, upon request, on terms negotiated, unless the request is unreasonable. ICASA may exempt licensees from their obligations, but only if they do not have significant market power (SMP). ICASA must promulgate regulations to facilitate interconnection and facilities leasing. In terms of chapter 10 of the ECA, ICASA may impose specific license

conditions regarding, *inter alia*, interconnection and access, on licensees determined to have SMP. ICASA has neither made regulations in terms of chapters 7 and 8 nor imposed licence conditions in terms of chapter 10.

4.2 How are interconnection or access disputes resolved? Does the national regulatory authority have jurisdiction to adjudicate and impose a legally binding solution?

According to chapters 7 and 8, if the parties are unable to agree on terms and conditions, and the dispute is referred to ICASA, ICASA may do one of three things:

- impose the terms and conditions;
- propose terms and conditions and instruct the parties to renegotiate;
- or refer the matter to the Complaints and Compliance Committee (CCC).

If referred to the CCC, the CCC must hear the matter and make a recommendation to ICASA as to the appropriate action, which could include, if the licensee has repeatedly been found guilty, suspension or revocation of its licence.

Regarding implementation disputes, the CCC must hear and decide matters on an expedited basis in accordance with regulations to be prescribed by ICASA.

Chapter 10 provides for ICASA to issue cease and desist orders where a licensee is found to have engaged in an anti-competitive act. The regulations required to implement these provisions have not been promulgated.

Similarly, the Competition Act prohibits anti-competitive acts, including abuses of dominant positions, charging an excessive price and refusing to give access to an essential facility. The Competition Commission investigates anti-competitive acts and the Competition Tribunal adjudicates.

Although there have been complaints filed with ICASA and the Competition Commission, there have been no successful prosecutions, due mainly to dominant players employing delaying and diversion tactics, taking advantage of legislative impreciseness and inexperienced regulators.

4.3 Are any operators required to publish their standard interconnection contracts and/or prices?

Although ICASA must provide a regulatory framework that may include reference offers containing model terms and conditions, and may impose licence conditions requiring publication of offers, it has done neither.

4.4 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?

ICASA may prescribe regulations establishing a framework of wholesale interconnection and facilities leasing rates taking into account chapter 10, which deals with competition matters. The existing regulations (under the now repealed Telecommunications Act) set up a pricing regime (albeit a discriminatory one). However, those regulations are functionally obsolete as licence categories have changed with the completion of the licence conversion process.

ICASA has failed to regulate interconnection and facilities leasing pricing in terms of the ECA, due to, *inter alia*, ambiguous legislative language in this regard

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

ICASA has the authority to require accounting separation as a licence condition on licensees determined to have SMP. It does not appear that ICASA has the authority to require functional or legal separation. The Competition Tribunal has the authority to order divestiture in certain circumstances where a prohibited practice has been found to have occurred.

4.6 How are existing interconnection and access regulatory conditions to be applied to next generation (IP-based) networks?

The ECA does not make a distinction between technologies used in respect of regulating interconnection and facilities leasing.

4.7 Are owners of existing copper local loop access infrastructure required to unbundle their facilities and if so, on what terms and subject to what regulatory controls? Are cable TV operators also so required?

The Minister has issued a policy direction to ICASA that all licensees must have access to the local loop, and that local loop unbundling must be completed by 2011. There are no cable TV operators in South Africa.

4.8 Are there any regulations or proposals for regulations relating to next-generation access (fibre to the home, or fibre to the cabinet)? Are any 'regulatory holidays' or other incentives to build fibre access networks proposed?

The ECA provides that notwithstanding a finding of SMP, ICASA may exempt ECNS licensees from the obligation to lease fibre loops servicing residences on the condition, *inter alia*, that the network is newly constructed in an area not previously served by the licensee.

5 Price and Consumer Regulation

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

In terms of the Telecommunications Act, the retail prices of Telkom, Vodacom and MTN, were, to some extent, regulated by the imposition of price caps. Nonetheless, retail prices in SA remain comparatively high.

Under chapter 10 of the ECA, ICASA may impose retail price controls as licence conditions. This, however, must be preceded by determinations by ICASA of relevant markets, the effectiveness of competition in markets, SMP, and appropriate pro-competitive licence conditions.

5.2 Is the provision of electronic communications services to consumers subject to any special rules and if so, in what principal respects?

ICASA has made regulations setting out a licensee code of conduct, minimum standards for end-user and subscriber service charters, and a code of conduct with regard to people with disabilities.

6 Numbering

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

ICASA must prescribe a numbering plan for the efficient use and allocation of numbers, to accommodate the various protocols used and services provided, and to transform the numbering plan to a non-geographic numbering system utilising electronic numbering allowing the interoperation between telephone numbers and the Internet domain name system.

ICASA has not prescribed numbering plan regulations in terms of the ECA; however, there are numbering plan regulations made in terms of the Telecommunications Act.

In terms of the ECA, the provision of ECS using numbers allocated by ICASA requires an individual ECS licence. Thus, only individual ECS licensees may obtain allocations from ICASA. ECTA established the .za Domain Name Authority to assume responsibility for the .za domain name space.

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

The specific rules governing the use of numbers are located in the numbering plan regulations.

6.3 How are telephone numbers made available for network use and how are such numbers activated for use by customers?

There are rules in the numbering plan regulations regarding the issuance of numbers to customers, including, *inter alia*, that the allocation must be controlled by the original applicant even though sub-allocations are allowed, and the number must be used for the purpose stated in the original application and in accordance with any conditions imposed by ICASA.

6.4 What are the basic rules applicable to the 'porting' (i.e. transfer) of telephone numbers (fixed and mobile).

ICASA was required to prescribe regulations in terms of the ECA to ensure that number portability was introduced in 2005. Although ICASA has not prescribed number portability regulations in terms of the ECA, there are number portability regulations made in terms of the Telecommunications Act, dealing with number portability between fixed licensees on the one hand and mobile licensees on the other.

The implementation of number portability is dependent on specifications, *inter alia*, to be negotiated between licensees and published by ICASA. This process has not been completed in respect of geographic (fixed) number portability. Mobile number portability is currently being implemented.

7 Submarine Cables

7.1 What are the main rules governing the bringing into South Africa's territorial waters, and the landing, of submarine cables? Are there any special authorisations required or fees to be paid with respect to submarine cables?

An ECNS licence authorises the landing of a submarine cable in SA. No special rules govern the landing of submarine cables although the Minister proposed some time back to impose rules that would require licensees to, *inter alia*, obtain a separate authorisation from the Minister. There are other regulatory requirements applicable, such as those under the National Environmental Management Act for an Environmental Impact Assessment, and the Sea-Shore Act for a seashore lease.

8 Radio Frequency Spectrum

8.1 Is the use of radio frequency spectrum specifically regulated and if so, by which authority?

Spectrum is primarily regulated by ICASA. The Minister has the authority to approve (or disapprove) the radio frequency band plan and to decide whether the migration of users that are government entities, is permitted.

8.2 How is the use of radio frequency spectrum authorised in South Africa? What procedures are used to allocated spectrum between candidates - i.e. spectrum auctions, comparative 'beauty parades', etc.?

Spectrum licences are awarded on an *ad hoc* basis. ICASA may make regulations and criteria for awarding licences for competing applications and has recently proposed regulations which indicate that the evaluation criteria and selection process, which might include a beauty parade or auction or both, will be set out in invitations to apply for specific spectrum.

8.3 Are distinctions made between mobile, fixed and satellite usage in the grant of spectrum rights?

Spectrum licences are awarded consistent with the band plan, which indicates which spectrum is designated for which type of service.

8.4 How is the installation of satellite earth stations and their use for uplinking and down-linking regulated?

The installation of satellite earth stations is regulated no differently than the installation of facilities in respect of other spectrum. A spectrum licence and an ECNS licence are required. The Minister has issued a policy direction to ICASA to issue an invitation for individual ECNS licences for the provision of satellite infrastructure.

8.5 Can the use of spectrum be made licence-exempt? If so, under what conditions?

ICASA may exempt certain uses of spectrum from the licensing requirement, and prescribe the conditions under which unlicensed use may take place. It has prescribed certain spectrum licence exemptions including for the use of the 2.4 GHz band for wide band wireless systems, *inter alia*.

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

Application and licence fees for the various uses of spectrum have been prescribed by ICASA on an *ad hoc* basis. ICASA has recently proposed spectrum fees based on certain formula depending on type of use.

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

The ECA enjoins anyone from using spectrum without a spectrum licence granted to that person, and therefore sub-licensing is not allowed.

Spectrum licences may be transferred, but only twelve months after the date of issue or in the case of commercial operations, twelve months after the facilities are operational.

9 Data Retention and Interception

9.1 Are operators obliged to retain any call data? If so who is obliged to retain what and for how long? Are there are data protection (privacy rules) applicable specifically to telecommunications?

In terms of RICA, all service providers must store communications related information that identifies the origin, destination, termination, duration, and equipment used. The time period for retention is three years.

In addition, service providers must gather and retain personal information about customers regarding their identity and contact details.

In broad terms, RICA itself is data protection legislation. It prohibits interception and monitoring except in the specific circumstances set out. Similarly, the Promotion of Access to Information Act prohibits the disclosure of certain personal information. There are some voluntary privacy provisions set out in ECTA. However, the South African Law Reform Commission has drafted comprehensive data protection legislation, which has been approved by Cabinet for consideration by Parliament.

9.2 Are operators obliged to maintain call interception (wiretap) capabilities?

RICA establishes an obligation on services providers to have the capability to intercept communications.

9.3 What is the process for authorities obtaining access to retained call data and/or intercepting calls? Who can obtain access and what controls are in place?

The circumstances under which government entities or other persons may intercept or monitor communications include, *inter alia*: if a judge issues an direction on application of a law enforcement officer; interception with the written consent of one of the parties to the communications; interception in the carrying on of a business;

interception by law-enforcement personnel to prevent serious bodily harm; interception by law-enforcement personnel to determine the location of a person in an emergency; interception in a prison; and monitoring of the radio frequency spectrum by the regulator.

Similarly, RICA prohibits the provision of communications-related information except if, *inter alia*, a judge issues a direction on application of a law-enforcement officer. Unauthorised interception or provision of communications-related information is a criminal offence subject to fines and imprisonment.

10 The Internet

10.1 Are conveyance services over the internet regulated in any different way to other electronic communications services? Which rules, if any, govern access to the internet at a wholesale (i.e. peering or transit) and/or retail (i.e. broadband access) level? Are internet service providers subject to telecommunications regulation?

Internet networks are regulated as ECNS. Internet services are regulated as ECS (and not BS, which attract additional regulation in respect of *inter alia*, content). If an entity is merely a content provider, it does not need a licence or fall within the ambit of the entities that are regulated under the ECA.

10.2 Is there any immunity (e.g. 'mere conduit' or 'common carrier') defence available to protect telecommunications operators and/or internet service providers from liability for content carried over their networks?

ECTA provides for the limitation of liability for service providers, if such providers are members of an industry representative body that has been recognised by the Minister, and have adopted that body's code of conduct.

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

Although there is no obligation on service providers to monitor use, there is an obligation to take down offending information upon receiving a take down notice in terms of ECTAin order to retain the legislative limitation of liability in respect of caching, hosting and information location tools.

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

There are no net neutrality requirements in South Africa.

10.5 How are 'voice over IP' services regulated?

Voice over IP services are not regulated differently than other voice services.

10.6 Are there any rules to prevent, restrict or otherwise govern internet or email communications, in particular, marketing and advertising communications?

ECTA provides that anyone who sends unsolicited commercial information must give the recipient the opportunity to be removed from the list, and provide information on how that person got on the list.

<u>11 USO</u>

11.1 Is there a concept of universal service obligation; if so how is this defined, regulated and funded?

The ECA establishes the Universal Service and Access Agency of South Africa (USAASA) to promote universal service, under the direction and control of the Minister. The Minister must determine the meaning of universal service and universal access.

The ECA also establishes the Universal Service and Access Fund (USAF), to which licensees contribute 0.2 percent of annual turnover. Money is to be paid out of the USAF if Parliament appropriates money for that purpose.

ICASA may place universal service obligations (USOs) on individual licensees.

12 Foreign Ownership Rules

12.1 Are there any rules restricting direct or indirect foreign ownership interests in electronic communications companies whether in fixed, mobile, satellite or other wireless operations?

All licensees must be either citizens, or entities registered in SA with their principle place of business in SA. ICASA, in granting licences, must ensure that services, viewed collectively, are provided by persons or groups from a diverse range of communities in SA, and must promote the empowerment of HDIs.

In respect of new individual licences, ownership by HDIs must be no less than 30 percent or some other percentage prescribed by ICASA.

Although HDI is not defined in the ECA, ICASA has recommended that it include South African citizens who are black people, as well as women and people with disabilities; associations whose majority members are such persons; and juristic persons, were greater than 25 percent of the share capital is held by such persons. In respect of commercial BS licensees, foreigners may not exercise control, have a financial interest or interest in voting shares or paidup capital in a licensee of more than 20 percent, or constitute more than 20 percent of the board of directors.

13 Future Plans

13.1 Are there any imminent and significant changes to the legal and regulatory regime for electronic communications?

Although the ECA come into force less than five years ago promising to substantially alter the regulatory framework leading to competition and universal service, it has become apparent that in addition to the huge amount of regulatory work that needs to be completed by ICASA, the ECA must be amended if it is to be successfully implemented. The 2009 elections brings renewed hope that this will happen. There are a number of proceedings in process, such as the development of broadband policy, that might lead to the required legislative amendments. In the meantime, there

will be incremental movements to improve the competitiveness of the industry as ICASA continues to implement, where it is able, the provisions of the ECA.

UNITED KINGDOM

1.1 When did the UK first liberalise telecommunications networks and/or services?

The UK was one of the first countries to liberalise its telecommunications market in the 1980s, and the market has been completely liberalised since the early 1990s.

1.2 Has the UK fully implemented the EU 2003 regulatory framework? If the UK has not fully implemented the new regulatory framework, have proceedings been brought against the UK by the European Commission and if so, for which contraventions?

The UK has fully implemented the EU 2003 regulatory framework through the Communications Act 2003 ("2003 Act"), the General Conditions of Entitlement (the "General Conditions"), the significant market power ("SMP") review process and a number of other specific regulations.

In April 2009 the European Commission opened infringement proceedings against the UK in relation to its implementation of aspects of the Privacy and Electronic Communications Directive (Directive 2002/58/EC) and the Data Protection Directive (Directive 95/46/EC) (specifically concerning the controversial "Phorm" behavioural advertising technology).

1.3 Please give an overview of the different laws and regulations governing the operation of electronic communications networks and the provision of electronic communication services.

The 2003 Act governs electronic communications networks and services and sets out the duties and powers of the Office of Communications ("Ofcom").

The day-to-day obligations imposed on electronic communications network and service providers ("Communications Providers") are set out in the General Conditions, adopted by Oftel in July 2003 (and which have been subsequently modified). Additional obligations apply to operators with SMP, and designated universal service providers (see further below).

The Wireless Telegraphy Act 2006 ("WTA") provides the authorisation and regulatory framework for services and networks using radio spectrum. A licence is required for the establishment or operation of a wireless telegraphy station unless exemption regulations have been adopted (see question 8.5 below). In addition, regulations enabling the limitation of the number of wireless telegraphy licences have also been adopted: the Wireless Telegraphy (Limitation of Number of Licences) Order 2003.

In relation to privacy and related matters, the Data Protection Act 1998 ("DPA"), the Regulation of Investigatory Powers Act 2000 ("RIPA"), the Telecommunications (Lawful Business Practices) (Interception of Communications) Regulations 2000, the Privacy and Electronic Communications (EC Directive) Regulations 2003 ("Privacy Regulations") and the Data Retention (EC Directive) Regulations 2009 implement various aspects of the privacy and data protection requirements relating to electronic communications.

The Radio Equipment and Telecommunications Terminal Equipment Regulations 2000 set out requirements for telecoms and radio equipment (including compliance with essential requirements on e.g. electro-magnetic compatibility and CE marking, which are included in other implementing regulations).

In addition, competition and consumer protection legislation applies to electronic communications networks and services, notably the Competition Act 1998 and the Enterprise Act 2002.

1.4 Please describe the regulatory framework, in terms of regulatory authorities and associated agencies, e.g. national competition authority (where different).

Electronic communications networks and services are regulated by Ofcom. Ofcom also has concurrent jurisdiction for competition law with the Office of Fair Trading ("OFT") regarding electronic communications matters and is a national competition authority for electronic communications. The majority of regulatory matters can be appealed from the first instance decision-maker to the Competition Appeal Tribunal ("CAT"), with price control matters and market investigations being dealt with by the Competition Commission.

PhonepayPlus regulates the content and marketing of premium rate services, including directory enquiry services. The Information Commissioner is responsible for data protection and freedom of information.

1.5 Which principal aspects of electronic communications regulation fall under the supervision of the national regulatory authority for electronic communications?

Ofcom is responsible for electronic communications regulation in general:

- setting and enforcing general conditions;
- undertaking market reviews, setting and enforcing SMP conditions (i.e. access and interconnection);
- setting universal service obligations in accordance with the Secretary of State's specification of services;
- setting consumer protection requirements and dealing with complaints;
- managing numbering;
- issuing and enforcing spectrum licences;
- regulating conditional access and electronic programme guides; and
- resolving disputes.

1.6 In order to be properly authorised to provide electronic communications networks and services, is a registration, declaration or notification required and if so to whom and for which purposes? What rules or conditions, if any, may be attached to a registration, declaration or notification?

No registration, declaration or notification is needed to provide electronic communications networks or services, unless the service involves the use of radio spectrum. However, any Communications Provider providing electronic networks or services must comply with applicable General Conditions, which depend on the type of service being provided.

1.7 Are any network operators or service providers subject to rules governing their operations over and above rules and conditions governing authorisations and imposing SMP obligations, for example under competition law?

BT and Kingston Communications (in the Hull area) are designated universal service providers, and are subject to additional universal service obligations (see question 11.1 below). In addition, BT must comply with the undertakings which it gave to Ofcom in 2005 in place of a reference to the Competition Commission under the Enterprise Act 2002 (the "Undertakings"). Pursuant to the Undertakings (see also question 4.5 below), BT:

- created a functionally separate "access services" division ("Openreach");
- agreed that Openreach will supply BT's competitors with products on an exactly equivalent ("Equivalence of Inputs") basis to its supply to other parts of BT;
- agreed to erect and police a number of internal information barriers;
- supplies certain co-location products;
- will deploy its next-generation network in a nonexclusionary manner;
- and set up an internal compliance committee.

1.8 Which (SMP) markets have been notified to the European Commission under Article 7 of the Framework Directive?

The UK has notified the following SMP markets to the European Commission (note that slightly different notifications have been made in respect of the Hull area):

the following fixed narrowband retail markets:

- analogue exchange line services (residential and business);
- ISDN2 exchange line services (residential and business);
- ISDN30 exchange line services (business only);
- local calls (residential and business);
- national calls (residential and business);
- calls to mobiles (residential and business);

- operator assisted calls (residential and business);
- and IDD category A calls, and IDD category B calls (residential only);
- the fixed geographic call termination market, each fixed network operator having SMP in the provision of call termination on its own network;
- the wholesale local access market;

the following fixed narrowband wholesale services markets:

- wholesale analogue exchange line services (residential and business);
- wholesale ISDN2 exchange line services (residential and business);
- wholesale ISDN30 exchange line services;
- call origination on fixed public narrowband networks;
- local-tandem conveyance and transit on fixed public narrowband networks;
- inter-tandem conveyance and transit on fixed public narrowband networks; and
- single transit on fixed public narrowband networks;

the wholesale broadband access market, albeit only in certain geographic areas amounting to 31% of UK premises (other areas recently having been found to be effectively competitive);

the wholesale mobile voice call termination market, each mobile network operator having SMP in the provision of call termination on its own network; and the following retail leased lines, symmetric broadband origination and wholesale trunk segment markets:

- retail market for low bandwidth leased lines;
- wholesale market for low bandwidth traditional interface symmetric broadband origination ("TISBO");
- wholesale market for high bandwidth TISBOs;
- wholesale market for very high bandwidth 155Mbit/s TISBOs;
- wholesale market for low bandwidth alternative interface symmetric broadband origination; and
- wholesale traditional interface trunk segments.

2 Licensing

2.1 If a licence or other authorisation is required to install or operate electronic communications networks or provide services over them, please briefly describe the process, timescales and costs.

No licence or other authorisation is required to install or operate electronic communications networks or services unless the use of radio frequency spectrum is involved (see question 1.6 above, and below under Radio Frequency Spectrum) or access to public or private land is required (see section 3 below).

Administrative fees of roughly 0.06% of turnover are levied by Ofcom on Communications Providers with turnover of £5 million or more from relevant activities (e.g. operating an electronic communications network or service).

Fees are also levied on those Communications Providers who have the benefit of rights, and are subject to obligations under, the Electronic Communications Code. Communications Providers are subject to a one-off application charge of £10,000, annual charges of approximately £1,000, and an obligation to put in place arrangements (typically via a bond) to meet the network-related costs should the Communications Provider become insolvent.

2.2 What other requirements, permits or approvals must be met or obtained before networks may be installed or operated and services provided?

As explained above, in order to use radio frequency spectrum, a Communications Provider must have a licence under the WTA. In addition, with respect to radio frequency, Ofcom has the power to authorise its use on a licence-exempt basis (see below under Radio Frequency Spectrum).

Numbers are managed and allocated by Ofcom pursuant to the relevant general condition of entitlement and the National Number Plan.

2.3 May licences or other authorisations be transferred and if so under what conditions?

The only licences capable of transfer are certain of those granted under the WTA, i.e. for radiocommunications (see question 8.7 below). The UK also uses "recognised spectrum access" grants to convert public sector spectrum holdings into licence-type rights capable of transfer.

2.4 What is the usual or typical stated duration of licences or other authorisations?

Whilst there are no hard and fast rules concerning duration of licences, typically they are granted for an initial fixed period of 5, 10 or 15 years, with an option to renew on payment of additional licence fees. Exceptionally, the 3G mobile licences granted in 2000 continue in force until 31 December 2021, recognising the considerable period required to recover the significant investments.

At the time of writing the Digital Britain report was canvassing the possibility of extending the 3G licences indefinitely (see further question 13.1 below).

3 Public and Private Works

3.1 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 general principles of common law, property law and planning law apply in the usual way, but additional rights of access to public and private land may be granted under the 2003 Act, specifically the Electronic Communications Code ("Code"), an instrument of statute.

This Code enables providers of electronic communications networks to construct infrastructure on public land (streets), to take rights over private land, either with the agreement of the land owner or by applying to court. In addition, there are also certain exceptions to planning legislation available to Communications Providers (see question 3.2 below).

3.2 Is there a specific planning or zoning regime that applies to the installation of telecommunications infrastructure?

Under planning regulations (The Town & Country Planning (General Permitted Development) Order 1995, as amended), land may be developed by Communications Providers to whom the Code applies for the purposes of their networks, in particular the installation, alteration or replacement of apparatus. There are limitations to this permitted development, in particular with respect to the height of the apparatus or its proximity to a place where people live. Erection of apparatus on homes etc. is the subject of separate rules, e.g. regulating the height of antenna above the building on which it is erected. Note also that there is also a separate Code of Best Practice relating to the sitting of mobile phone network infrastructure.

3.3 Are there any rules requiring established operators to share their infrastructure, e.g. masts, sites, ducts or cables (i.e. dark fibre)? Are there any proposals to mandate 'passive access' to such basic infrastructure?

The Code requires Communications Providers to consider cooperating to share their physical infrastructure; however, the obligation is weak and has not been used to mandate network sharing. Ofcom is consulting on how passive duct access should be regulated as part of its policy development on next generation access

As a commercial matter various network sharing arrangements have been entered into between mobile network operators.

4 Access and Interconnection

4.1 Is network-to-network interconnection and access mandated, and what are the criteria for qualifying for the benefits of interconnection?

General Condition 1 requires all Communications Providers to negotiate interconnection on request.

SMP conditions also require various UK Communications Providers (most notably BT and, for call termination, mobile operators) to provide various interconnection and/or access services and to publish the reference terms and conditions.

4.2 How are interconnection or access disputes resolved? Does the national regulatory authority have jurisdiction to adjudicate and impose a legally binding solution?

Disputes between different Communications Providers concerning network access and the relevant terms and conditions for such access may be

referred for resolution to Ofcom pursuant to sections 185 to 191 of the 2003 Act).

Ofcom must, other than in exceptional circumstances, make a binding determination resolving the dispute within four months of the date of their decision to handle the dispute, although this timescale has proved challenging in practice.

Ofcom's dispute resolution function has recently been considered by the relevant appeal court, which has clarified that this is a distinct regulatory function and power not dependent on a finding of SMP and that Ofcom should resolve disputes in a way that is fair (as between the parties) and reasonable in the context of Ofcom's statutory duties.

4.3 Are any operators required to publish their standard interconnection contracts and/or prices?

Yes.

Following market reviews such obligations have been imposed on Communications Providers including BT and Kingston Communications for various products, and on O2, Orange, TMobile and Vodafone for voice call termination.

4.4 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?

Yes.

Interconnection and network access is subject to price regulation in a number of different markets, in particular fixed narrowband, retail leased lines, symmetric broadband origination and trunk segments, wholesale local access and wholesale mobile voice call termination. In general, where wholesale pricing obligations have been imposed, prices are required to be based on forward-looking long-run incremental costs plus a mark-up for common costs including return on capital employed and in certain markets RPI-X price caps have been imposed.

4.5 Are any Communications Providers subject to: (a) accounting separation; (b) functional separation; and/or (c) legal separation?

- (a) Both BT and Kingston Communications are subject to accounting requirements pursuant to their SMP on certain markets, including cost accounting rules and accounting separation obligations.
- (b) As set out at question 1.7 above, in 2005 BT gave the Undertakings to Ofcom in order to avoid a reference to the Competition Commission under the Enterprise Act 2002. Among these obligations was the undertaking to set up Openreach as a functionally separate business unit of BT to operate BT's local access network. Openreach must give access to its network on a so-called "Equivalence of Inputs" basis, including wholesale line rental, local loop unbundling and Ethernet services, on an identical basis to the internal BT customer and external customers. Openreach is monitored by an independent Equality of Access Board.
- (c) No operator has been required to separate parts of its business into separate legal entities.

4.6 How are existing interconnection and access regulatory conditions to be applied to next generation (IP-based) networks?

In the Undertakings, BT committed to supplying other Communications Providers with network access using its next generation network (i.e. IP-based electronic communications network) in network access markets where BT has SMP. The supply of such network access under the undertakings is to be on terms allowing other Communications Providers to compete effectively with BT's end-to-end services over its NGN. In addition, in constructing its next generation network, BT must not make any network design decisions which might prevent the provision of network access to other Communications Providers, without first consulting them.

BT must also build its NGN and associated systems in a way to ensure that other Communications Providers can purchase network access from BT on the basis of Equivalence of Inputs, which, as above, requires equal treatment by BT of all Communications Providers (including BT itself).

4.7 Are owners of existing copper local loop access infrastructure required to unbundle their facilities and if so, on what terms and subject to what regulatory controls? Are cable TV operators also so required?

BT, which is the incumbent owner of access infrastructure and has been found to have SMP in the wholesale local access market, is required to provided metallic path facilities on the basis of fully unbundled local loops or shared access, together with associated cabling, site access and ancillary services. Charges are required to be cost-oriented and have been fixed by Ofcom through various decisions and determinations.

Virgin Media (the cable TV operator) is not subject to any similar unbundling obligation.

4.8 Are there any regulations or proposals for regulations relating to nextgeneration access (fibre to the home, or fibre to the cabinet)? Are any 'regulatory holidays' or other incentives to build fibre access networks proposed?

This area is subject to policy debate by both the Government and Ofcom. In June 2009, Ofcom agreed a variation to the Undertakings, which allows Openreach to control and operate electronic equipment necessary to provide super-fast broadband services using fibre to the street cabinet (previously Openreach was not allowed to control and operate electronic equipment in BT's access network). However, in general Ofcom's current position on next generation access is to keep matters under review (see in particular http://www.ofcom.org.uk/consult/condocs/nga future broadband/statement/statement.pdf).

The Government, in its Digital Britain Report, has proposed a fund to finance next generation access (see question 13.1 below), in areas where otherwise there would be no commercial justification for doing so. The proposal is that this would be financed by a £0.50/month surcharge on fixed line subscriptions.

5 Price and Consumer Regulation

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

No, apart from mobile operators who are subject to the Europeanlevel Mobile Roaming Regulation (Regulation 717/2007/EC), which imposes caps on wholesale and retail charges for mobile calls, SMS and data services while roaming between EU Member States.

5.2 Is the provision of electronic communications services to consumers subject to any special rules and if so, in what principal respects?

The General Conditions include a number of consumer protection obligations and requirements which apply over and above general consumer protection law. These obligations apply to specific categories of Communications Provider, including providing operator services and directory enquiries, publication of terms and conditions and pricing information, requirements for accurate billing, restrictions on sales and marketing (including measures intended to prevent misselling and slamming), dispute resolution and details of any limitations on the services being provided, special measures for users with disabilities and quality of service measures.

Consumer protection has been an area of focus for Ofcom in recent years. Ofcom have proactively undertaken a number of 'own initiative' compliance investigations.

6 Numbering

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

Telephone numbers and network identifying codes are allocated by Ofcom, following a successful application by a qualifying Communications Provider. Ofcom has in place standard application forms for number ranges. Mobile network short codes, however, such as those used for SMS-based services, are not allocated by Ofcom. These codes are allocated by the mobile network operators themselves, between whom there is a code of practice dealing with how such codes should be used.

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

Ofcom has established the National Numbering Plan in accordance with its duties under the Communications Act 2003. Communications Providers are required by General Condition 17 (Allocation, Adoption and Use of Telephone Numbers) to comply with the National Numbering Plan. Failure to comply with General Condition 17 may lead to enforcement action by Ofcom. In addition, the services offered behind particular number ranges may be subject to regulation by PhonepayPlus (see question 1.4 above), for example, premium rate or 09 numbers, and the most expensive 08 numbers (0871, 0872 and 0873). PhonepayPlus also regulate directory enquiry services and premium rate SMS.

6.3 How are telephone numbers made available for network use and how are such numbers activated for use by customers?

Numbers allocated to a Communications Provider need to be datafilled across other Communications Providers' networks and activated. This process is dealt with in interconnection agreements.

BT is (for SMP interconnect products) required to have in place provisions for the activation of numbers by means of the "data management amendment" process set out at Annex A, Appendix C of its standard interconnection agreement.

6.4 What are the basic rules applicable to the 'porting' (i.e. transfer) of telephone numbers (fixed and mobile).

All Communications Providers are required by General Condition 18 (Number Portability) to facilitate the porting of numbers, including mobile numbers. This means that numbers must be ported on a customer request, subject to a reasonableness requirement, and Communications Providers must enter into porting arrangements when requested by another operator. The cross-industry porting procedure has been defined in detail.

7 Submarine Cables

7.1 What are the main rules governing the bringing into the UK's territorial waters, and the landing, of submarine cables? Are there any special authorisations required or fees to be paid with respect to submarine cables?

The laying of cables on or under the sea bed (or elsewhere in tidal waters) will normally require consent under the UK Coast Protection Act 1949. Consent is also required from the Secretary of State for Environment, Food and Rural Affairs for any proposal to install telecommunications cables at sea and in other tidal waters below the level of Mean High Water Springs. Where the applicant is a Communication Provider granted Code powers under the 2003 Act, a specific procedure applies under the Code; otherwise applications are governed by the Coast Protection Act 1949. The Secretary of State's powers normally extend only to the 12 mile limit of UK territorial waters. Cable protection activities, such as rock dumping, are likely to require a licence under the Food and Environment Protection Act 1985.

For landing of cables a wayleave or right of way will be required from the land owner, typically the Crown Estates or the Duchy of Cornwall depending upon the location of the landfall.

8 Radio Frequency Spectrum

8.1 Is the use of radio frequency spectrum specifically regulated and if so, by which authority?

Yes. Use of radio spectrum is regulated by Ofcom.

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

Unless licence exempt (see below), a licence is required from Ofcom under the Wireless Telegraphy Act 2006. Ofcom's commitment to market-driven spectrum use informs its preference for auctions as the primary means of distributing spectrum, and a number of spectrum auctions are scheduled for the next two years including 800 MHz and 2.6 GHz. Auctions are provided for under specific regulations, and a number of major spectrum auctions have already taken place on different terms, beginning with the auction of 3G spectrum for a combined total of £22.5 billion.

8.3 Are distinctions made between mobile, fixed and satellite usage in the grant of spectrum rights?

Distinctions are made between different types of wireless telegraphy licence, mobile, fixed, broadcasting, business radio, aeronautical, maritime, programme making and special events and satellite services. Details are available at www.ofcom.org.uk/radiocomms/ifi/wtf. Licence conditions are set out in the specific licence document and in a General Licence Conditions Booklet published by Ofcom.

Ofcom has a policy objective to liberalise the use of spectrum where possible, subject to constraints such as international and regional spectrum co-ordination requirements.

8.4 How is the installation of satellite earth stations and their use for up-linking and down-linking regulated?

Satellite earth stations are specifically subject to licensing administered by Ofcom. Different types of earth station are licensable under different terms. Some satellite television or radio broadcasting services also require licences under the Broadcasting Act 1990, whilst some may also require local authority planning approval.

8.5 Can the use of spectrum be made licence-exempt? If so, under what conditions?

Yes.

Certain types of telecommunication apparatus, e.g. mobile phone handsets, WiFi and UWB equipment, are exempted from licensing pursuant to the Wireless Telegraphy (Exemption) Regulations 2003, as amended.

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

For commercially exploitable wireless telegraphy licences, fees will normally be payable, either pursuant to prices bid at auction or under administrative incentive pricing ("AIP") set under specific regulations according to the type of service involved. AIP seeks to set fees to mimic the market value of the spectrum.

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

Yes.

Certain classes of licence, for fixed-wireless access, business radio and fixed-links, are transferable pursuant to spectrum trading regulations. The UK Plan for Frequency Authorisation has information regarding the frequencies available for transfer and the purposes for which such frequencies have been allocated. The Wireless Telegraphy Act Register provides basic information regarding individual licences such as contact names and address details, class of licence, band(s) of frequencies and, where appropriate, geographic area of operation.

The Trade Notification Register displays details of proposed trades notified to Ofcom, trades in progress and completed trades. Further, in 2009 new secondary legislation was introduced to create rights of recognised spectrum access (see question 2.3 above), which are also tradable.

9 Data Retention and Interception

9.1 Are operators obliged to retain any call data? If so who is obliged to retain what and for how long? Are there are data protection (privacy rules) applicable specifically to telecommunications?

Communication Providers who receive a notice from the Secretary of State are obliged to retain logs of telephone calls and content communication pursuant to the Data Retention (EC Directive) Regulations 2009, which implement the EU Data Detention Directive (Directive 2006/24/EC). The types of data required to be held are set out in the Schedule to the 2009 Regulations, and differ depending whether the Communications Provider is a fixed or mobile telephony provider, or ISP.

The Privacy Regulations apply specifically to electronic communications, and govern many aspects such as electronic marketing (see question 10.6 below), security and confidentiality of electronic communications, restrictions on processing and storing traffic data, itemised billing, CLI, location data and tracing nuisance calls.

9.2 Are operators obliged to maintain call interception (wiretap) capabilities?

Public telecommunications service providers (defined generically) who provide a public telecommunications service to more than 10,000 persons are normally subject to a statutory obligation under the Regulation of Investigatory Powers (Maintenance of Interception Capacity) Order 2002) to maintain a capability to enable the provider to assist with interceptions where a warrant or notice is served.

9.3 What is the process for authorities obtaining access to retained call data and/or intercepting calls? Who can obtain access and what controls are in place?

The Regulation of Investigatory Powers Act 2000 ("RIPA") sets out the procedures that defined authorities need to follow to issue a warrant for interception of the contents of a communication. This authorises and requires a person to intercept communications and/or to disclose (in any described manner) the contents of any communications so intercepted as well as any related traffic data. Such warrants may only be issued by the Secretary of State where it is considered necessary for the purposes of preventing or detecting crime or in the interests of national security or for the purposes of safeguarding the economic well-being of the UK and is proportionate.

The Interception of Communications Code of Practice issued by the Home Office gives guidance on the duties of providers of telecommunications service with regard to assisting in the interception of communications and sets out the criteria and procedures by which the police, intelligence and defence authorities (and Customs & Excise) may apply for warrants to intercept communications. The code provides best practice guidance for "public authorities" (essentially

the police, intelligence services and certain other bodies) which have the power under RIPAto acquire communications data for national security, law and order, and certain other purposes. The code also clarifies the circumstances in which Communications Providers will be obliged to respond to such disclosure requests. RIPAalso governs notices for the disclosure of communications (i.e. traffic, subscriber and general service) data. Aprescribed notice may be issued by a wider group of authorised persons to require disclosure of communications data. Such disclosure must still be necessary for various listed purposes including those listed above as well as tax, public safety, public health and emergency reasons.

10 The Internet

10.1 Are conveyance services over the internet regulated in any different way to other electronic communications services? Which rules, if any, govern access to the internet at a wholesale (i.e. peering or transit) and/or retail (i.e. broadband access) level? Are internet service providers subject to telecommunications regulation?

In addition to the electronic communications regulatory rules which apply to the networks making up the Internet and the electronic communications services provided over these networks, websites and services provided over the Internet are also subject to the Electronic Commerce (EC Directive) Regulations 2002 ("E-Commerce Regulations") which apply to information society services. Ofcom has not imposed any SMP regulation at the wholesale or retail level on internet access. In general, internet service providers are subject to the same rules as other Communications Providers, in particular those General Conditions applicable to providers of public electronic communications services and the data retention requirements described above.

10.2 Is there any immunity (e.g. 'mere conduit' or 'common carrier') defence available to protect telecommunications operators and/or internet service providers from liability for content carried over their networks?

The UK Electronic Commerce (EC Directive) Regulations 2002 (as amended) implements the Electronic Commerce Directive (00/31/EC) requirement that service providers are not liable for the content of communications where they play only a passive role as a "mere conduit" of information to and from third parties or innocently cache or host otherwise infringing material. However, ISPS are subject to self-regulatory rules known as the "notice and take-down" regime regarding unlawful content. Communications Providers and ISPs are also protected from liability for defamatory statements under section 1 of the Defamation Act 1996 provided: (i) they were not the author, editor or publisher of the statement complained of; (ii) they took reasonable care in relation to its publication; and (iii) they did not know, and had no reason to believe that what they did caused or contributed to the publication of a defamatory statement.

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

Service providers are not under a general obligation to monitor or actively police material hosted or transmitted by them, subject to the carve-out in the Electronic Commerce Directive that service providers may be obliged to inform the authorities of illegal activities.

However, the Copyright Directive gives the power to copyright owners to obtain an injunction against intermediaries, if their services are used for piracy. Content owners may require a telecommunications Communications Provider or ISP to provide details of the identity of users that have infringed their rights (to the extent the Communications Provider holds this information) by obtaining a so-called "Norwich Pharmacal order". A Norwich Pharmacal order is a Court order (i.e. necessitating an application to the Court, and the satisfaction of certain evidential thresholds) requiring a respondent such as a third party to disclose certain documents or information to the applicant.

As noted below at question 13.1, at the time of writing the Digital Britain report was proposing the introduction of certain new measures to combat illegal file-sharing.

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

Yes, subject to general competition law, Communication Providers are able to differentially charge. There is no requirement for net neutrality. However, Communications Providers with SMP (including BT) are subject to undue discrimination rules, and general competition law also applies.

10.5 How are 'voice over IP' services regulated?

In 2006 Ofcom departed from its previous policy of forbearing from regulating VoIP services. VoIP services are now subject, as other telecommunications services, to the General Conditions, with their precise regulation dependent on the type of service offered. Particular requirements on VoIP services include, where they are offered to domestic and small business customers, compliance with a code of practice on consumer protection information (including information on service reliability, whether emergency calls can be made, number portability etc.). Further, certain types of VoIP services, depending on their functionality (for example, if they offer the ability to make outbound calls to normal telephone numbers), may be required to provide emergency call capabilities, which may have the secondary effect of making those services subject to greater regulation as 'publicly available telephony services' under the General Conditions.

10.6 Are there any rules to prevent, restrict or otherwise govern internet or email communications, in particular, marketing and advertising communications?

The Privacy Regulations govern direct marketing by email, SMS, fax and telephone. Importantly, they require an "opt in" consent to email and SMS marketing to individuals, set out rules on the use of existing customers' details for marketing for similar products and services (the so-called "soft opt-in" provisions) including the requirements to give recipients the opportunity to opt-out of future marketing and limitations on the use of website "cookies" to obtain personal data.

In addition, marketers must also be transparent. The combined effect of the DPA and the Privacy Regulations, as well as the information and compliance requirements of the E-Commerce Regulations, impose a number of requirements including that email marketers identify communications as commercial, identify themselves and include a simple and free means to opt-out of future marketing communications (e.g. an email address or a web link).

<u>11 USO</u>

11.1 Is there a concept of universal service obligation; if so how is this defined, regulated and funded?

The Electronic Communications (Universal Service) Order 2003 specifies which services must be provided nationally, implementing the EU Universal Service Directive. The Order is implemented by Ofcom, by imposing appropriate universal service conditions on each of BT and Kingston Communications (regarding Hull), such as the requirement to have in place a scheme for disadvantaged and vulnerable users and to provide public call boxes.

The universal service conditions are not financed by a fund or contributions from industry, as the last review by Ofcom of the costs indicated that they do not amount to an undue burden on the universal service providers (but see question 13.1 below on the proposed next generation access fund, funded by a levy on fixed line subscriptions).

12 Foreign Ownership Rules

12.1 Are there any rules restricting direct or indirect foreign ownership interests in electronic communications companies whether in fixed, mobile, satellite or other wireless operations?

There are no rules restricting direct or indirect foreign ownership interests in electronic communications companies in these sectors.

13 Future Plans

13.1 Are there any imminent and significant changes to the legal and regulatory regime for electronic communications?

Significant changes to the electronic communications regime were proposed in the Government's 'Digital Britain' report of June 2009.

Implementation of these proposals will in part turn on the outcome of the next general election, expected in 2010. They include proposals for:

- a universal service commitment to broadband access for all households of at least 2Mbit/s by 2012;
- a "Next Generation Fund" to subsidise next generation broadband roll-out, funded by a 50p per month levy on retail fixed line subscriptions;
- new measures to combat illegal file-sharing such as requirements on ISPs to notify illegal file-sharers and make their information available to rights holders, and "backstop" proposals to compel ISPs to impose technical measures to reduce copyright infringement; and
- resolution of the existing disputes between mobile operators

and Ofcom over the regulator's proposals to re-allocate existing spectrum to 3G use, caps on overall spectrum holdings to prevent undue consolidation, and extension of the existing 3G licences indefinitely (as opposed to their current 20 year terms).

Ofcom are also consulting on regulation of fixed narrowband retail markets in the UK, and propose to find that these retail markets are now largely competitive, and therefore to remove the final retail regulations on BT, including allowing BT to freely bundle fixed narrowband products with broadband and TV services.

In parallel, Ofcom have also been consulting on wholesale fixed narrowband markets and are proposing to find that BT no longer has SMP in some markets (local-tandem conveyance and transit, and inter-tandem conveyance, inter-tandem transit and single transit products).

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Rob specialises in advising on corporate, commercial and telecoms regulatory matters and in particular complex matters requiring the coordination of all three areas of law. Rob's corporate practice includes advising on mergers, acquisitions, disposals, investments and joint ventures. Rob's commercial practice spans IT and BPO outsourcing transactions, procurement, interconnection, roaming, broadcast and transmission arrangements, customer, distribution and partnering. Rob's regulatory practice includes advising on policy development, compliance, complaints and disputes before Ofcom and the European Commission as well as the UK Information Commissioner and PhonepayPlus.

Rob is described by Chambers & Partners as an "excellent telecoms practitioner, benefits from his years in the industry to bring a commercial and pragmatic view that others just don't possess." He is noted for his "tremendous industry knowledge".

Tomos is an Associate in the EU & Competition Group at Olswang. Tomos specialises in UK and EU competition and regulatory law, in particular in the telecommunications/technology sectors. He has advised clients on some of the most high-profile recent regulatory access and interconnection disputes in the UK, as well as European spectrum issues. Olswang has a market-leading telecommunications team, acting for many of the best-known UK and international operators. Our telecoms practice is led by Rob Bratby, Purvi Parekh and Colin Long.

Olswang's lawyers have played a major part in the development of the telecommunications industry since the 1980s when it was opened up to competition in the UK and Europe.

Our deep understanding of the industry and market context is a real strength of our telecoms practice and is pivotal to us providing advice to help clients achieve their objectives. Olswang lawyers have featured prominently in many of the industry's landmark cases and projects and have been involved as advisers in all of the industry's era-defining events, from industry-wide interconnection, to 2G and 3G mobile, local loop unbundling, functional separation and next generation access. We have detailed practical experience of dealing with industry-specific issues such as network sharing, network outsourcing, MVNOs, interconnection and roaming.

UNITED STATES OF AMERICA

1.1 What are the overall policies and objectives for the electronic communications industry and have these been published in draft or final form? What legislation is relevant to telecommunications and radio frequencies?

Section 1 of the federal Communications Act of 1934, as amended (Communications Act), provides that it is the policy of the U.S. "to make available, so far as possible, to all the people of the United States . . . a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges, . . ." The U.S. generally looks, at both the federal and state level, to competitive market forces to ensure the quality and variety of telecommunications services and regulates where those forces cannot or have not promoted these objectives of the Communications Act.

1.2 Is the USA a member of the World Trade Organisation? Has the USA made commitments under the GATS/GATT regarding telecommunications and has the USA adopted the WTO Basic Telecommunications Agreement?

The U.S. is a member of the World Trade Organisation (WTO). The U.S. has made commitments and adopted the WTO Basic Telecommunications Agreement.

1.3 How is the provision of electronic communications networks or services regulated? Is the provision of electronic communications networks or services open to competition in the USA?

The regulation of telecommunications services in the United States is divided on both a geopolitical and conceptual basis. The Federal Communications Commission (FCC) regulates the provision of interstate and international communications. Local exchange and intrastate long distance services are regulated by the individual states. In general, the provision of electronic communications services is open to competition, although entry into some rural areas may be regulated. Non-dominant telecommunications providers are not subject to any significant regulation. At least on the national level, private carriage is unregulated. *See* also question 4.4.

The provision of "enhanced" or "information" services – services which include data processing service, including most Internet services - is basically unregulated, although Voice over Internet Protocol (VoIP) is subject to some regulations. *See* question 10.5.

The only companies which remain subject to extensive regulation, and then only with respect to their local telephone operations over which the enhanced services ride, are the incumbent local exchange carriers (ILECs) - generally the Bell Operating Companies (BOCs) and their successors. While most states have relaxed regulation of telecommunications, a number have not gone as far as the FCC.

1.4 Which are the regulatory and competition law authorities? How are their roles differentiated? Are they independent from the government?

The FCC is the principal regulatory authority with respect to the provision of telecommunications services. State public utility or service commissions (PUCs) have regulatory authority over the provision of local exchange and intrastate long distance services. Their regulatory authority over entry is very limited, but they have extensive authority over at least

the ILECs' pricing and terms and conditions of service. The Antitrust Division of the Department of Justice (DoJ) and the Federal Trade Commission (FTC) have jurisdiction under the antitrust laws over competition issues, including review of mergers and acquisitions among telecommunications providers.

1.5 Are decisions of the national regulatory authority able to be appealed? To which court or body?

Decisions of the FCC can be appealed to one of the twelve United States Courts of Appeal. Decisions of state PUCs can be appealed to the courts of the relevant state.

2 Licensing

2.1 If a licence or other authorisation is required to install or operate electronic communications networks or provide services over them, please briefly describe the process, timescales and costs.

The FCC has different procedures for the issuance of licences to use the radio spectrum, to provide international and domestic telecommunications services, and to construct, or acquire an interest in, a submarine cable. The amount of time required to obtain a licence varies depending on the service and the procedures used to award the licence. The FCC is not required to act on an application in a specified period of time.

With the exception of certain services, such as WiFi and remote controls, which use unlicensed spectrum, a licence from the FCC is required to use the radio spectrum. Spectrum licences are awarded either by auction or through the filing of an application specifying the precise spectrum and facilities to be used. Due to the many details requiring resolution, the auction process - from deciding how the spectrum will be licensed to the grant of a licence - can take several years. The actual licensing process, from the date the FCC issues a notice that an auction will be held to the grant of a licence can take close to a year or more. Radio spectrum licences not awarded by auction typically are granted within 75 to 90 days after the filing of the application, assuming no opposition is filed.

U.S. companies seeking to provide domestic interstate telecommunications services are not required to obtain a licence. Companies in which foreign entities hold an indirect 25% interest are required to seek a ruling from the FCC that the ownership of the entity comports with the FCC's foreign ownership rules. *See* Section 12. Some state PUCs continue to require authorisations before an entity can provide local exchange or intrastate long distance service, although a PUC's ability to deny the request is severely limited. The filing requirements, time to act and processing procedures vary from state to state.

Requests for authority to provide international telecommunications services, whether resale or facilities-based, require filing a Section 214 application with the FCC and are subject to public comment. Section 214 applications are entitled to streamlined processing, and applicants may commence service 15 days after the FCC releases a public notice of the filing, unless (a) the applicant is affiliated with a dominant landline provider in the destination country and cannot satisfy one of six specified conditions, (b) the applicant is proposing service to a non-WTO country and the applicant is affiliated with a foreign carrier, or (c) the FCC decides to review the application more carefully.

Applications not entitled to streamlined treatment or removed from the expedited treatment line take substantially longer to process. Applications for submarine cable landing licences are filed with the FCC and are subject to public comment. The FCC consults with the Department of State, the Department of Defense, and the National Telecommunications and Information Administration (NTIA). Submarine cable applications which meet certain criteria - principally related to whether they are not affiliated with dominant

carriers at the foreign terminating points - are granted 45 days after the FCC releases a public notice seeking comment on the application. Applications not entitled to this streamlined process take several months and may take a year, or longer, to be acted on. Unlicensed services that employ radio-frequency emitting equipment, either intentionally or unintentionally, are subject to technical requirements and, in some cases, filings with the FCC assuring compliance with those requirements.

2.2 What other requirements, permits or approvals must be met or obtained before networks may be installed or operated and services provided?

Companies proposing to provide facilities-based telecommunications service must obtain authority to use rights of way (ROW) from local or state governments and to construct radio towers. Securing ROW or zoning approval for towers can be difficult and time-consuming. Capacity can be leased from existing holders of ROW or towers and is less burdensome as it generally does not require governmental approval. Facilities-based providers also must comply with local building codes, environmental regulations, and other rules of general applicability.

2.3 May licences or other authorisations be transferred and if so under what conditions?

Prior FCC consent is required to transfer control of any entity holding or controlling, directly or indirectly, an FCC spectrum licence, a Section 214 authorisation to provide interstate or international telecommunications services, or a submarine cable licence. Prior FCC consent is also required to assign any spectrum licence or any authorisation to provide interstate or international telecommunications services or to assign customers or lines. The FCC will review applications for transfer of control or assignment of a licence or authorisation to determine whether the transaction is consistent with its rules and policies and whether conditions should be imposed to ensure that the transfer or assignment serves the public interest - the touchstone of its regulatory authority. Mergers or acquisitions of companies with assets in excess of a specified amount, which is adjusted for inflation, are required to file information with the DoJ and the FTC to permit either agency to determine whether the transaction complies with the antitrust laws.

2.4 What is the usual or typical stated duration of licences or other authorisations?

The duration of radio spectrum licences varies depending on the nature of the service. Radio spectrum licences used for telecommunications services are

typically granted for a term of ten years and are renewable, although, in some cases, showings as to usage or build-out are required. Satellite authorisations are

for a period of fifteen years and permission to continue operating thereafter can be obtained if the satellite is still functional.

Authorisations to provide landline telecommunications services, whether domestic or international, are perpetual. Submarine cable landing licences are for the duration of the life of the cable system.

3 Public and Private Works

3.1 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?

Regulation of land use is generally a matter for local or state governments. Local or state governments control the use of land they themselves own. Most local governments have zoning laws which restrict the manner in which private property may be used, and those laws apply to telecommunications infrastructure. Subject to limited exceptions, local or state environmental rules and other requirements applicable to business in general may apply to network infrastructure. Access to federal lands is subject to regulation by the Department of the Interior or by the government department owning the property; these regulations vary by department.

The Communications Act limits the ability of local municipalities to restrict the placement of towers for commercial wireless service. However, the limits are vague and often require litigation to enforce. Local governments are precluded from considering the effect of RF radiation, which is subject to FCC regulation, in resolving zoning questions. There are also limits on the ability of local governments and building owners to preclude the installation of small satellite receive/transmit antennas. Some states may have additional provisions that telecommunications providers may use to gain such access, but they are scattered and unique in each situation.

3.2 Is there a specific planning or zoning regime that applies to the installation of telecommunications infrastructure?

There is no national planning or zoning regime applicable to network infrastructure. Some states or municipalities may have such regimes.

3.3 Are there any rules requiring established operators to share their infrastructure, e.g. masts, sites, ducts or cables (i.e. dark fibre)? Are there any proposals to mandate 'passive access' to such basic infrastructure?

There are no requirements that carriers share radio towers, although local zoning officials encourage wireless carriers to share tower space. Owners of conduits, rights of way and utility poles are required to give telecommunications providers access to the conduits, space on the poles and rights of way at reasonable rates, assuming there is capacity. ILECs are required to allow competitors to collocate in their central offices, subject to nondiscriminatory rates, terms and conditions. Wireless carriers are required to enter into automatic "roaming" agreements which permit customers to use their wireless devices for voice? but not data? service in areas in which the customer's carrier does not have a spectrum licence. This obligation to offer roaming does not apply where the two carriers are both licensed to provide service in the same geographic area. The FCC is examining whether to extend the roaming rules to apply to data services.

4 Access and Interconnection

4.1 Is network-to-network interconnection and access mandated, and what are the criteria for qualifying for the benefits of interconnection?

All telecommunications carriers are required to interconnect with each other under reasonable terms and conditions and may not discriminate between and among carriers. ILECs are required to provide long distance, international and wireless carriers with access to the local exchange at regulated rates.

4.2 How are interconnection or access disputes resolved? Does the national regulatory authority have jurisdiction to adjudicate and impose a legally binding solution?

The FCC has jurisdiction to resolve disputes over interconnection and collocation. However, principal responsibility for facilitating these agreements has been delegated to the state PUCs. Interconnection agreements must be approved by state PUCs, subject to review in federal district court.

4.3 Are any operators required to publish their standard interconnection contracts and/or prices?

Certain operators must publish interconnection contracts with the appropriate state PUC and/or the FCC.

4.4 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?

ILECs are required to provide interconnection and network access to competitors on rates, terms and conditions that are just, reasonable and nondiscriminatory. Dominant carriers are subject to price regulation and the advance filing of tariffs for certain interstate telecommunications services. The larger ILECs have been granted forbearance from price-cap regulations for certain elements of their networks and in certain places. Other elements of the ILECs' networks have been granted pricing flexibility in a number of areas. For still other elements or places, ILECs face either price-cap or rate-of-return regulation. The regulation of special access services is the subject of an ongoing FCC rulemaking proceeding, in which the FCC is examining, among other things, whether to adopt pricing rules for such services.

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

Section 272 of the Telecommunications Act of 1996 required the BOCs to provide in-region, interstate, long-distance services through structural, transactional and accounting separations. The majority of these restrictions sunset at the end of 2006. The FCC recently adopted a new regulatory framework to replace the structural separation requirements with certain targeted safeguards to enable the FCC to monitor BOC provisioning of these services. ILECs are subject to accounting rules at both the federal and state levels, including requirements for allocating costs between interstate and intrastate services, which bear on interconnection charges.

4.6 How are existing interconnection and access regulatory conditions to be applied to next generation (IP-based) networks?

Providers of IP-based services are not required to interconnect or to provide access to their networks. ILECs must offer certain network elements, unbundled and priced at substantially reduced costs, in certain circumstances.

4.7 Are owners of existing copper local loop access infrastructure required to unbundle their facilities and if so, on what terms and subject to what regulatory controls? Are cable TV operators also so required?

Upon request from a telecommunications carrier, an ILEC is required to provide access to the copper local loop on just, reasonable, and nondiscriminatory terms. Cable TV operators are not required to provide access to their infrastructure.

4.8 Are there any regulations or proposals for regulations relating to next-generation access (fibre to the home, or fibre to the cabinet)? Are any 'regulatory holidays' or other incentives to build fibre access networks proposed?

ILECs building out a fibre to the home (FTTH) or fibre to the curb (FTTC) in previously unserved areas are not required to provide access to such networks on an unbundled basis. In areas previously served, if an ILEC retires the copper loop and replaces it with FTTH or FTTC, it must provide nondiscriminatory access to the nextgeneration network for voice grade service on an unbundled basis. If an ILEC maintains the copper loop along with the new fibre, the ILEC must keep the copper loop connected to the customer premises and make available access to the copper loop on an unbundled, nondiscriminatory basis.

5 Price and Consumer Regulation

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

Retail rates for mobile services are not regulated. Rates charged by ILECs for residential service and some small businesses are generally regulated. Some state PUCs regulate the rates ILECs charge to residential and small business customers for intrastate long distance service. Retail rates for larger businesses typically are not regulated or, if regulated, are subject to a more flexible regulatory regime than rates for residential and small business customers. Rates charged by Competitive Local Exchange Carriers (CLECs) typically are not regulated, nor are the interstate rates of long distance carriers, although all these carriers may be required to file tariffs with the state PUC or provide customers with information on their websites.

5.2 Is the provision of electronic communications services to consumers subject to any special rules and if so, in what principal respects?

Telecommunications providers are prohibited from changing a customer's service provider without the customer's specific authorisation ("slamming"). There are detailed rules concerning the manner in which a carrier may obtain a new customer from an existing carrier. Similarly, carriers are prohibited from adding new services to an existing customer - such as voice mail or caller identification - without the customer's express approval ("cramming"). Both the FCC and state PUCs have procedures for enforcing these prohibitions.

The FCC has truth in billing rules regulating some billing practices. Many states have consumer protection rules which apply to telecommunications providers. In some states, these rules are enforced by the state PUC; in others, they are enforced by the state attorney general's office or a consumer protection agency.

6 Numbering

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

The FCC has plenary jurisdiction over the allocation and assignment of telephone numbers. Telephone numbers are assigned pursuant to the North American Numbering Plan (NANP). NANP numbers consist of ten digits, NXX-NXX-XXXX. The FCC has delegated administration of the NANP to an independent contractor pursuant to a competitively bid five-year contract. The NANP Administrator assigns local exchange area codes and the central office codes - the two sets of three numbers in the NANP - to

specific geographic areas and central offices in accordance with FCC rules and policies. Telephone numbers are assigned to carriers by the local ILEC in blocks of 1,000 numbers. Each carrier assigns telephone numbers to its customers.

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

Telephone numbers must comply with the NANP. Certain Numbering Plan Areas (NPAs), such as 800, 866, etc., are allocated for toll-free calling, *i.e.*, the receiving party pays, and some three digit calling numbers are assigned for other specific purposes, such as 911, which is reserved for emergency public safety, 711, which is reserved for Telephone Relay Services for the hearing- and speech-impaired and 411, which is dedicated to directory assistance.

6.3 How are telephone numbers made available for network use and how are such numbers activated for use by customers?

Carriers may request numbers from the NANP Administrator or the local ILEC, as appropriate. Toll-free numbers are assigned by entities designated by the FCC, typically providers of toll-free service.

6.4 What are the basic rules applicable to the 'porting' (i.e. transfer) of telephone numbers (fixed and mobile).

Telephone numbers are portable without regard to service type. Landline and mobile numbers, including interconnected VoIP numbers, can be ported from one carrier to another; mobile numbers can be ported to a landline carrier and vice versa. Carriers are not required to port numbers where a customer moves from one geographic area to another. Carriers may impose reasonable fees to port a number but may not refuse to port because the customer has not paid the porting fee. The FCC recently adopted new rules to require processing of porting requests within one business day. These time limits will not take effect until 2010.

7 Submarine Cables

7.1 What are the main rules governing the bringing into the USA's territorial waters, and the landing, of submarine cables? Are there any special authorisations required or fees to be paid with respect to submarine cables?

Companies proposing to construct submarine cables between the U.S. and other countries must obtain a cable landing Licence from the FCC. The application is coordinated with the Department of State, which must approve any grant, Departments of Homeland Security and Defense and NTIA. There are no limits on foreign ownership of the underwater or "wet" portion of the cable, but a U.S.-owned and controlled entity must own and control the cable segment from the beach joint to the cable landing station.

Applicants for cable licences must agree to maintain certain records in the U.S. and permit the Department of Homeland Security and DoJ to gain access, pursuant to lawful process, to those records and to the cable for national security purposes. The U.S. portion of the cable must comply with the Communications Assistance for Law Enforcement Act (CALEA). A filing fee is required in connection with any application for a cable landing licence.

8 Radio Frequency Spectrum

8.1 Is the use of radio frequency spectrum specifically regulated and if so, by which authority?

The use of the radio frequency spectrum by entities other than the U.S. government is regulated by the FCC. Most uses of that spectrum require a licence, but some devices may operate on unlicensed frequencies subject to technical rules.

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

The FCC awards most newly licensed spectrum through an auction process. The FCC decides in advance of an auction the technical rules for the spectrum, any limitations on the use of the spectrum, the amount of spectrum to be awarded with each licence, the geographic area covered by each licence, the rules governing the bidding process, and similar matters. Auctions often involve multiple different licences for several different geographic areas. Auctions typically are conducted electronically over a period ranging from a few days to more than a month. Entities interested in participating in an auction are required to file an application in advance of the auction.

Once the auction is completed, the provisional" winner for a licence files another application providing information concerning the entity and, where required, the proposed service. After opportunity for public comment, the FCC will award a licence upon concluding that the applicant is qualified.

8.3 Are distinctions made between mobile, fixed and satellite usage in the grant of spectrum rights?

Historically, the permissible uses of the spectrum were specified by the FCC, and certain spectrum bands could be used only for specified uses. Those rules distinguished among mobile, fixed and satellite uses. Recently, the FCC basically has allowed licencees to decide how to use newly licensed spectrum for terrestrial services, although it has adopted rules to avoid interference between adjacent spectrum bands and between satellite and terrestrial uses. Historical limitations on the use of spectrum bands have been retained, unless the spectrum has been reallocated for other purposes.

8.4 How is the installation of satellite earth stations and their use for up-linking and down-linking regulated?

Satellite uplink earth stations are licensed facilities. C-band uplink stations must be licensed for specific locations since the band is shared with terrestrial users. Very small aperture earth stations (VSATs) operating in the Ku and Ka bands can be licensed in bulk, *i.e.* a licence can authorise the use of a number of uplink stations.

Uplink stations can be authorised to communicate with one or multiple satellites, and a licencee may request authority to communicate with additional satellites after its initial authorisation. Receive-only earth stations are not licensed, except C-band receiveonly stations may be registered with the FCC to protect them from terrestrial interference. *See* question 3.1.

8.5 Can the use of spectrum be made licence-exempt? If so, under what conditions?

Certain spectrum has been set aside for unlicensed use. This spectrum is subject to technical rules concerning the permissible power, the emission characteristics, and similar matters. It is also permissible, subject to technical parameters, for unlicensed devices to operate in some licensed spectrum. These devices must not cause interference to licensed services and must accept interference from licencees operating in the band, as long as the licencees are

complying with the technical rules.

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

Licence fees are not imposed specifically on the use of the radio spectrum, but are imposed on spectrum applications and entities regulated by the FCC regardless of whether they use the spectrum.

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

With limited exceptions, spectrum licences can be transferred or assigned upon obtaining prior FCC consent. The parties to the transaction are required to file an application and demonstrate that the transfer or assignment is consistent with the public interest, which generally requires them to show that (a) the purchaser is qualified to hold the licence and (b) the acquisition will not have an adverse effect on competition. Transactions that do not raise public interest concerns may be granted on the day after they are filed with the FCC.

Spectrum also can be leased by the licencee to entities that would qualify to hold the licence. Leases can be for all or part of the spectrum covered by the licence. Except for spectrum management leases, where the FCC must only be notified, FCC consent must be obtained for a spectrum lease. Leases that do not raise public interest concerns may be granted on the day after they are filed with the FCC. In general, the leased spectrum is subject to the same rules as apply to the licencee and the licencee retains some responsibility, depending on the nature of the lease, to ensure that the spectrum is used in accordance with those rules. The term of the lease cannot extend beyond the licence term.

9 Data Retention and Interception

9.1 Are operators obliged to retain any call data? If so who is obliged to retain what and for how long? Are there data protections (privacy rules) applicable specifically to telecommunications?

Telecommunications service providers must retain certain data to aid law enforcement. *See* question 9.2. Certain information that telecommunications service providers and VoIP providers collect from customers, Customer Proprietary Network Information (CPNI), may only be used or disclosed by the provider in limited circumstances, including:

- (1)in supplying the service from which the customer information was obtained;
- (2) as required by law; or
- (3) with the customer's approval. The provider must keep records regarding disclosure of customer information to third parties and whether the customer has allowed use of CPNI for marketing purposes. Providers must certify annually that they comply with these rules.

9.2 Are operators obliged to maintain call interception (wiretap) capabilities?

Telecommunications service providers, interconnected VoIP providers and facilities-based broadband Internet access service providers are subject to CALEA, which requires that telecommunications networks take technical measures that would permit interception of the content of communications and the provisioning of other information by authorised law enforcement personnel. CALEA excludes "information" services, although the FCC has interpreted this exclusion more narrowly than it has the definition of "information" services under the Communications Act. Thus, CALEA obligations only apply to the switching and transmission components of facilities-based broadband Internet access service providers, while such providers have no CALEA obligations for Internet service provider (ISP) functionalities (e.g. email storage, web hosting) of its Internet access service. The Wiretap Act, the Criminal Trap and Trace Statute, and the Foreign Intelligence Surveillance Act (FISA) also authorise the government to obtain the assistance of telecommunications carriers and electronic communications service providers to intercept communications and provide pen register/trap and trace information under certain circumstances.

9.3 What is the process for authorities obtaining access to retained call data and/or intercepting calls? Who can obtain access and what controls are in place?

In order to obtain call data, authorities may obtain a court order, trial subpoena, administrative subpoena, consent from the customer, or a search warrant. State law may provide other requirements for access to call data.

A law enforcement officer seeking a wiretap for criminal investigative purposes must obtain federal court approval based on the showing of probable cause that the wiretap may provide evidence of a felony violation of federal law. The judge must continue to monitor the implementation of the wiretap. FISA provides a separate process for obtaining access to the content of communications and to call data for intelligence purposes.

10 The Internet

10.1 Are conveyance services over the internet regulated in any different way to other electronic communications services? Which rules, if any, govern access to the internet at a wholesale (i.e. peering or transit) and/or retail (i.e. broadband access) level? Are internet service providers subject to telecommunications regulation?

Although the FCC has jurisdiction over Internet services, it has refrained from imposing any significant regulation, preferring the Internet to develop in a deregulated environment. The extent of state PUC regulatory authority over Internet services has not been determined, although the FCC has pre-empted state regulation of VoIP services and broadband Internet access service. ISPs are subject to the antitrust laws and to consumer protection laws at both the state and federal levels. However, ISPs are exempt from state and local taxation in connection with the provision of Internet access, although entities selling products or services may be subject to taxation on those transactions.

10.2 Is there any immunity (e.g. 'mere conduit' or 'common carrier') defence available to protect telecommunications operators and/or internet service providers from liability for content carried over their networks?

Under Section 230 of the federal Communications Decency Act, providers of an interactive computer service are not treated as the publisher or speaker of content provided by a third party. This law generally protects such providers from liability for claims arising out of the publication of information generated by a third-party user. However, federal courts disagree on the scope of this protection. The Digital Millennium Copyright Act (DMCA) includes safe harbour provisions that protect online service providers in certain circumstances. If providers meet the DMCA's requirements, the providers will be exempt from liability for copyright infringement when the provider is involved in transitory digital network communications, system caching, and storage of a third party's material, among other things.

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

Even if the provider meets the threshold requirements of the DMCA, the provider still must take certain steps to be entitled to statutory immunity. These steps vary depending on what conduct is at issue. For example, to qualify for protection under the DMCA for infringement based on thirdparty content residing on the provider's system or network, the provider must implement a

specific notice and takedown procedure.

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

ISPs and the telecommunications carriers providing the underlying transport are subject to the FCC's Internet Policy Statement, which establishes a requirement of "network neutrality." The Policy provides that consumers are entitled to (a) access lawful Internet content of their choice, (b) run applications and use services of their choice, (c) connect devices of their choice that do not harm the

network and (d) competition among network, application and service, and content providers. This policy precludes telecommunications and Internet service providers from blocking, or impairing the ability of, Internet service customers to access lawful content of their choice but permits reasonable network management practices. It is unclear what additional restraints, if any, this policy might impose. The matter is under review by the FCC and the U.S. Congress. A recent FCC decision is on appeal to the courts.

10.5 How are 'voice over IP' services regulated?

The FCC has not determined whether VoIP should be treated as a telecommunications service or an information service for regulatory purposes under the Communications Act. However, the Commission has imposed certain public interest obligations on interconnected VoIP providers. Interconnected VoIP providers must comply with E-911 requirements, contribute to the Universal Service Fund, comply with CALEA and CPNI regulations, support the Telecommunications Relay Service fund, comply with discontinuance of service requirements and allow customers to port their numbers to a new carrier in the same geographic area. The FCC has pre-empted much state regulation of VoIP services.

10.6 Are there any rules to prevent, restrict or otherwise govern internet or email communications, in particular, marketing and advertising communications?

The federal CAN-SPAM Act regulates commercial emails - emails that contain advertisements or promote a commercial product or service - and precludes materially misleading header information, obscuring the identity of the sender, or sending the commercial email from an email account obtained through false or fraudulent pretences. A commercial email must: (i) identify itself as an advertisement or solicitation; (ii) notify the recipient of his or her right to opt out of receiving future commercial emails from the sender; and (iii) provide the physical postal address of the sender.

Additionally, it must contain an Internet-based mechanism (such as reply email or a link to a web "unsubscribe" page) that the recipient can use to submit an opt-out request. The sender must stop sending commercial mails to the recipient within ten days and is prohibited from providing the

recipient's personal information (including email address) to third parties. Violations may be aggravated if the sender obtained the address by automated harvesting or generated the address by combining names, letters, or numbers into numerous permutations. These provisions apply to all senders who send commercial email to U.S. recipients, not just to senders located in the United

11 Future Plans

11.1 Are there any imminent and significant changes to the legal and regulatory regime for electronic communications?

Telecommunications policy continues to be debated extensively as technology alters the marketplace and renders aspects of the current regulatory environment inapposite. Among the significant issues under review by the FCC and/or the U.S. Congress are:

- improving emergency communications systems, including the interoperability of telecommunications systems used by public safety entities;
- establishing a nationwide broadband policy to ensure broadband services are made available as widely as possible across the U.S.;
- the practice of wireless carriers and equipment manufacturers entering into arrangements for wireless handsets that contain exclusive terms;
- the universal service system, including determining whether universal service subsidies should be made available for services other than voice telephony, e.g., broadband access;
- improving the variety and quality of services available in rural portions of the country;
- the manner in which long distance carriers compensate local exchange carriers for access to the local network, including the compensation carriers pay each other for terminating the other carrier's traffic;
- establishing rules for pricing of special access circuits used by competitive telecommunications providers;
- the manner in which telecommunications and Internet service providers manage their networks in light of the increasing demands of Internet traffic;
- establishing when wireless carriers should be obligated to provide service to other wireless carriers where the latter carrier lack facilities, i.e. roaming obligations;
- the regulatory treatment of VoIP;
- the availability of additional wireless spectrum;
- creating generally a regulatory framework that permits the growth and development of new services while assuring that those dependent on historic services and those who cannot afford expensive new services are served adequately;
- and whether the truth in billing rules should be applied more broadly. It is unclear how many of these issues will be resolved in the immediate future, even though there is a general agreement that the telecommunications Act of 1996, which made the promotion of competition a basic tenet of U.S. telecommunications policy, is no longer adequate and should be modified.

Source: TRAI, Iclg, DOT.

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