IDAL
INVEST IN LEBANON

INFORMATION TECHNOLOGY

FACT BOOK
2015

CONTENT

SECTOR OVERVIEW

1. SECTOR PERFORMANCE

The Lebanese Information Technology (ICT) sector is a fast growing sector with an estimated market size of USD 381 million in 2014[1] (Figure 1) and projected to reach USD 530 million by 2017[2]. The market has been growing at a compounded annual growth rate (CAGR) of 7.9% over the period 2009 – 2014[3] and is expected to grow at a CAGR of 7.24% from 2015 to 2018[4]. Its impact on GDP, whether direct or indirect, is forecasted to be greater than USD 6 Billion by 2017[5].

According to Business Monitor International, Lebanon's ICT market is forecasted to be a "regional outperformer over the medium term as strong economic growth strengthens market expansion"[6]. Some elements contributing to the market's expansion include rising income, declining device prices and modernization initiatives takes by enterprises and the public sector, as well as improvements in the telecom infrastructure.

ICT sector is a fast growing sector with an estimated market size of

381 million USD

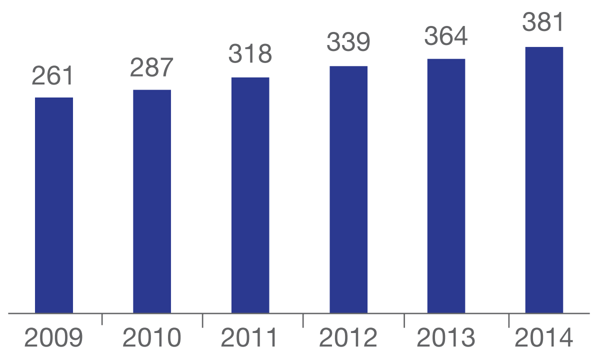
in 2014

CAGR equal to

7.24%

over the next 4 years

Figure 1: Lebanese ICT market value | **USD million**



Source: Business Monitor International **BMI**

The ICT market can further be analyzed across three main subsectors: Hardware, Software development and ICT Services (Figure 2).

1,3 BankMed - Market & Economic Research Division, Analysis of Lebanon's ICT Sector, June 2015
2,6 Business Monitor International, Lebanon Information Technology Report, 2013
4 Business Monitor International, Lebanon Information Technology Report, 2014
5 Booz & Company analysis, Ministry of Telecommunications, Progress Report 2013

HARDWARE

Hardware sales reached USD 235 million in 2014[7](accounting for 62% of total market size)[8] and are expected to grow at a CAGR of 6.63% over the 2015 - 2018 period[9]. The market is still far from saturated, demand for computers remaining on a steady rise among the various industries and household levels and booming tablet sales[10].

SOFTWARE DEVELOPMENT

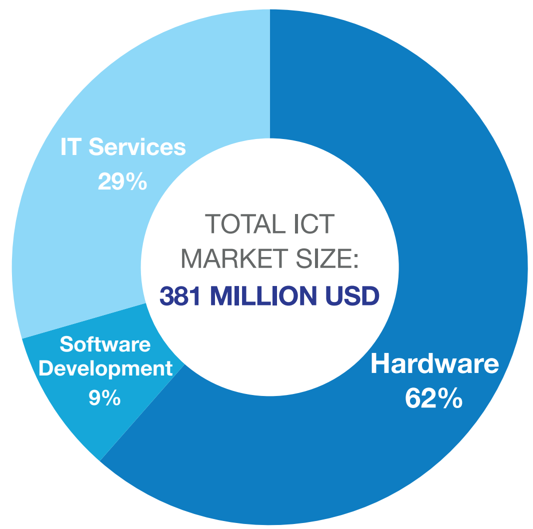
The software market value reached USD 34 million in 2014[11] (accounting for only 9% of total market size)[12] and expected to grow at a CAGR of 9.12% over the 2015 to 2018[13] period. Software development activities have grown steadily in Lebanon in the past few years with the enforcement of intellectual property rights, the reduction of software piracy and the upgrade of the ICT infrastructure.

ICT SERVICES

The size of the Lebanese ICT services market reached a value of USD 112 million in 2014[14] accounting for 29% of total ICT spending[15]. The pickup in ICT services is forecasted to continue with a CAGR of 7.9% during 2015 - 2018[16], as spending on e-services by governments, businesses and telecom companies is continuously increasing.

At present, support and maintenance constitute the largest share of spending on ICT services; however, demand for more complex services such as managed services, value added services and outsourcing and cloud services are expected to increase[17].

Figure 2: ICT Market Size in Lebanon by Subsector **(USD Million) | 2014 Projections**



Source: Business Monitor International **BMI**

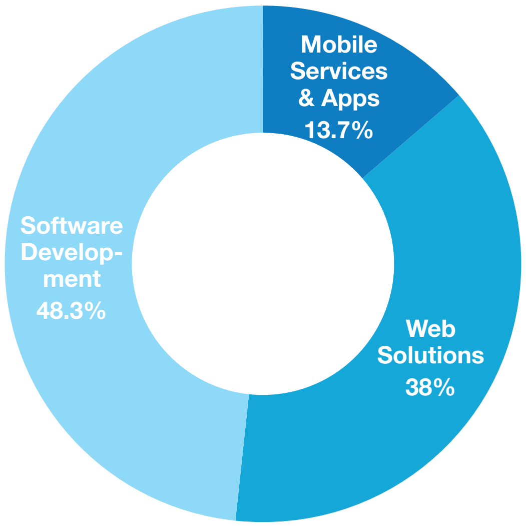
7, 8,11,12,14,15 BankMed - Market & Economic Research Division, Analysis of Lebanon's ICT Sector, June 2015
9,10,13,16,17 Business Monitor International, Lebanon Information Technology Report, 2014

2. COMPANIES PROFILING

The local ICT sector comprises around 800 companies; mostly small and medium-sized businesses. The majority of these companies remain distributors and sellers, given that the market is still dominated by major international ICT hardware manufacturers, represented in the country through local agents and distributors.

The sector has, however, been progressively moving from retail and wholesale activities into innovation and content generation with the share of companies involved in the creation of Software Products & Services currently standing at around 30% of total enterprises (Figure 3).

Figure 3: Distribution of ICT Companies by Type of Activity **% | 2015**



Source: IDAL, ICT Directory 2015

Companies engaged in the creation of Software Products & Services employ around 5000 individuals and operate across three major activities (Figure 3):

- **Software Development** for vertical industries, mainly for the healthcare, education and banking sectors. These constitute for around 48% of software companies.
- **Web Solutions** companies mainly involved in web hosting, web design and development as well as e-services and account for 38% of total software companies.
- **Mobile Services and Applications** account for around 14% of total software companies.

3. EXPORT ACTIVITY

- Lebanon is emerging as a leading exporter of software products and services in the region. Exports of ICT services related activities account for an estimated 34.8% of total service exports in 2013[18];
- More than 60% of firms engaged in ICT activities are export oriented, with the majority of their revenues stemming from their activities outside Lebanon.
Key exported products include vertical software applications and mobile applications.
- The Gulf region is the primary export destination for Lebanese products while other Middle Eastern countries rank second. European markets rank third, with France at the top of the list.
African countries are currently emerging as a new important export destination, being increasingly targeted by Lebanese firms.

Exports of ICT related activities constitute an estimated
34.8%
of total of service exports in 2013

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18 World Bank Data: ICT service exports

COMPETITIVE ADVANTAGES

1. STRONG HUMAN CAPITAL BASE

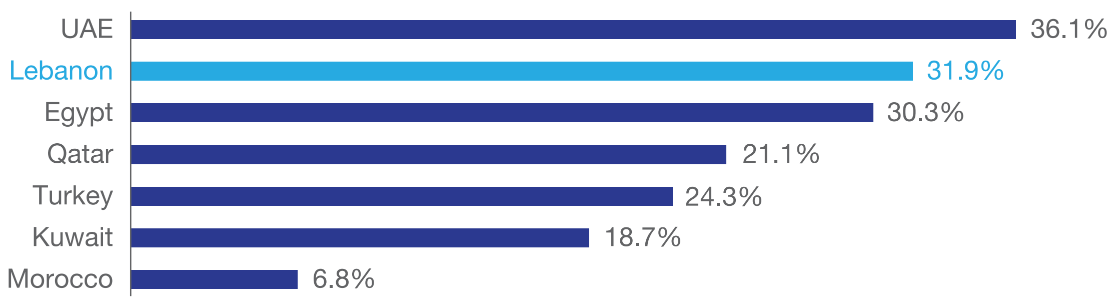
- Lebanon's solid educational system is at the basis of the country's highly qualified labor force. Lebanon ranks 28th worldwide for the Quality of its Educational System, while it occupies 5th place globally for the Quality of its Math and Sciences Education[19].
- Lebanon also occupies the 5th position in the MENA region in 2013 on the ICT Development Skills Index (IDI), which measures ICT capabilities and skills[20].
- More than 30% of the country's workforce is employed in knowledge intensive activities. Around 2000 university graduates specialized in ICT related activities join the sector every year. These are spread over the fields of engineering, computer science, applied informatics and media (Figure 4).
- The majority of the labor force is tri-lingual, and possesses one of the most competitive technical skills in the region.

Lebanon ranks **28th** worldwide for the Quality of its Educational System

It occupies the **5th** place worldwide for the Quality of its Maths & Sciences Education

The average wage of software engineer at nearly **40%** lower than in the GCC

Figure 4: Share of workforce employed in knowledge intensive activities **% | 2013**



Source: International Telecommunication Union (2013)

19 Global Competitiveness Report 2013-2014.
20 International Telecommunication Union, Measuring the Information Society, 2014

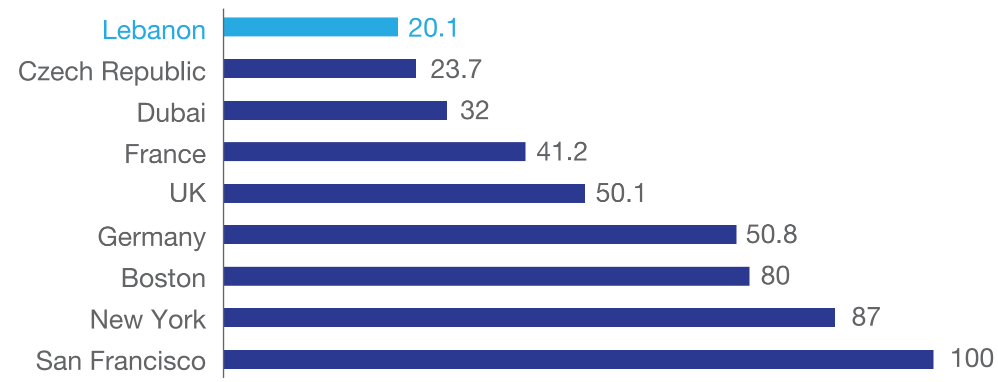
The number of internet users in the Arab world is expected to reach **197 million** by 2017

The Arabic language to be ranked as the **4th** most used language on the net

2. COMPETITIVE LABOR COST

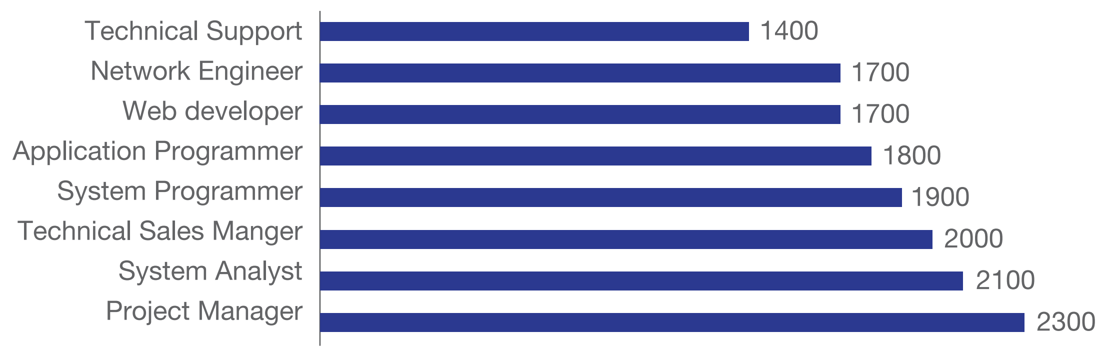
The Lebanese workforce is not only adequately skilled, but highly cost competitive as well. The labor base is relatively cheaper than the US, Europe and GCC countries, with the average wage of a software engineer nearly 37% lower than in the GCC and 50% lower than in selected developed economies (Figures 5 and 6).

Figure 5: Average annual wages of software engineers in selected countries **USD thousands | 2015**



Source: Payscale

Figure 6: Average salaries for selected positions in IT with 5 years of experience **USD | 2013**



Source: INFOPRO

3. ACCESS TO GROWING REGIONAL MARKETS

▸ Lebanon's access to expanding emerging markets presents significant opportunities for ICT companies to serve the region.

▸ The ICT market in the MENA is rapidly growing. The region's ICT spending is projected to total USD 211 billion in 2014[21] and USD 242.8 billion by 2018, accounting for 5.6% of worldwide ICT spending[22].

- The number of Internet users in the Arab world is expected to reach 197 million by 2017[23].
- The value of the Middle East mobile sector was estimated at USD 15.65 billion in 2013[24].
- The digital Arabic content market is predicted to hit USD 28 Billion in 2015[25].
- In addition, a wave of e-government initiatives will result in a significant increase in regional ICT spending.

▸ The African market equally presents promising potential especially for software developers and mobile applications, with mobile penetration rates in sub-saharan Africa for people over the age of 15 at 69% in 2015[26].

▸ Various advantages allow businesses to capture these opportunities from Lebanon, especially given the Lebanese international business culture and wide exposure to the Arab region, Africa, and Europe as well as the wide diaspora network which provides worldwide investment and business linkages opportunities.

4. ENABLING INFRASTRUCTURE

▸ Companies operating out of Lebanon can also benefit from an adequate infrastructure and an enabling business environment. The growth of the ICT sector is among the government top priorities leading to increased investments in upgrading the existing telecom infrastructure. Lebanon's bandwidth has increased 10 folds since 2011[27]. The average speed of mobile broadband has increased 18 times and prices have declined by 40% during the same period[28].

21 Gartner, April 2014
22 Gartner, March 2014
23 Arab Knowledge Economy Report, 2014
24 Nordic Industries: The ICT Business in the Middle East
25 Wael Nabbout, The Digital Arabic Content Market: Size, Challenges and Solution. Arabnet, 2013
26 Borko Handjiski, Mobile connectivity in Africa has already arrived, Brookings, 2015
27,28 Lebanese Ministry of Telecommunications, Progress Report, 2013

Selected list of Infrastructure upgrades in Lebanon during 2011-2013

- Fourth generation mobile networks launched in Beirut and some parts of Greater Beirut during 2013 and are expected to expand to other areas in the near future.
- A new fiber optic platform installed in Lebanon to upgrade the digital transport infrastructure for telecom services.
- The Mitsubishi Electric's new India-Middle East-Western Europe (IMEWE) cable activated in 2011 resulting in an increase in international capacity and the reduction in prices of the internet and the international leased lines.

For more information on Lebanon's internet and mobile landscape you can check out our telecom fact sheet here, http://goo.gl/21aTA6.

▸ New business parks and clusters are being developed to host companies in the digital industry. These include large-scale developments like the Beirut Digital District (BDD) www.beirutdigitaldistrict.com, as well as smaller spaces like Solidere's www.solidere.com/cloud5/. These projects provide state of the art facilities and services at reduced rates, in addition to clustering opportunities within a friendly business environment.

5. SUPPORTIVE ECOSYSTEM

▸ Established companies and startups in the sector can benefit from a wide range of public and private initiatives aimed at the development of the country's digital ecosystem. Services and programs include fiscal incentives, financing options, as well as incubation and acceleration.

▸ **Fiscal Incentives:** The country has one of the lowest tax rates globally. **The Investment Development Authority of Lebanon offers tax breaks** for up to 10 years, as well as other incentives to local and foreign companies operating in the ICT sector and meeting specific requirements. You can check out IDAL's full range of incentives here.

▸ **Financing:** Today around 6 **venture capital firms** have operations in Lebanon in addition to various regional VCs which have backed a number of local pioneering companies. These include the Berytech Fund, Cedrus Ventures and MEVP. VC funds in Lebanon account for around 10% of VC transactions in the region and Lebanon is currently among the top 3 most active VC markets in the Arab World[29].

The Central Bank of Lebanon has issued in 2013 Circular No. 331, through which an amount of up to 400 Million USD will be

29 Lebanese Ministry of Telecommunications, Progress Report, 2013

dedicated for Lebanese banks' equity investment into startups, incubators, accelerators, and funds operating in Lebanon. These investments will be 75% guaranteed by the Central Bank.

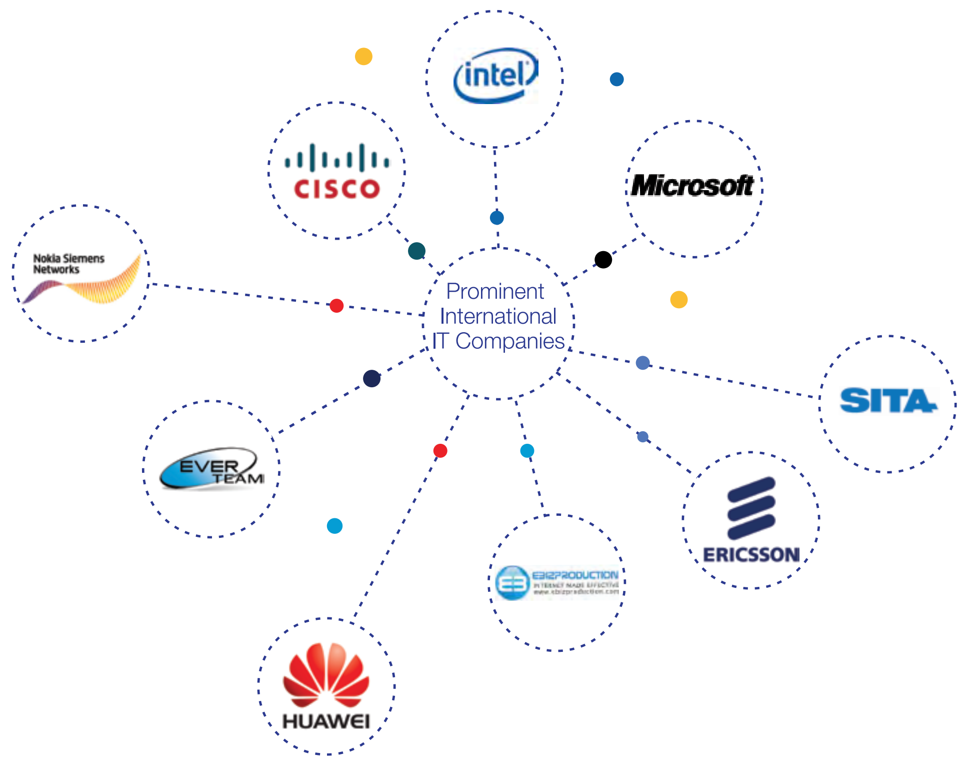
Other financing options include the **Kafalat** loan guarantee scheme. Kafalat provides financial guarantees for loans of up to USD 400,000 granted by commercial banks to SMEs.
For more information on available financing schemes for ICT companies, please check out our financing your business fact sheet here.

- **Incubation and Acceleration:** Today, there are a series of incubators that provide training, technical & financial assistance to new and existing businesses across Lebanon.
They include Berytech (in 3 distinct locations): South Business Innovation Center (SOUTHBIC), Business Incubation Association in Tripoli (BIAT), and Alt City. Other programs offer a wealth of mentorship and networking opportunities including Bader, Endeavour, and the MIT Business Plan Competition.

- **Clustering:** Physical and virtual clusters equally seek to capitalize and expand on the vibrant digital community. These include the Beirut Creative Cluster and the Lebanon Softshore Cluster. Together with industry associations like the Association for Lebanese Software Industries, these associations help companies expand their market reach and develop their businesses. A full list of these stakeholders is provided at the end of this factsheet.

INVESTMENT TRENDS

Lebanon already boasts a track record of successful local and international companies operating out of Beirut. Lebanese IT companies have established themselves as important players in the communication and software markets, particularly in the Middle East but also in the African, European and the US markets. In addition to these well-established enterprises, innovative startups have also been emerging in the fields of gaming, e-services, and mobile apps among others. You can check our compilation of successful startups here. Multinational corporations also form a significant part of Lebanon's high-tech environment. Prominent international IT companies have established themselves within the Lebanese market and are operating through their subsidiaries in Beirut. These include the likes of Microsoft, Ericsson, Cisco, and Intel, among others.



In fact, the trends of the ICT market, coupled with Lebanon's competitive advantages, present an array of promising business opportunities for IT companies.

CURRENT MARKET DYNAMICS PARTICULARLY SIGNAL OPPORTUNITIES IN THE FOLLOWING AREAS OF ACTIVITY:

CONSUMER INTERNET

More specifically in Web and Mobile Portals, Content Websites and Applications, News, Internet Publishing, Social Networks and Applications, and Search. There is an especially high demand for Arabic content creation along those key markets, equally presenting competitive advantages for local content developers with the number of active Arab Internet users is set to rise to 197 million by 2017[30].

Facts About The Arab Digital Generation

- 41% search the internet in both Arabic and English
- 37% percent are not satisfied with the availability of Arabic websites
- 48% believe that the region's healthcare services require technological upgrades;
- 43% believe this of education services

Source: The Booz & Company – Google Arab Digital Generation **Survey 2012**

ADTECH

In 2013, online advertising spending amounted to USD 300 million in MENA and is currently expanding by 37% per year to reach USD 1 billion in 2017[31]. Lebanon presents a competitive advantage for the development of Adtech products, especially in Mobile, Search and Video.

CLOUD COMPUTING

According to Ovum's 2014 Trends report, the use of cloud services is no longer a complementary element of corporate ICT but has become an imperative for companies. An increasing number of organizations are shifting their data centers towards cloud infrastructure, fueling a strong demand for all cloud services ranging from infrastructure, platform to applications.

Lebanon presents a significant opportunity for the development of cloud based applications particularly in SaaS (Software as a Service) as companies based in Lebanon can serve the SMEs which are prevalent in the region. SaaS opportunities are especially present in Customer Relationship Management, Government, and Advertising.

MEDIA STREAMING

Online music and video revenues in MENA were estimated to grow at a CAGR of 60% from 2011 to 2014, providing opportunities for developers in Lebanon.

30 Madar Research & Development, Orient Planet. Arab Knowledge Economy Report 2014.
31 EMarketer, The Global Media Intelligence Report: Middle East & Africa, 2013"

GAMING

Digital game sales are set to rise at a CAGR of 29% to reach USD 3.2 billion in 2016, owing to the young population of the Arab world that makes up about 60% of the total population. There are increased opportunities for gaming on tables and smartphones with more than 80% of the 1.2 billion gamers worldwide playing on tablets and smartphones.

VALUE-ADDED SERVICES (VAS)

The increase in the number of mobile users and sale of smart devices, have created opportunities for VAS. The MENA region will be the second biggest region contributing to the increase in global mobile VAS revenues, with a CAGR of 12%. Lebanon will especially have one of the highest growth rates in the region, significantly higher than the average of the region, with revenues expected to more than double by 2018.

E-GOVERNMENT

Lebanon started its e-Government initiative, dawlati, with an implementation strategy spanning from 2013 to 2015. With the implementation of this initiative, Mobile devices will increasingly be used as key facilitator for online interactions.

VERTICAL MARKET SOFTWARE

Lebanese ICT developers have developed high levels of expertise in vertical application software tailored to specific industries, mainly the medical, banking and finance, and insurance segments. This niche sector has been highly export focused, serving the growing markets of the MENA, Europe, North America and the emerging African countries.

OUTSOURCING BASE FOR SOFTWARE PRODUCTION

With international companies increasingly looking for cost efficient and flexible solutions, Lebanon has been chosen by a number of foreign corporations as an offshore outsourcing base. The Lebanese workforce offers plenty of growth potential in this segment mainly due to its high levels of expertise and specialization, flexibility and professionalism, cost effectiveness as well as innovation and internationalization.

REGULATORY FRAMEWORK

In recognition of the impact of the legal environment on the performance of the ICT sector, the government has placed a special focus on the reform and modernization of ICT related laws. The main regulations governing the sector are mentioned below.

TELECOMMUNICATIONS LAW

Law 431, or the Telecommunications Law as it is often referred to, was issued in 2002 to provide the governance framework needed to organize the telecommunications services sector and set the rules for its transfer to the private sector.

The Telecommunications Regulatory Authority (TRA) was subsequently formed to regulate the liberalization of the sector, and ensure the creation of a competitive environment.

INTELLECTUAL PROPERTY LAW

The Intellectual Property Law (IP) was drafted by the Ministry of Economy and Trade (MoET), and passed as a law in 1999. Provisions under the law cover patents, industrial designs, trademarks, copyrights, unfair competition, & penalties for infringement.

INVESTMENT LAW NO.360

IDAL offers companies, engaged in the ICT sector, a set of incentives and facilitation services as per the Investment Law No.360. Companies can benefit from up to 100% exemption on corporate income tax over a period of 10 years in addition to other fiscal incentives, provided that they meet certain requirements in terms of investment size and employment generation.

COMPETITION LAW

The new competition law - drafted by The Ministry of Economy and Trade - prevents all forms of anti-competitive agreements and abuses of dominance. These provisions ensure competition and easier market access, and therefore allow for greater consumer welfare, economic efficiency, increased output and rapid technical advancement.

E-COMMERCE BASKET OF LAWS

The Ministry of Economy and Trade has drafted and presented to the Parliament a basket of laws in support of the ICT sector. This basket includes amendments as well as new laws destined to enable e-commerce in the country. Laws cover the fields of E-signature, E-payment, E-transactions, consumer protection, privacy, copyright, and cyber-crimes.

LAW ON ANTI-DUMPING, SUBSIDIES & SAFEGUARDS

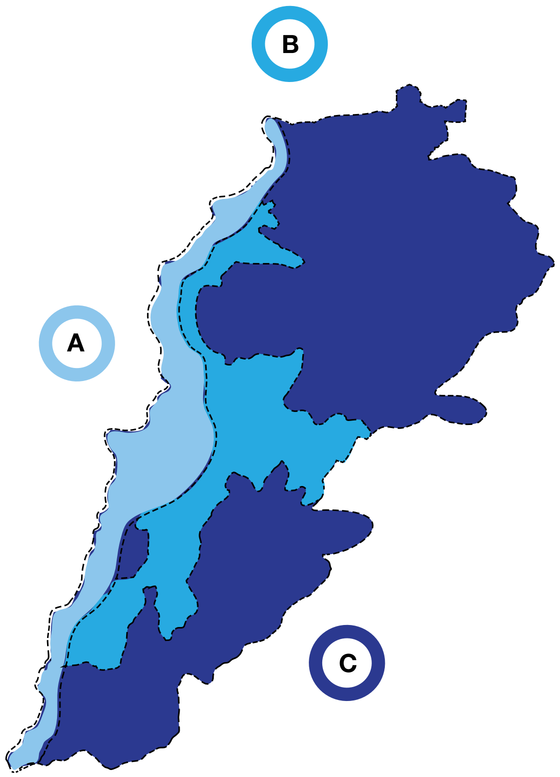
The law was issued with the aim of protecting national production as well as legitimate original products from dumped and subsidized imports.

INCENTIVES AVAILABLE TO PROJECTS IN THE INFORMATION TECHNOLOGY SECTOR

1. INCENTIVES PROVIDED BY IDAL

a. Region Based Incentives or Investment Project by Zone (IPZ)

Due to the importance of this sector to the economy, all projects located in Zone A and B benefit from Zone C exemptions which provides the maximum amount of incentives to projects.



Zone C
Eligibility Criteria: Minimum Investment Requirement is USD 200,000

INCENTIVES:

- **A 100% exemption from corporate income tax and taxes on project dividends for a period of 10 years.** The exemption shall be applicable as soon as excavation works for the project commence, in accordance with the provisions of the Law.

- **Work permits for various categories,** exclusively needed for the project, provided that at least two Lebanese nationals are employed for each foreigner.

All employees should be registered with the National Social Security Fund.

b. Region Based Incentives or Package Deal Contract (PDC)

ELIGIBILITY CRITERIA:
Minimum Investment Requirement is USD 400,000
Minimum Number of Jobs Required: 25

INCENTIVES:

- **100% exemption from Corporate Income Taxes for up to ten years** starting as from the commencement date of the exploitation of the project.

- **100% exemption of Taxes on Project Dividends** for up to ten years starting as from the commencement date of the exploitation of the project.

- **Up to 50% Reduction on Work and Residence Permit Fees** regardless of their category and depending on the number of permits required. Also the value of the certificate of deposit entrusted to the Housing Bank shall be reduced by half

- **Up to 50% Reduction on Construction Permit Fees** related to the buildings to be established & needed for the execution of the project benefiting from the provisions of the Package Deal Contract.

- **100% exemption from Land Registration Fees** at the Real Estate Register and from fees needed for annexation, sub-division, mortgage and registration of lease contracts at the Real Estate Register.

- **Obtaining Work Permits** of all categories provided that the project benefiting of the Package Deal Contract preserves the interests of the local labor force through employing at least two Lebanese nationals against one foreigner, and registering them in the National Fund for Social Security.

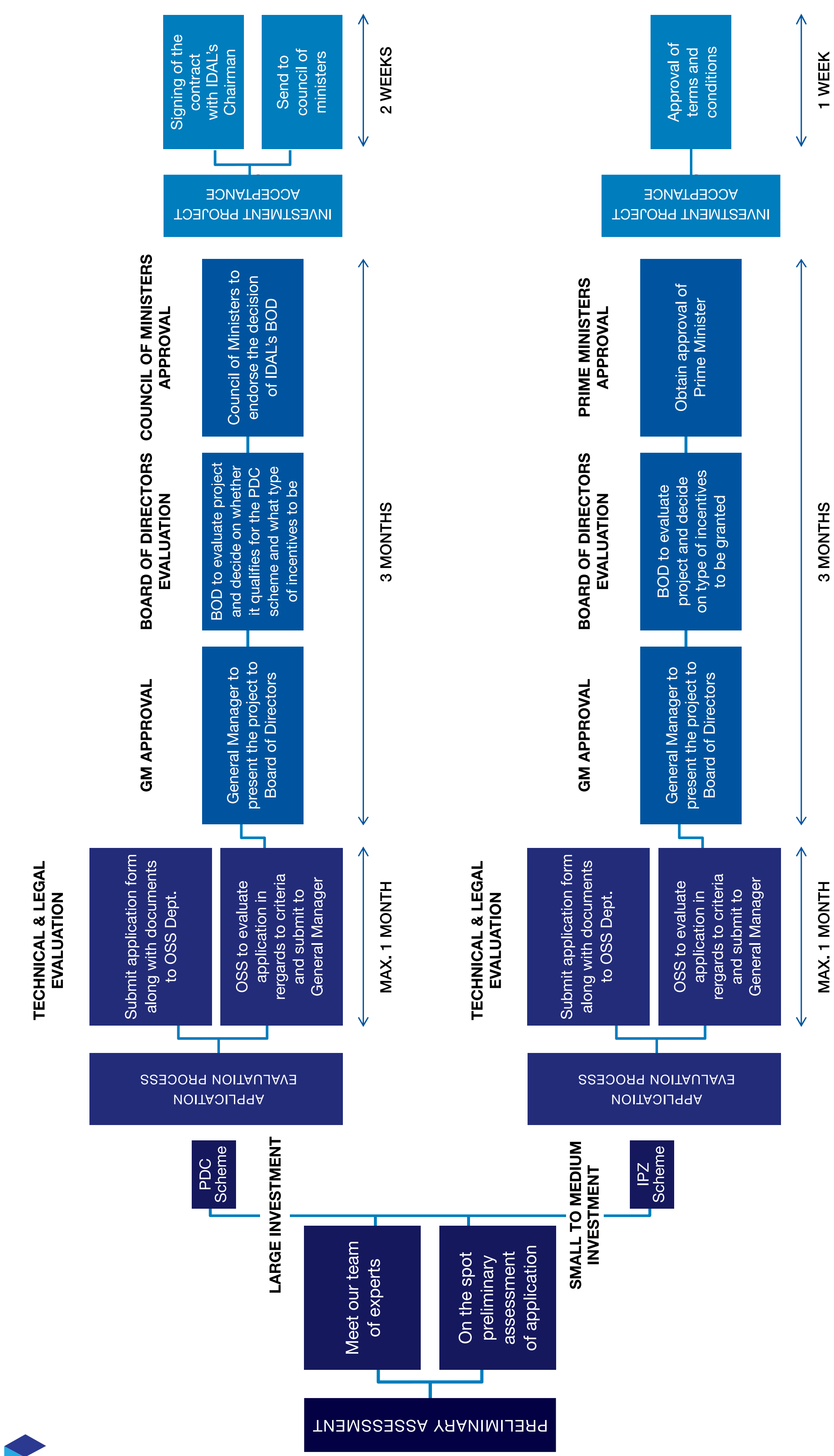
- **Exemption from the obligation of including** Lebanese natural and legal persons in the Board of Directors in Joint Stock companies.

ADDITIONAL REQUIREMENTS TO BENEFIT FROM THESE INCENTIVES

- At least 60% of the workforce generated by this project needs to be skilled

- The project needs to allocate at least 3% from its total sales on research & development

3. APPLICATION PROCESS AT IDAL



MAIN STAKEHOLDERS

Altcity
www.altcity.me

Association of the Lebanese Software Industry - ASLI
www.alsionline.org

Bader
www.baderlebanon.com

Berytech
www.berytech.org

Beirut Creative Cluster
www.beirutcreativecluster.org

Beirut Digital District (BDD)
www.beirutdigitaldistrict.com

Business Incubation Association in Tripoli (BIAT)
www.biatcenter.org

Endeavor
www.endeavor.org

Investment Development Authority of Lebanon - IDAL
www.investinlebanon.gov.lb

Kafalat
www.kafalat.com.lb

Ministry of Economy and Trade
www.economy.gov.lb

Ministry of Telecommunications
www.mpt.gov.lb

MIT Enterprise Forum Pan Arab Region
www.mitefarab.org

Office of the Minster of State for Administrative Reform
www.omsar.gov.lb

OGERO
www.ogero.gov.lb

Presidency of the Council of Ministers, National ICT coordinating office
ict.pcm.gov.lb

Professional Computer Association of Lebanon - PCA
www.pca.org.lb

South Business Innovation Center (SOUTH BIC)
www.southbic.org

Telecommunications regulatory authority
www.tra.gov.lb

CONTACT US

If you require any further information on investing in Lebanon or on the services IDAL can offer you, please do not hesitate to contact us at the following:

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