Chapter XX

LEBANON

Souraya Machnouk, Joy Lahoud and Ziad Maatouk¹

I OVERVIEW

Lebanon has seen very little of the advances the telecommunications industry has experienced over the past decade in other Middle Eastern and North African countries. The sector is still wholly owned and controlled by the government, and this monopoly has set Lebanon behind in terms of technological advancement. Customers suffer exorbitant rates, poor service and policies based more on political considerations than economic impetus. The mobile market penetration rate stands at around 50 per cent in a region where the penetration rate of some countries exceeds 100 per cent.

The government owns the country's two existing mobile networks (MIC1 and MIC2), and since 1994 has been awarding management concessions to operate the network. The country's current mobile operators are Touch (formerly MTC Touch), part of the Zain group, and Alfa, now managed by Orascom.

ISPs and data service providers (DSPs) are privately owned licensed entities subject to revenue-sharing arrangements with the government, but remain dependent on the outdated government-owned infrastructure. It is through Ogero, the government-owned company acting as the country's fixed-line operator, that access to the internet is sold and distributed to the different ISPs and DSPs for resale to consumers.

Many industry experts are of the view that privatisation is the key to improving Lebanon's telecommunications sector, but debate persists over this strategy.

The idea of privatisation came close to realisation in November 2007, when Lebanon was due to auction its mobile networks. The decision was reversed only a few months later as a result of Lebanon's political stalemate. After the Doha accords, privatisation was once again considered, but then the financial crisis hit; because of fears that it would lower the offer prices in the sector if it were put up for tender, the proposal was again shelved.

Souraya Machnouk is a partner and Joy Lahoud and Ziad Maatouk are associates at Abou Jaoude & Associates Law Firm.

The telecoms sector has proven to be a lucrative source of income for the government, injecting over US\$1.6 billion in net revenues to the treasury, second only to value-added tax. Anti-privatisation campaigners claim that the government's control over the telecommunications sector is necessary to ensure a constant revenue flow into its coffers, and that the assets of the telecoms industry should be increased prior to privatisation in order to bolster the selling price of the industry. These arguments have now become less convincing as the rest of the region has bypassed the Lebanese telecoms industry.

II REGULATION

i The regulators

Telecommunications sector

The Ministry of Telecommunications (the Ministry) is vested with the powers to set the general rules governing the telecommunications sector in Lebanon, to supervise the implementation of these rules, and to propose draft laws and decrees relating to telecommunications activities.

In July 2002, Telecommunications Law No. 431 (the Telecoms Law) was enacted with a liberal mindset, and was hoped by many to be the cornerstone of the corporatisation and privatisation of the sector. The Telecoms Law established the legal framework for the creation of a joint-stock company called Liban Telecom (LT), intended to be a corporatised government-owned entity that would inherit Lebanon's telecoms infrastructure from the Ministry, hence paving the way for the sector's privatisation. LT's mandate is to encourage the sector's development and transparency, approve licences and organise the sector's privatisation; however, to date this entity has not yet been created.

The Telecoms Law also provided for the creation of the Telecommunications Regulatory Authority (TRA), an independent public body with a mandate to liberalise, regulate and develop telecommunications, protect the rights of consumers, and encourage competition and investment in the Lebanese telecommunications market. The TRA began operations in February 2007.

The main duties and powers of the TRA are exhaustively stipulated in Article 5 of the Telecoms Law, and include the authority to:

- a take the necessary decisions and measures to promote competition in the telecommunications sector;
- *b* organise concessions;
- c establish interconnection and general technical standards and rules;
- d set and manage the numbering system;
- *e* monitor the tariffs of service providers; and
- f formulate principles and procedures for the handling and resolution of complaints.

By virtue of its regulatory powers and following consultations with key stakeholders in the sector, the TRA has issued and published several regulations that are now in force prohibiting anticompetitive behaviour and promoting a liberal telecommunications environment in Lebanon. The TRA further prepared a number of draft regulations, such as the Service Provider Licensing Regulation, the Spectrum Management and Licensing Regulation and the Code of Practice for Value Added Services, which are still pending the approval of the relevant authorities.

Under the Telecoms Law, the licensing authority for telecommunications services is divided between the Council of Ministers for telephony licences and the TRA for all other licences, including those related to the internet sector.

The delay in creating LT, combined with the fact that the Telecoms Law itself contains some provisions drafted in generalities, has caused quarrels over the prerogatives of the TRA and the Ministry regarding, for instance, the licensing of ISPs and the management of the national numbering plan. With these issues in the way, the TRA and the Ministry had to refer to the State Council for a final verdict on who would be granted what authority. The Council has yet to make a decision on many of the outstanding issues.

Media sector

The audiovisual media in Lebanon is regulated by a specific law, the Television and Radio Broadcasting Law No. 382 of 4 November 1994 (the Media Law). The Media Law details the terms and conditions applicable to the ownership and operation of a television or radio station in Lebanon. Said law also established the National Audiovisual Media Council (the Media Council) to operate in parallel with the Ministry of Information as a regulatory authority vested with the power, *inter alia*, to study the applications for television and radio licences, to monitor media content and to sanction media-related infractions.

Television and radio broadcast stations are under the supervisory authority of the Ministry of Information. Except for the state-owned and controlled Télé-Liban, the other six licensed TV stations are privately owned, with some of them broadcasting both through a terrestrial channel and via satellite. Lebanon possesses more than 30 radio stations, one of which, Radio Lebanon, is state-owned.

ii Regulated activities

All TMT-related services offered to the public are considered regulated activities that require licensing. Indeed, the concessions to operate the two mobile networks in Lebanon are granted by virtue of licences issued by the government, and the licences related to the use by mobile operators of radio frequency spectrum are allocated by the TRA. In the internet sector, the TRA is also in charge of licensing ISPs and DSPs, whereas television and radio licences are issued by decree by the Council of Ministers following consultation with the Minister of Information and the Media Council. Applications for TV and radio licences are submitted to the Ministry of Information.

On a different note, Lebanon has two 'legal' digital cable operator companies, Cable Vision and Econet, while CATV piracy continues to be a flourishing trade, with more than 600 illegal distributors granting access to a variety of satellite channels for a minimal fee of US\$10 per month. Lebanon ranks as one of the worst Middle Eastern countries in terms of cable programming theft, which is believed by many to be one of the primary obstacles in the way of the country's accession to the World Trade Organization.

iii Ownership and market access restrictions

Telecommunications sector

Pending the sector's privatisation, the government did not impose any ownership restrictions on candidates presenting their bids for the award of the management concessions over the country's two mobile networks.

With regard to the internet sector, there are in principle no nationality-related restrictions on the ownership of companies that apply for an ISP or a DSP licence. Making

up for the lack of specific provisions in the Telecoms Law, the licences granted to service providers explicitly stipulate that any transfer of shares or voting rights representing 10 per cent or more or resulting in the change of control in the capital of a licensed ISP or DSP company is subject to the TRA's prior approval.

Media sector

The Media Law provides stringent restrictions on the ownership of broadcasting companies preventing the entry of non-Lebanese investors. Indeed, only Lebanese individuals and legal entities with entirely held Lebanese-capital are entitled to own and operate a broadcast licence or own an equity stake in television or radio broadcasting companies.

From an antimonopoly standpoint, the Media Law states that no single individual or legal entity shall hold, directly or indirectly, more than 10 per cent of the shares in the capital of a company or be a shareholder of more than one broadcasting company.

The sale and purchase of shares in broadcasting companies is strictly regulated by Article 15 of the Media Law. A prior authorisation from the Council of Ministers is required for any transfer of shares in the capital of a broadcasting company under penalty of the transaction being declared null and void, and up to three years' imprisonment for individuals.

The restrictions on foreign ownership in Lebanon's media sector, set more than a decade ago in the Media Law, have not been revised in response to the globalisation of media and media companies. Disregarding such restrictions, Lebanon's very high satellite TV penetration rate allows almost every household access to regional and global TV channels.

iv Transfers of control and assignments

Considering that ownership of the Lebanese telecommunications sector remains in the public domain, there is no widely applicable law or regulation governing mergers and acquisitions of companies operating in the sector.

Nevertheless, and with the aim of limiting anticompetitive practices, the TRA controls mergers between any two or more ISP or DSP companies by requiring that they submit a proposal for the merger prior to its approval presenting the reasons and incentives for the proposed transactions. Due to the absence of detailed regulations setting out the rules and procedure of such mergers, the TRA's power to accept or refuse the proposed transaction is discretionary. A notable example of a successful transaction approved by the TRA was the merger between two prominent ISP companies, Inconet and Data Management, which resulted in the creation of a new entity, IDM.

III TELECOMMUNICATIONS AND INTERNET ACCESS

i Internet and internet protocol regulation

Issuance of licences

Prior to the entry into effect of the Telecoms Law in 2002, there was no clear set of rules regulating the internet sector or establishing the terms and conditions to be fulfilled by licence applicants. The Ministry, as the sole authority controlling the country's internet supply then, issued a number of licences to ISPs and DSPs.

Pursuant to the Telecoms Law, the TRA is in charge of regulating the internet and IP-based services, and is vested with the power to issue licences pertaining to the internet sector and to set out the conditions and requirements to be met by service providers. This procedure aimed to ensure equal opportunities and competition in the internet market.

Indeed, and with the aim of transforming the telecommunications sector from a state-owned monopoly to a competitive market, the Telecoms Law states specifically that the ownership and operation of telecommunications services must not be subject to any discrimination or restriction.

There are currently 26 licensed ISP (17) and DSP (nine) companies operating in the Lebanese market in total, with the TRA refraining from issuing licences to new service providers pending the review of its draft Service Provider Licensing Regulation and subsequent publication in the Official Gazette. Until this draft enters into force and effect, the TRA has frozen the issuance of new licences for ISPs and DSPs.

Significant market power

TRA Decision No. 3 dated 18 March 2009 regulates and reduces the supremacy of service providers with significant market power (SMP). The goal of this decision is to prevent service providers with SMP to materially affect the market as a result of their control over essential facilities or through the use of their position.

In reality, the sole service provider with SMP is the state-owned company Ogero, which sells and distributes access to the internet to the different ISPs and DSPs operating in the sector. To limit price fluctuation, the Council of Ministers fixes the prices at which Ogero sells internet access. Nonetheless, internet access in Lebanon still suffers, *inter alia*, from Ogero's monopoly over the bandwidth resulting in poor service at high prices and lack of competition between ISPs.

VoIP

As the telecommunications sector is an essential source of income for the state and in order to ensure the continuance of its high yield, the Ministry issued a decision prohibiting the use of VoIP services by end-users. Although this is not enforced in practice, a slow internet connection was the main impediment to the use of VoIP services. However, subsequent to the issuance in August 2011 by the Council of Ministers of the Broadband Decree aiming to increase internet connection speeds, and to the major improvements that Lebanese end-users have witnessed during the past year, VoIP services are becoming the most reliable source of telecommunications in the market.

ii Universal service

In December 2010, the government purchased a US\$45 million participation in the submarine internet cable known as the India–Middle East–Western Europe cable (IMEWE), which was activated in early July 2011. The IMEWE is a 13,000 kilometre high-capacity fibre-optic submarine cable system that links India and Europe via the Middle East. It will give ISPs the capacity needed to supply high-speed internet, including 3G for the mobile phone sector. The government also recently funded the installation of fibre-optic cable throughout the country to render access to high-speed internet universally available.

iii Restrictions on the provision of service

ISPs and DSPs do not have a legal obligation to monitor the content transmitted to internet users. The only control operated by service providers is on the monthly traffic volume of their network users due to the fact that the bandwidth allocated to each internet user is capped on a monthly basis.

Moreover, there is no legal obligation to restrict or block the content or applications accessed by network users. At the request of an end-user, ISPs and DSPs have discretionary power to remove content that constitutes an infringement to intellectual property rights temporarily or definitively. ISPs and DSPs are only mandated to comply with a court order to withdraw the unlawful information.

A special police unit is in charge of investigating and tracking cyber theft, piracy and crimes that occur over the internet.

Unsolicited phone calls, text messages or emails could be construed as harassment and a criminal offence, and restraining court orders are issued to reveal the source and block the caller or sender.

iv Security

The Telecoms Law states that upon the occurrence of events that affect national security, the Council of Ministers may instruct service providers to give full priority to the telecom-related requests of the security forces and the civil organisations operating under their control.

Furthermore, Law No. 140 of 27 October 1999 related to the secrecy of telecommunications provides that each service provider is under the obligation to install listening and communication interception devices to be operated exclusively and at the discretion of the government.

Finally, the TRA imposes the obtainment of licences prior to the importation of internet and telecommunications devices and equipment. Such rule aims to restrict the type of devices that may be used within the country. For instance, devices using a certain radio frequency spectrum can only be imported for use by the security forces.

Privacy and consumer protection

Lebanon is legally committed to protect consumers and ensure the respect of their personal information.

Consumer protection is addressed in Consumer Protection Law No. 659, which entered into effect on 4 February 2005, as well as in the Consumer Affairs Regulation issued by the TRA in 2009 that will become binding after being reviewed by the State Council and published in the Official Gazette.

In essence, the Consumer Affairs Regulation provides that consumers and users have the right to personal privacy and to protection from unauthorised use of their records and personal information. In other words, the storage of data by service providers (personal information, calling patterns, records, etc.) is legal, but such information should remain confidential and may not be disclosed unless the consumer consents in advance and in writing to its use or divulgation.

The extent of such confidentiality is limited by national security concerns and judicial procedure needs. Indeed, the investigation of the Special Tribunal for Lebanon into the assassination of the former Lebanese Prime Minister Rafic Hariri revealed the ability of service providers to track the activity of mobile phones (incoming and outgoing calls, and the time, date, duration and location from which they were made) and their obligation to disclose such information upon formal request. In this specific case, the request from the Special Tribunal for Lebanon to disclose information was granted by an ordinance delivered by the Telecommunications Minister upon the written request of the general prosecutor.

Protection of children

The TRA, in collaboration with the Higher Council for Children Protection, organised several round tables in 2009 and 2010, inviting the main stakeholders of the telecommunications sector to share their vision of a protected internet space for children and to discuss the necessary measures to be undertaken. ISPs, software vendors, NGOs and members of the legislative internet committees attended these meetings and developed recommendations to ensure the protection of children on the internet.

These recommendations most notably address the need to develop a national awareness campaign and establish an open dialogue between parents and children. Special emphasis is placed on encouraging ISPs to provide parental control facilities. Ensuring the empowerment of children and their responsibility in accessing cyberspace is also a critical aspect. Finally, establishing areas dedicated to children in cyber cafés and enforcing their implementation is deemed an essential initiative.

These recommendations will be incorporated in a code of conduct that is currently under preparation.

Cybersecurity

In recent years, Lebanon has taken many steps towards addressing cybersecurity based on international best practice. It has been a member of the Pan Arab Observatory for Cybersecurity since its creation in 2009. The role of this body is to gather experts and professionals from various sectors involved in cybersecurity to discuss the needs and emerging issues that the legislative and regulatory authorities of Arab countries need to address.

In 2010, the TRA announced its plan to build the first national emergency cybersecurity incident response centre for Lebanon, in cooperation with Lebanese public institutions and the ITU. This plan was adopted and is currently under implementation.

IV SPECTRUM POLICY

i Development

Under the Telecoms Law, the TRA is the authority in charge of developing policies, rules and regulations for the assignment of radio frequency spectrum. In 2010, it took major steps towards the development of the regulatory framework of the spectrum use in Lebanon. It endorsed draft Decrees related to the Spectrum Right to Use Fees and the Spectrum Administration Cost that, once reviewed by the State Council and issued by the Council of Ministers, will ensure an efficient utilisation of radio frequencies.

In the meantime, the TRA ratified the treaty to join the International Telecommunication Union (ITU), and abides by the latter's resolutions and recommendations regarding spectrum. In the context of the assignment of frequency spectrum, the TRA aims to ensure efficient usage and accommodate government and consumer needs, while making way for new technologies. Its consultations and resolutions take a number of factors into account, including the rights of existing users, domestic spectrum plans and forecasted demand.

ii Flexible spectrum use

The general terms of the spectrum licences delivered by the TRA include a divisibility restriction whereby the spectrum licensee may not transfer any of its rights or obligations under the licence to a third party.

The rigidity of the terms of the licences is an obstacle to the growing demand for voice, data and video communication. The success of 3G and other future wireless connections may depend on the ability to grant flexible licences.

iii Broadband and next-generation mobile spectrum use

Since the launch of ADSL services in 2007, the TRA has been continuously monitoring the development and implementation of broadband services in Lebanon. In 2009, the penetration of broadband services increased by more than 45 per cent compared with the previous year. Despite the growth witnessed in 2010 and the spread of coverage to most of the country, subscribers to broadband services still suffer from a poor quality of service for the residential market, high prices and limited availability. The Ministry has recently introduced the VDSL2 technology in 36 centres in Beirut and other locations, thereby increasing the internet speed to between 30Mbps and 50Mbps. Such upgrade to the DSL network comes in anticipation to the adoption of the fibre-optic infrastructure.

The major obstacle to the wide adoption of true broadband services is the lack of high-speed telecommunications infrastructure, and the absence of competitive offers for wholesale services. In order to address this issue, the Ministry has completed three main projects: the launch in July 2011 of the transcontinental internet submarine cable IMEWE; the introduction in October 2011 of 3G technology; and the introduction in May 2013 of 4G technology, which allows Lebanese consumers to benefit from high-speed connection on mobile devices and effectively use new applications on their mobile phones. Moreover, the Digital Telecom Vision 2020 initiative launched by the Ministry is expected to improve the fibre-optic infrastructure.

iv Spectrum auctions and fees

Lebanon has not engaged in any auction plan for spectrum. As previously mentioned, the TRA has prepared a draft Decree on Spectrum Right to Use Fees, which awaits the approval of the Ministry.

V MEDIA

i Restrictions on the provision of service

The service obligations of radio and television network licensees are detailed in the licence, and include the obligation to meet minimum performance requirements such as service on a 24-hour basis, specific territorial coverage and a capped call-blocking rate. Content restrictions are enforced by the Media Council and the special unit of the General Security Office, censuring mainly any sexual, pornographic or homosexual content broadcast on television and radio as well as any content supporting the state of Israel.

ii Internet-delivered video content

IPTV services, such as live television, time-shifted television and VOD services, have throughout the past year cumulated a significant share of the Lebanese market. This is because the available speed of the internet connection has increased and is now able to meet the high bandwidth requirements of such services.

Several IPTVs are now operating, such as those belonging to the TV stations LBC and MTV.

iii Mobile services

In an effort to meet the local market's ever-growing demand for mobile media services, the Ministry launched 3G technology for mobile devices in October 2011 through the two licensed operators, Alfa and Touch, allowing mobile users to connect to the internet on their mobile phones using high-speed internet connection (20 to 40 times faster than a DSL computer connection).

The current availability of a high-speed internet connection on mobile devices has led some local broadcasters to broadcast programmes directly to mobile phones via mobile applications.

VI THE YEAR IN REVIEW

With many projects on which the government and the TRA had worked finally materialising, 2012 was a year of prolific developments for the telecommunications sector in Lebanon, More recently, however, little (if any) progress has been seen in the implementation of the Telecoms Law.

i IMEWE and fibre-optic cables

At the end of December 2010, Lebanon took its first step towards increasing its bandwidth capacity by activating the IMEWE submarine cable; in July 2011, Lebanon started using 10Gb/s from the IMEWE cable bandwidth. A significant rise in internet speed will only take place once the country starts using the full 120Gb/s capacity made available to Lebanon, which is expected to increase gradually.

Lebanon has also engaged in major infrastructure developments by installing fibre-optic cable throughout the country. The implementation of the last phase of high-speed broadband with a tender for a pilot project of FTTH was completed in 2011 allowing end-users to get 100Mb/s.

ii Internet

The Council of Ministers passed a decree on 23 August 2011 that increased the internet connection speed, setting the minimum speed to 1Mb/s, in addition to lowering prices. Thanks to this initiative, service providers and end-users have started to benefit from a drop in prices of up to 80 per cent. Furthermore, the fixed broadband penetration rate per household now stands at around 44 per cent compared to a rate of 24 per cent in 2012 and a rate of 20 per cent in 2011.

According to the figures released by the International Telecommunication Union, Lebanon dropped in 2015 by three ranks from 2014 in terms of fixed broadband penetration and ranked in 56th place among 204 countries. As for the ranking among 19 Arab countries, Lebanon ranked in first place and in second place among 51 upper middle-income countries.

During the period of 2010–2015, Lebanon's fixed broadband penetration grew by a compound annual growth rate (CAGR) of 24.4 per cent in comparison with 12.4 per cent for developing economies and 17.4 per cent for Arab countries. Globally, Lebanon had a higher fixed broadband penetration rate than Bulgaria, Cyprus and Trinidad and Tobago.

It is worth noting that Lebanon's base of subscribers for fixed broadband is witnessing a growth, and in 2016, more than half a million subscribers to both DSL and fibre-to-the-curb (FttC) networks have been registered.

At the end of 2015, Lebanon ranked in 52nd place among 205 countries in terms of internet penetration. Globally, Lebanon's rank dropped by five places and among 20 Arab countries, Lebanon ranked sixth and came in second place among 51 upper middle-income countries. The number of internet users in Lebanon in 2015 witnessed a growth of 1.4 per cent and the internet penetration rate during the period of 2010–2015 superseded the global average, Arab average and the developing economies' average. It should also be noted that the number of internet users in Lebanon grew by a CAGR of 11.1 per cent between 2010 and 2015. On a global basis, Lebanon's internet penetration rate superseded Russia, Slovenia and Kazakhstan, but came lower than Azerbaijan, Oman and the US.

The aggressive upgrade of the internet infrastructure and the expansion and modernisation of the national transmission network are expected to fuel a major expansion of the subscribers' base.

iii Mobile network

The expansion of the networks was a major focus of the management contracts signed with Touch and Alfa in 2009.

Previously, both operators were paid a flat monthly fee to manage the networks and were liable to settle all the operating costs associated with running the networks. This arrangement was, by nature, antithetical to growth, because any expansion of the networks would increase operating costs, thus reducing the bottom line of the operators.

Under the 2009 management contracts, the objectives of both the Ministry and the operators seemed to have become more aligned.

Touch received US\$6.66 and Alfa received US\$6.75 per active subscriber, drastically changing the revenue model and giving the operators the incentive to expand.

With a subscription-based revenue model, the interests of mobile operators focused on expanding Lebanon's overburdened and ageing mobile network infrastructure. The expansion was made possible by an agreement between the operators and the government, whereby the latter agreed to take on the costs associated with any kind of capital expenditure, purchasing everything from towers to switches to buildings, while the operating costs continued to be incurred by the mobile operators.

One of the most important elements that affected the growth of the mobile market and facilitated higher market penetration was the new pricing structure put in place by the government at the beginning of April 2009. The plan lowered prices for prepaid monthly subscriptions (US\$45 to US\$25), prepaid minute rates (US\$0.50 to US\$0.36), monthly subscription fees (US\$25 to US\$15) and post-paid minute rates (US\$0.13 to US\$0.11) in a move that has been eulogised by many as the sector's first shift toward a viable pricing structure. A new pricing structure was enacted in June 2014 suggesting a considerable decrease ranging between 20 and 32 per cent of the monthly subscription fees, minute rates and broadband subscriptions while increasing the internet capacity.

According to the Ministry, given the growth in the number of subscribers, telecom revenues doubled from US\$44 million in January 2014 to US\$88 million in June 2014.

Figures released by the state-owned mobile phone networks Alfa and Touch show that there were 4 million mobile phone subscriptions in Lebanon at the end of June 2014. Touch has 2.1 million mobile phone subscriptions, representing a 53 per cent market share, while Alfa has 1.9 million subscriptions and a 74 per cent share. In parallel, there were 2.8 million subscriptions to data services at the end of June 2014, equivalent to 70 per cent of mobile phone subscriptions. Touch has 1.3 million subscriptions to the data services it provides, equivalent to about 62 per cent of its total mobile phone subscriptions, while Alfa has 1.5 million subscribers to its data services, or about 79 per cent of its total mobile subscription base. At the beginning of 2015, the Ministry announced that it will distribute 1 million new mobile phone numbers, and 200,000 numbers have initially been distributed equally to both Alfa and Touch. According to the Ministry, the remaining numbers will gradually be distributed over time in accordance with market needs.

Moreover, among seven countries whose rankings in the cellular intensity index have increased since 2013, Lebanon posted the sixth-largest increase in its score in the region. Lebanon received a score of 40.76 per cent in 2014, up from 40.71 per cent in 2013.

The Ministry has extended the management contracts of Global Telecom Holding and Zain, which operate the state-owned mobile phone networks Mobile Interim Company 1 (MIC 1) and Mobile Interim Company 1 (MIC 2), until the fourth quarter of 2015.

The government has launched a public tender to award new contracts for the management of MIC 1 and MIC 2. Seven companies applied to take part in the tender, and the Ministry accepted the applications from Vodafone, Orange, Detecom, Maxis, Turkcell and Zain. However, the bidding process has been subject to various delays and has not yet been completed.

It should be noted that in 2014, the share of smartphone owners among the total population in Lebanon was 70 per cent. In addition, 90 per cent of smartphone owners in Lebanon had mobile internet on their devices in 2014.

iv 3G service

During September 2011, 3G service was tested through a pilot project involving 4,000 mobile users, 25 per cent of which were students. In October 2011, the service was offered to the main agglomerations, and by January 2012 it was made available throughout the whole country.

The 3G network is providing a significantly faster version of current internet connections for mobile phones, known as WAP. It will also enable access to the internet on a computer via a USB key or a dongle. It is expected that the introduction of this technology into the Lebanese market will increase internet penetration rates by 30 per cent.

With the introduction of 3G by Touch and Alfa, a new market will open up, allowing these operators to compete with private ISPs and DSPs in providing internet to end-users. In 2013, Touch and Alfa enrolled Lebanon's first commercial 4G data following the successful completion of a short pilot phase.

Figures issued by the Ministry indicate that mobile broadband penetration increased to 60.1 per cent at the end of June 2014, compared with 17.2 per cent at the end of May 2012 and 6.7 per cent at the end of June 2011. The Ministry added that the number of mobile broadband subscribers reached 722,000 at the end of May 2012, constituting an increase of 158 per cent from 280,000 subscribers at the end of June 2011.

The ITU has indicated that the cost of mobile broadband services in Lebanon was equivalent to 3.7 per cent of its gross national income per capita in 2012, constituting the 43rd most expensive among 110 countries. In parallel, the cost of fixed broadband in Lebanon absorbed 2.3 per cent of the country's gross national income per capita in 2012, constituting the 63rd lowest share among 169 countries globally.

These recent developments indicate the Lebanese telecoms market is again heading in the right direction, and in 2015 the market is evolving, most notably in the broadband and mobile sectors.

VII CONCLUSIONS AND OUTLOOK

Despite the continuous growth in the number of mobile subscribers, Lebanon's mobile penetration remains far behind regional and worldwide standards. In 2010, the ITU conducted an annual study on the level of penetration of mobile phones and internet in each country. Lebanon was ranked 14th out of 17 in the Middle East region, which places it 144th out of 233 in the worldwide market. As far as internet penetration is concerned, Lebanon was 10th out of 17 in the Middle East region, which places it 100th out of 233 in the worldwide market. However, it should be noted that an increase in internet penetration was registered from 70 per cent in 2013 to 86 per cent in 2015.

The mobile competition intensity index for 2012 ranked Lebanon in 18th place among 19 countries in the Arab world, up from 19th place in 2011 and 2010, but down from 15th place in 2007 and 11th place in 2006. The index rates the intensity level of competition in the region's cellular markets by comparing the state of every market relative to the other markets.

In 2015, the Ministry launched the 'One Stop Shop' joint project with state-owned Ogero as part of a series of initiatives to modernise and reform the telecom sector. Ogero manages and operates Lebanon's fixed line telecommunications networks and provides internet services. The project allows Lebanon's two mobile operators, Touch and Alfa, to set up points of sales (POS) in Ogero's service distribution centres. The initiative will allow citizens, *inter alia*, to settle their fixed and mobile bills, subscribe to new landline and internet services, and receive after-sale services, in any of Ogero's branches. The project will be implemented over three phases; the first phase involved the renovation of eight Ogero branches by the end of 2014. The Ministry has indicated that the new POS will provide citizens and firms with flexibility, convenience and efficiency when dealing with telecom-related issues. Ogero currently has more than 50 service distribution centres across the country.

The multiple initiatives that have been implemented by the government to increase broadband access, improve the infrastructure, introduce new technologies and render services accessible to all by reducing prices, although necessary, are far from being enough to keep up with new technologies and meet the needs of Lebanese consumers. While Lebanon has been known to have slow and expensive internet access as well as costly and patchy mobile services, this situation is changing, with internet speeds now increasing, mobile call costs being reduced and capped data plans being introduced.

In 2015, the Ministry unveiled a five-year plan to rebuild Lebanon's telecoms infrastructure in the aim of allowing internet users to enjoy fibre-optic connectivity by the year 2020. Moreover, the Ministry announced that 4G services will cover the entire country within two years in preparation for the launching of the 5G connection by 2020.

In a recent report, Business Monitor International considered that the government's tight control over the Lebanese telecommunications sector is holding back investments and innovation, while the lack of competition in the mobile and broadband segments in restraining growth. However, it pointed out that the sector presents significant opportunities, as its liberalisation, if implemented, has the potential to unlock much-needed capital and expertise in the sector.

In terms of potential, Lebanon is a telecommunications goldmine. Its strategic location, educated population and low penetration rates make it a prime candidate for a thriving telecoms sector. At this point, the government's indecision over privatisation is commonly accepted. Even if privatisation is not adopted, a viable option for the Council of Ministers is to put the Telecoms Law into action through the liberalisation and the creation of LT, thereby cutting the umbilical cord between politics and telecommunications.

ABOU JAOUDE & ASSOCIATES LAW FIRM

OMT Building 266 Sami El Solh Ave PO Box 116-5079 Beirut Museum 1106-2010 Beirut Lebanon

Tel: +961 1 395555 Fax: +961 1 384064

s.machnouk@ajalawfirm.com www.ajalawfirm.com

SOURAYA MACHNOUK

Abou Jaoude & Associates Law Firm

Souraya Machnouk is a partner at Abou Jaoude & Associates Law Firm, and lends her specialised knowledge and experience to several practice groups including telecommunications, mergers and acquisitions, corporate finance, media, structured finance and banking.

In the TMT sector, Ms Machnouk regularly counsels on cross-border acquisitions and corporate finance transactions involving regulated entities such as GSM operators, radio and TV broadcasting companies. She has extensive experience in regulatory matters such as licensing, compliance and post-acquisition integration, and advises telecoms operators and service providers on all aspects of their businesses including the expansion of their activities to various jurisdictions. Her representative work includes transactions of first impression in the region, namely the launch of a TV station through a private placement of shares, and the mezzanine financing and consolidation of a large telecoms group operating in Africa.

Ms Machnouk is recognised by *The Legal 500* as a leading individual, and *Chambers and Partners* reports that she 'stands out as talented, innovative and professional'.

She holds a JD in private and public law from the St Joseph University in Beirut, a master's degree (DEA) in banking and financial markets law from the University of Paris II-Assas in partnership with St Joseph University, and a joint master of laws degree (LLM) from Georgetown and George Washington Universities.

She is admitted to the Beirut Bar, and is fluent in Arabic, French and English.

JOY LAHOUD

Abou Jaoude & Associates Law Firm

Joy Lahoud is an associate at Abou Jaoude & Associates Law Firm practising in the area of corporate and M&A with a particular focus on telecom.

He regularly provides legal advice to companies operating in the telecom sector, from licensing matters to drafting contracts. Mr Lahoud also carried out due diligences on telecom groups in various jurisdictions.

He received his JD in private law from the St Joseph University in Beirut and holds a master of laws degree (LLM) from Cornell University. He is fluent in Arabic, French and English.

ZIAD MAATOUK

Abou Jaoude & Associates Law Firm

Ziad Maatouk is an associate at Abou Jaoude & Associates Law Firm practising in the area of corporate and contractual law with a particular focus on media.

He regularly provides legal advice to enterprises operating in the media, advertising, production and post-production industries with regard to regulatory compliance matters. His experience also includes representing clients in connection with various matters contiguous to these industries such as radio licensing, the acquisition and protection of IP rights, the implementation of privacy policies, and IT issues. Mr Maatouk has further carried out due diligences on companies, assisted in obtaining various corporate approvals and drafted contracts.

He received his JD in private law from the St Joseph University in Beirut and is fluent in Arabic, French and English.