

Competition in Telecommunications and the Information-Based Economy

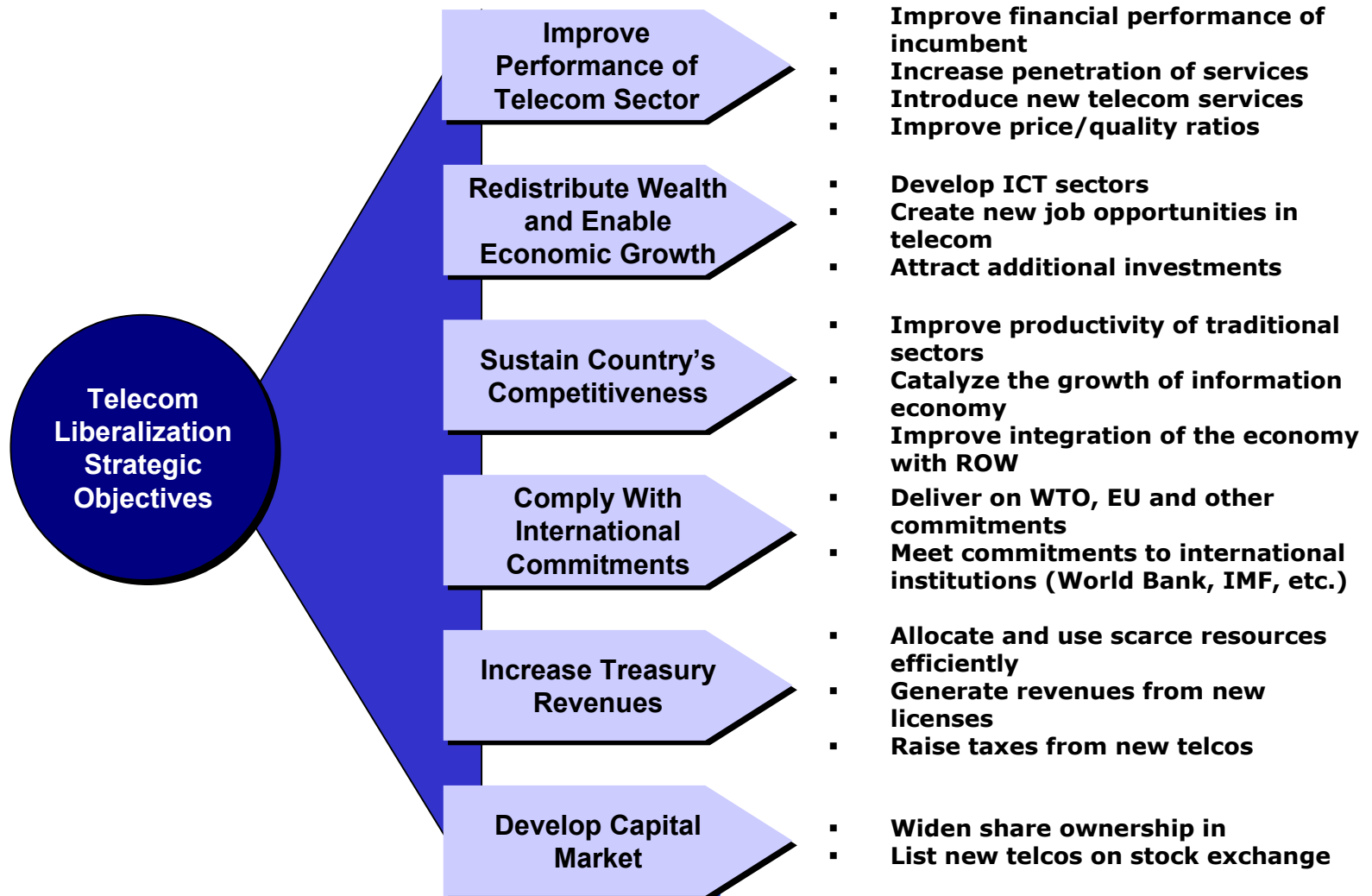
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The liberalization and privatization of telecoms are key to the future of the Lebanese economy

- Overwhelming evidence that competition in telecommunications “works.” It leads to:
 - Lower prices and better quality of service
 - Higher levels of telecom penetration
 - Higher productivity in telecom and economy
 - Faster rates of technological innovation
 - More investments in the sector
- There is not one single country in the world that has maintained state monopoly over telecom and succeeded in developing ICT

In the past, governments have pursued a number of objectives from liberalization and privatization



To leap-frog into the information-based economy, a number of requirements have to be in place

Requirements of Information-Based Economy

1
Legislation



- ▶ Key legislation needs to be in place to enable the development of e-business, e-government, and other information-based businesses

2
Education



- ▶ Educational system graduating computer literate students
- ▶ Educational system graduating skilled programmers, certified engineers, and other IT skills

3
Venture Capital



- ▶ Financing for ICT initiatives needs to be available
- ▶ ITC-industrial support mechanisms

4
Infrastructure



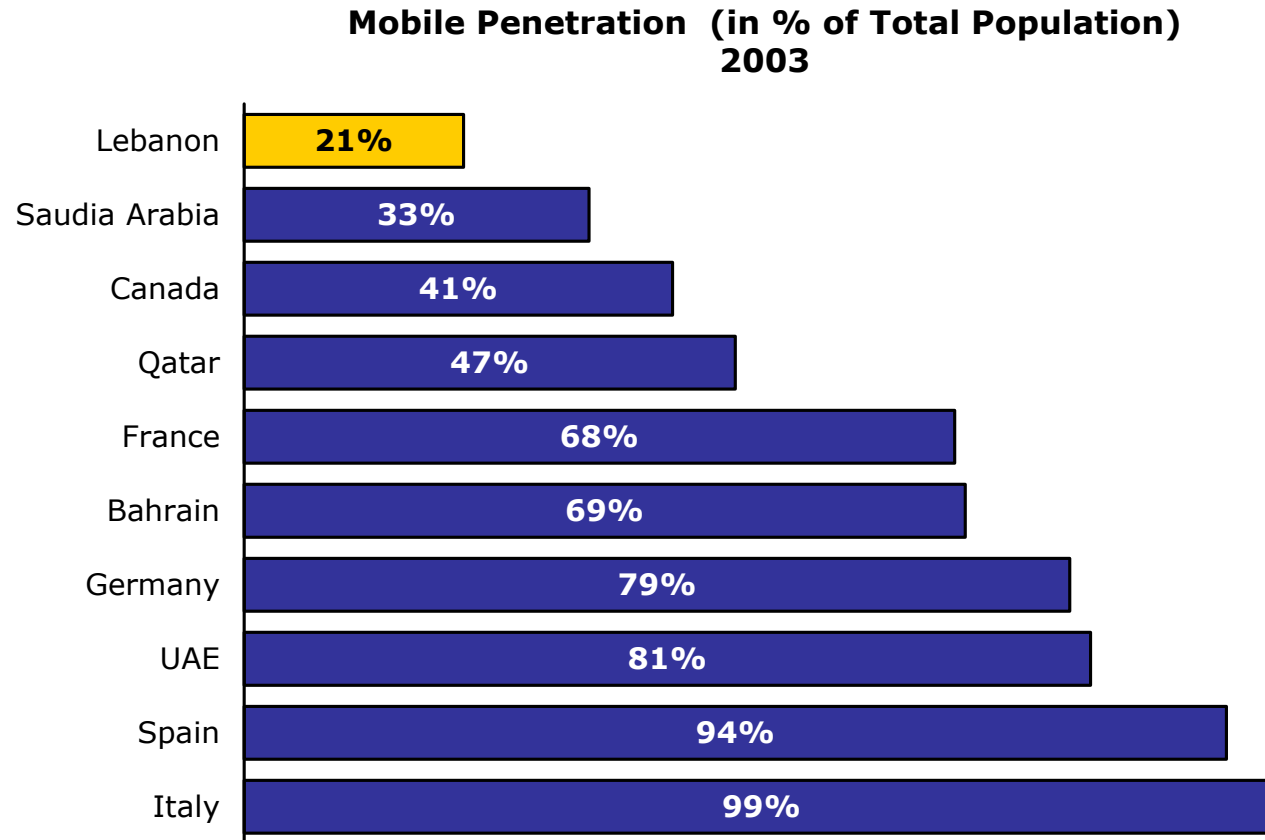
- ▶ State of the art infrastructure: wireless and wireline
- ▶ Wide reach and access of large population

5
Competitive Prices



- ▶ Price of telecom services competitive with rest of the world
- ▶ Price of services reflective of market conditions

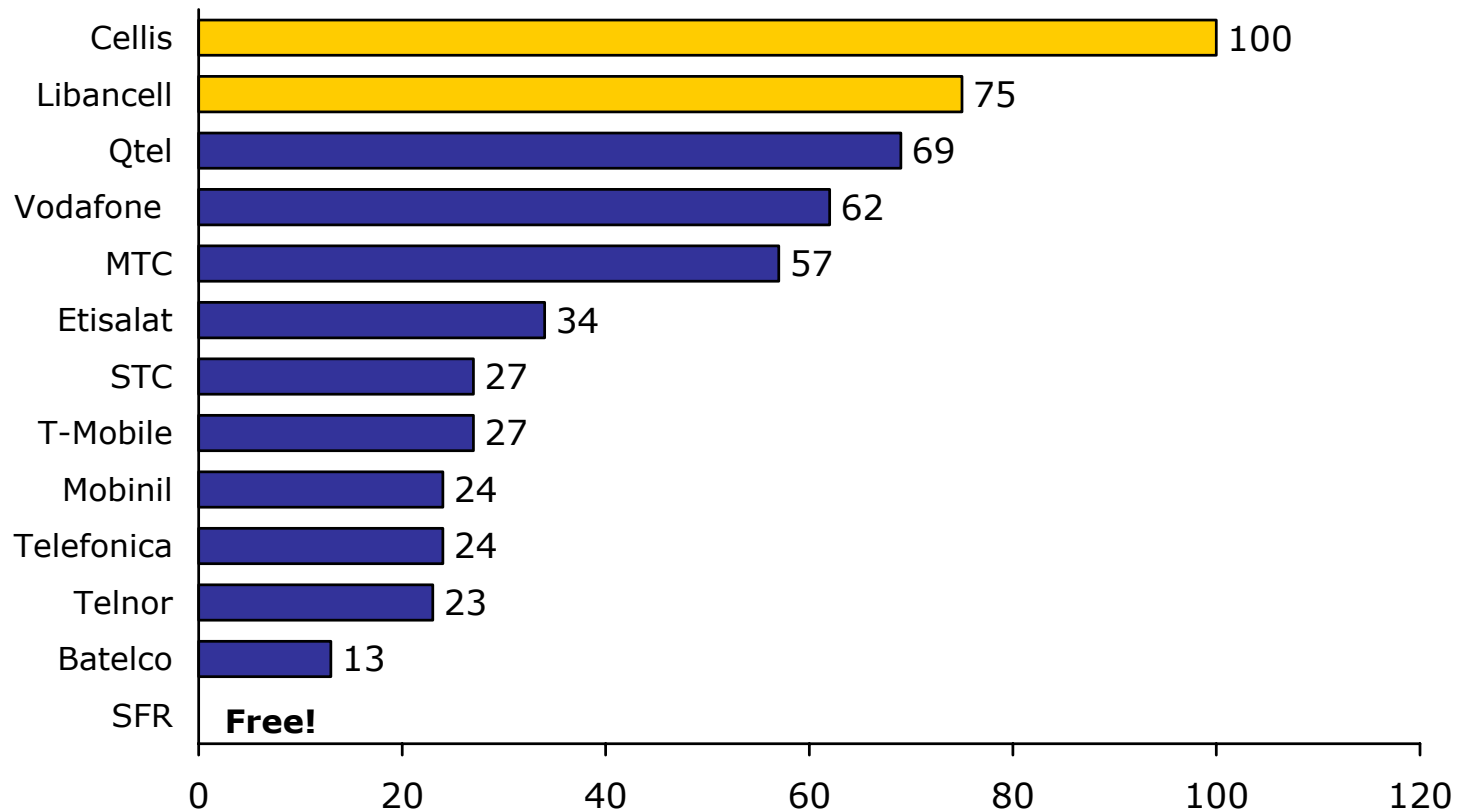
The mobile penetration rate in Lebanon is among the lowest in the region due to lack of competition and bad regulation



Source: Informa, ITU, Arab Advisors

Lebanon's mobile postpaid connection fee is among the highest when compared to other international operators

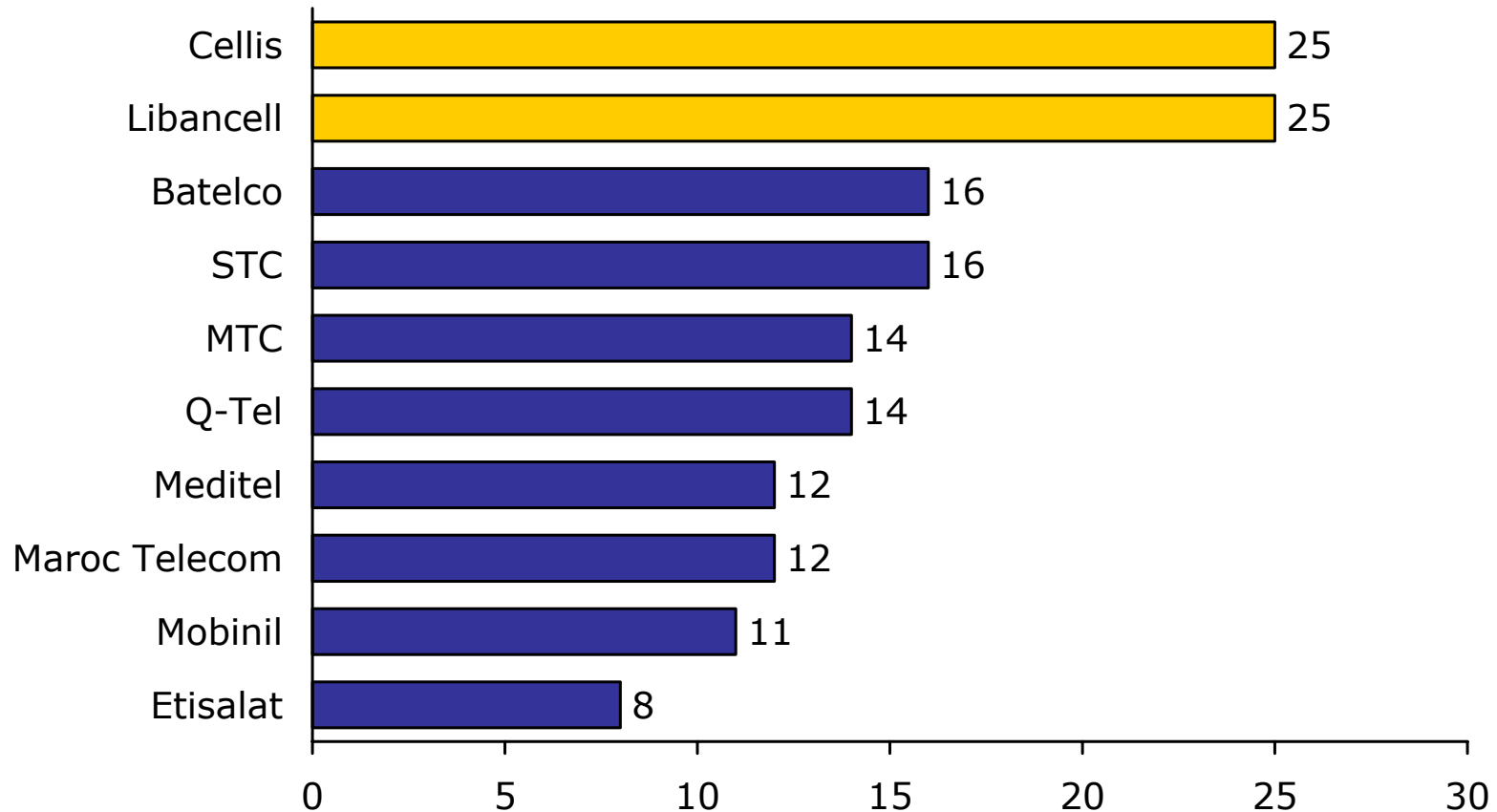
Mobile Post Paid Connection Fee Benchmarking Against Selected Regional and International Operators (2004) (US\$)



Source: Tarifica, ITU, Operators

The monthly charges for mobile postpaid lines are also among the highest - and they don't include any "free" minutes

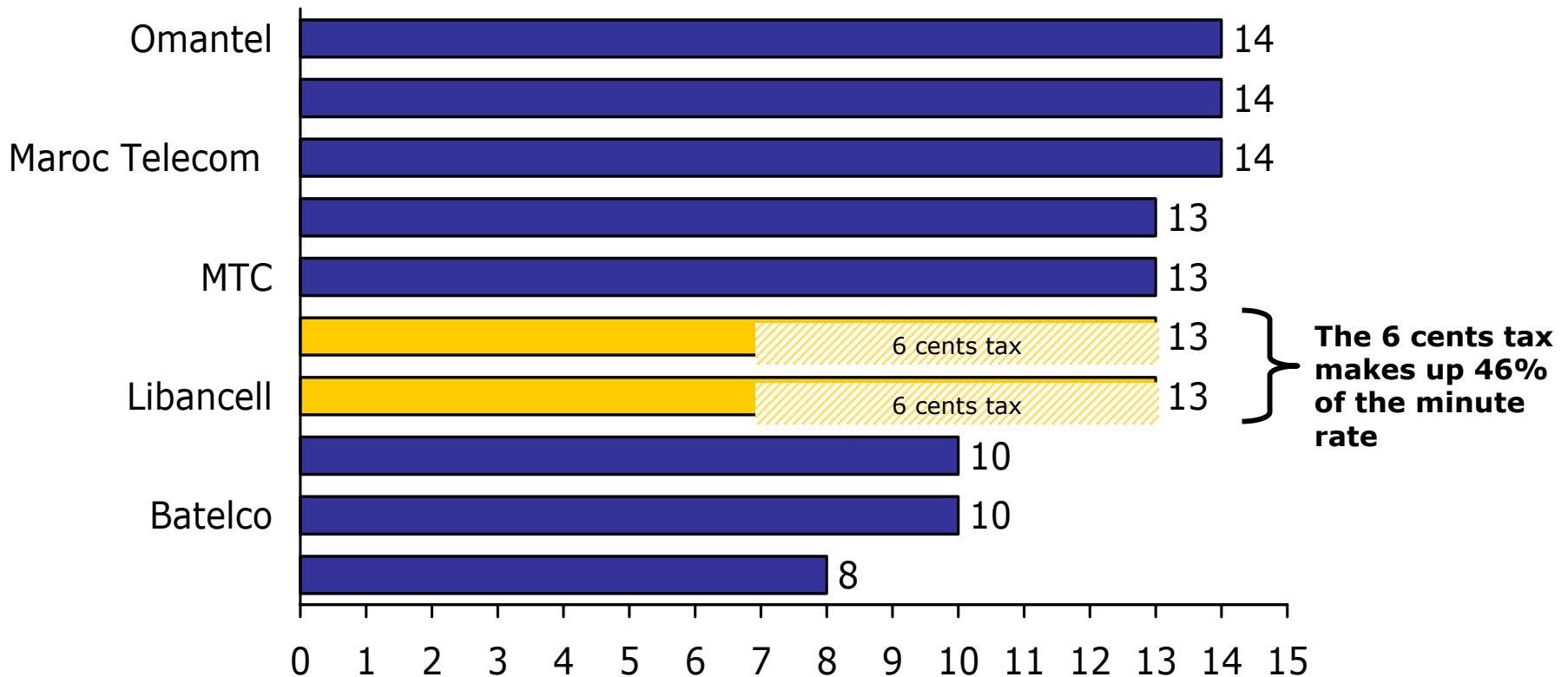
Mobile Post Paid Monthly Charges Benchmarking Against Selected Regional Operators (2004) (US\$)



Source: Tarifica, ITU, Operators

The cost of a postpaid minute in Lebanon is among the highest in the region and is due to the high excise tax imposed by the Government

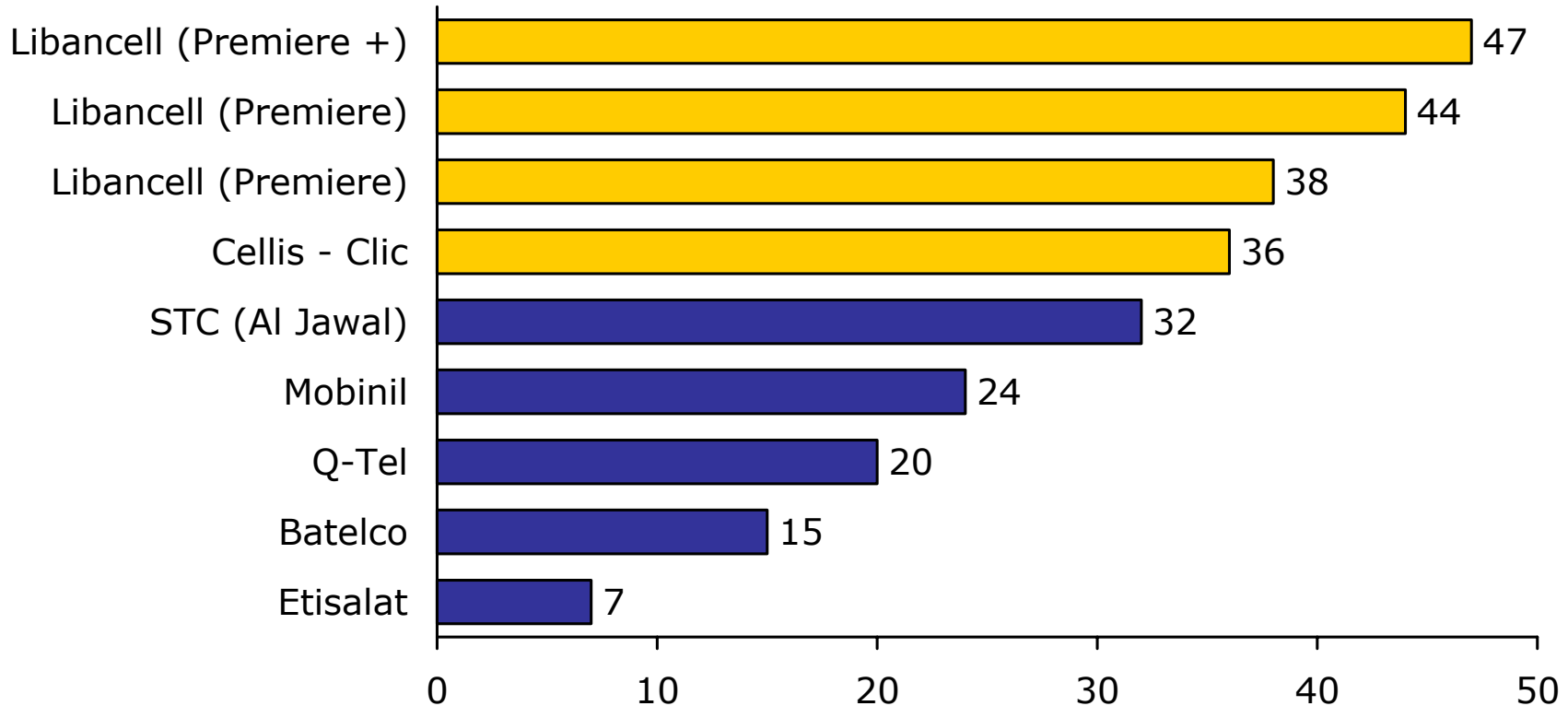
Mobile Postpaid Peak Minute Rate Benchmarking Against Select Middle Eastern Operators (2004) (US\$ cents per peak minute)



Source: Tarifica, ITU, Operators

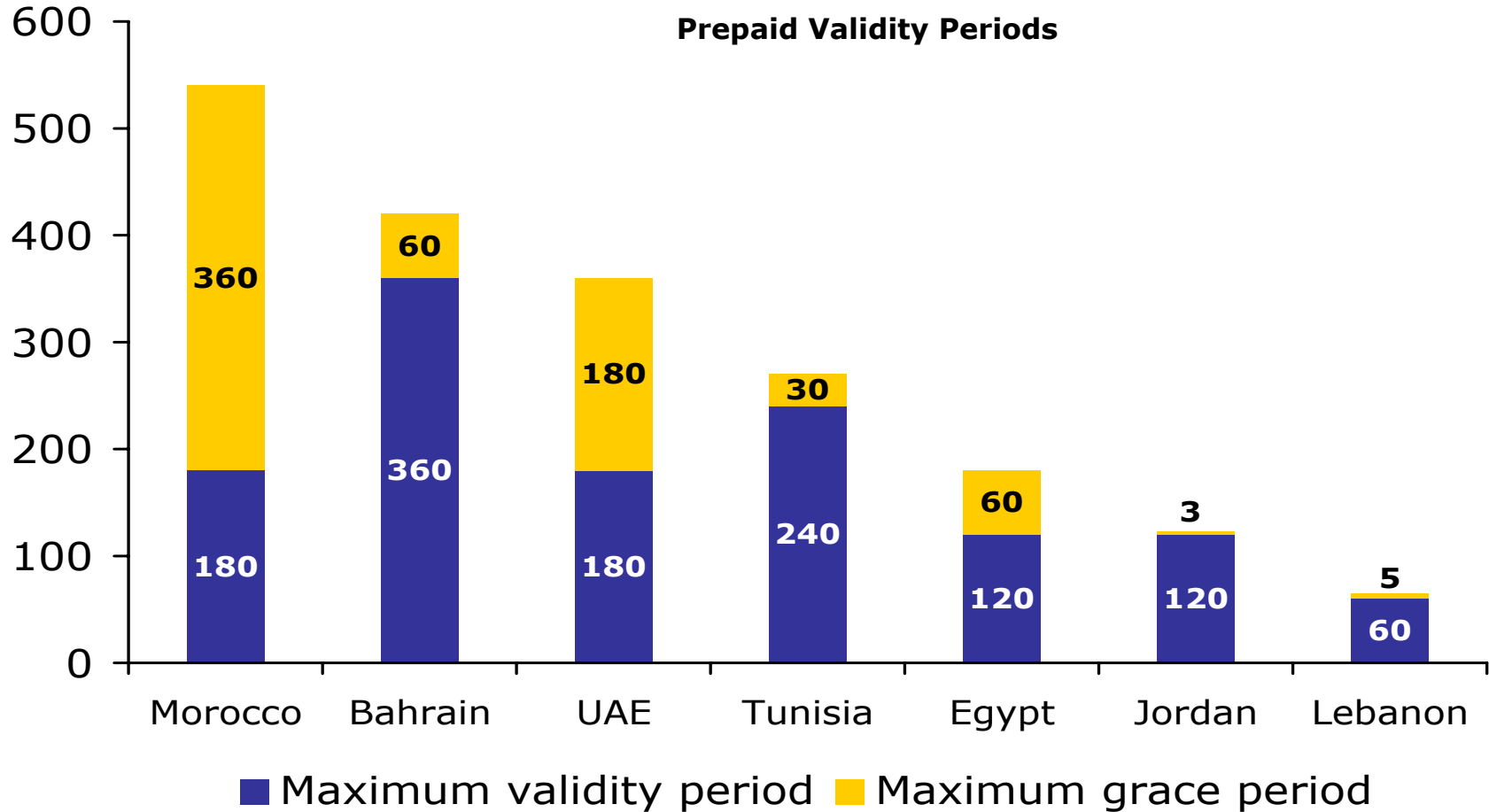
The price of a prepaid minute is higher than the rest of the region, with one company billing by 40 second intervals, thereby making prices less transparent

Mobile Prepaid Peak Minute Rate Benchmarking Against Select Middle Eastern Operators(2004) (US\$ per peak minute)



Source: Tarifica, ITU, Operators

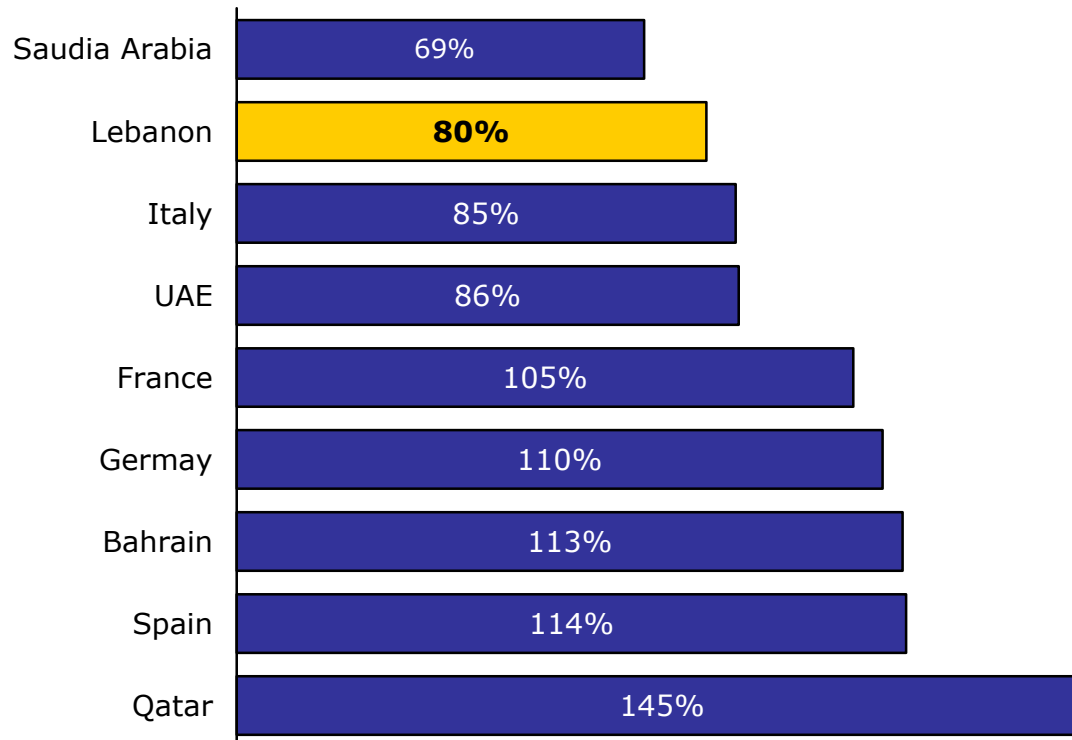
In addition, prepaid packages on offer have a validity period of 60 days, much less than what is available in other countries



Source: Arab Advisors Group, from Operators

On the fixed network side, Lebanon is at par with the penetration rates of selected regional and international operators

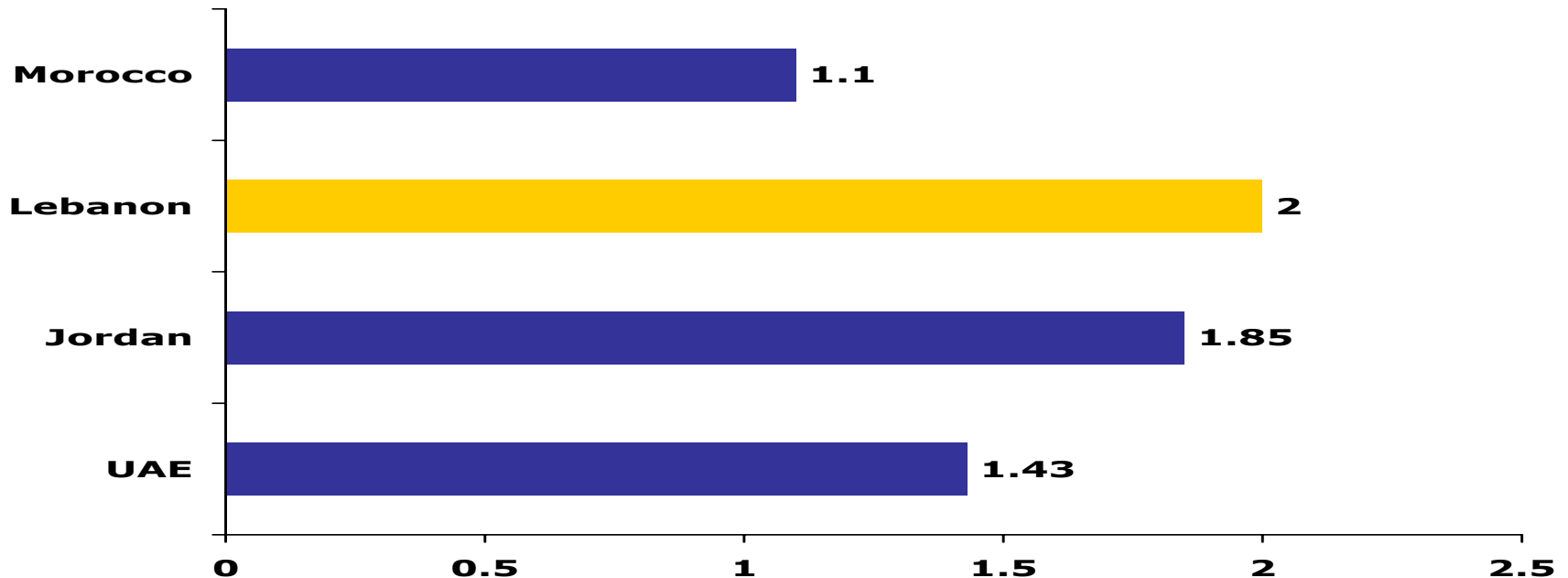
Fixed Line Penetration (in % of Households)



Source: Informa, ITU, Arab Advisors

Despite the 35% reduction in per-minute tariffs for international telephony, connection and per-minute tariffs remain relatively high

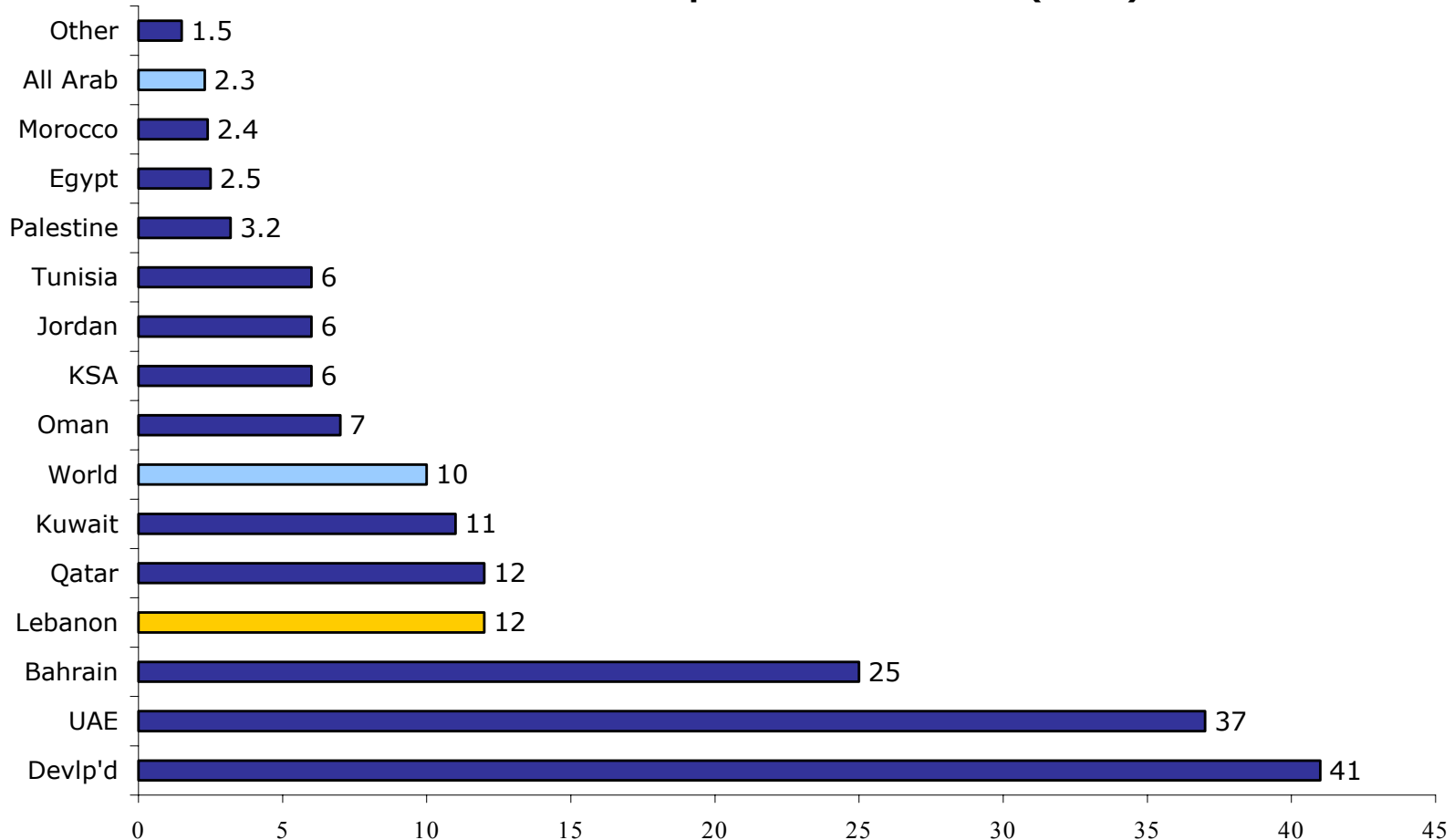
Tariff in US\$/ 3 minute call to NYC, average of peak and off-peak rates



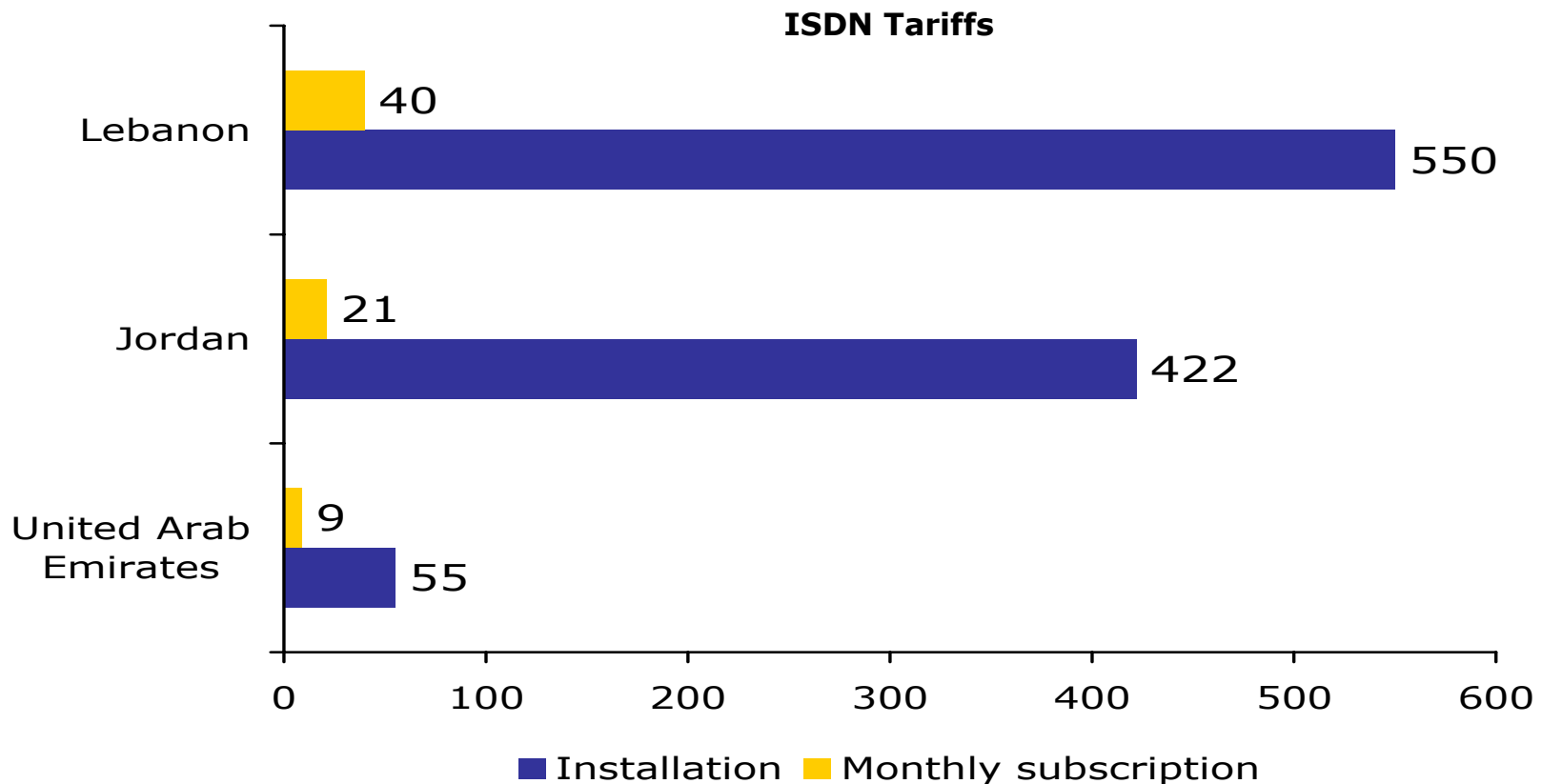
Source: Tarifica, ITU, Operators

Internet penetration in Lebanon compares favorably to the region, but the “digital divide” with developed countries is readily apparent

Internet Users per 100 Inhabitants (2003)



Lebanon has only recently introduced ISDN technology, but it is overpriced and has long been overtaken by more advanced technology such as ADSL

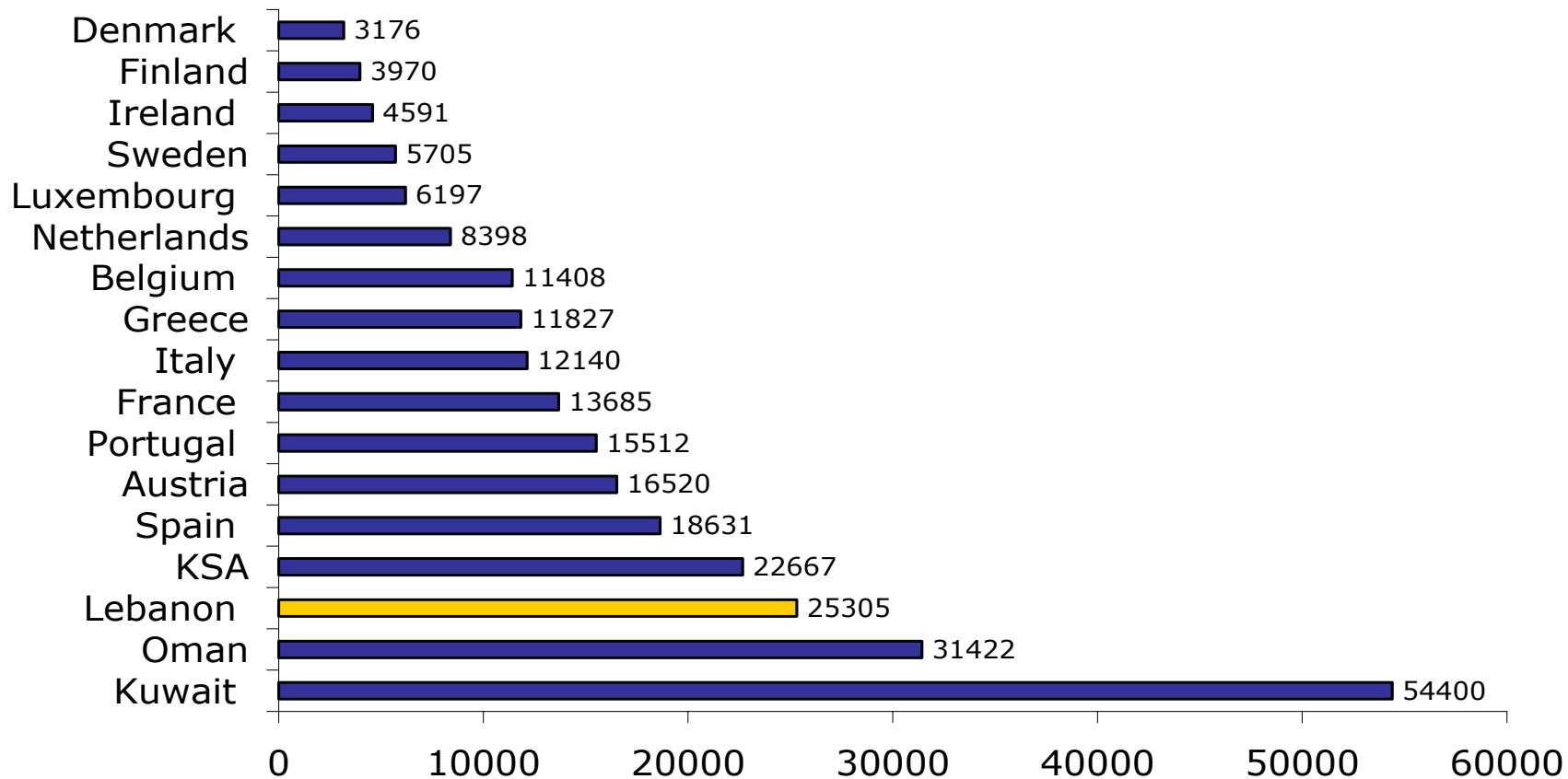


Source: Telecommunications Operators

For Lebanon, the ISDN BRI Monthly subscription rate used is the average of residential and business rates

International connectivity is prohibitively expensive and detrimental to the development of an information-based economy

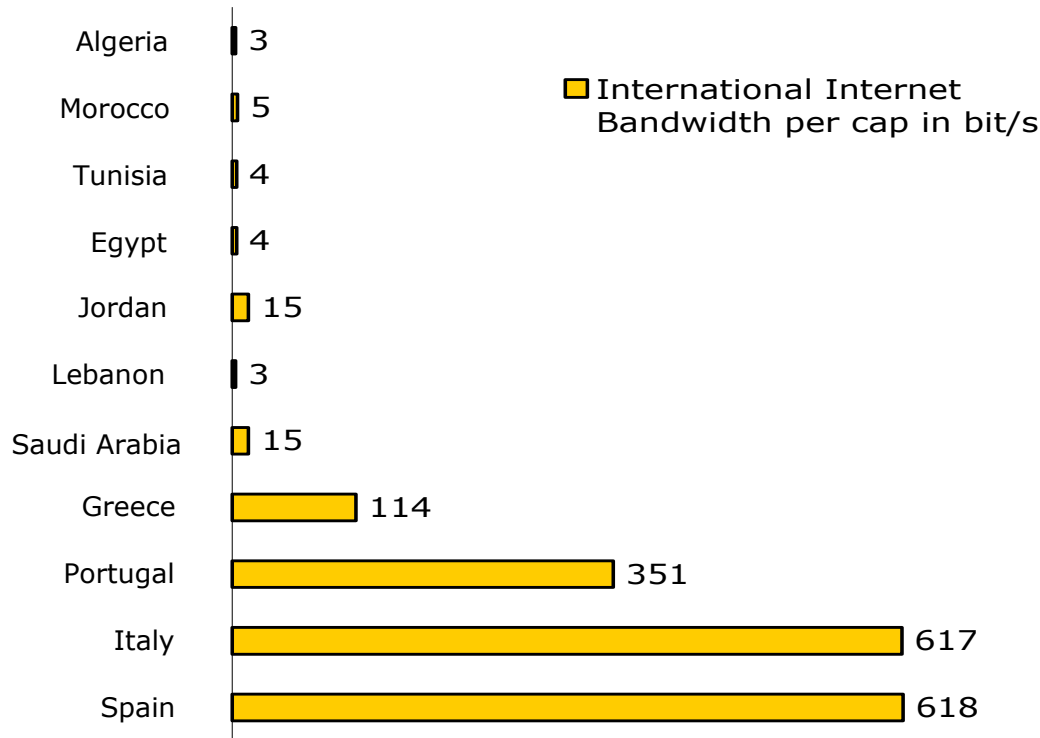
2MB/s International Half-Circuit Rental Prices to Nearby Countries (US\$)



Source: Teligen 2003 and Tarifica 2004

Lebanon has one of the lowest international connectivity ratios in the region

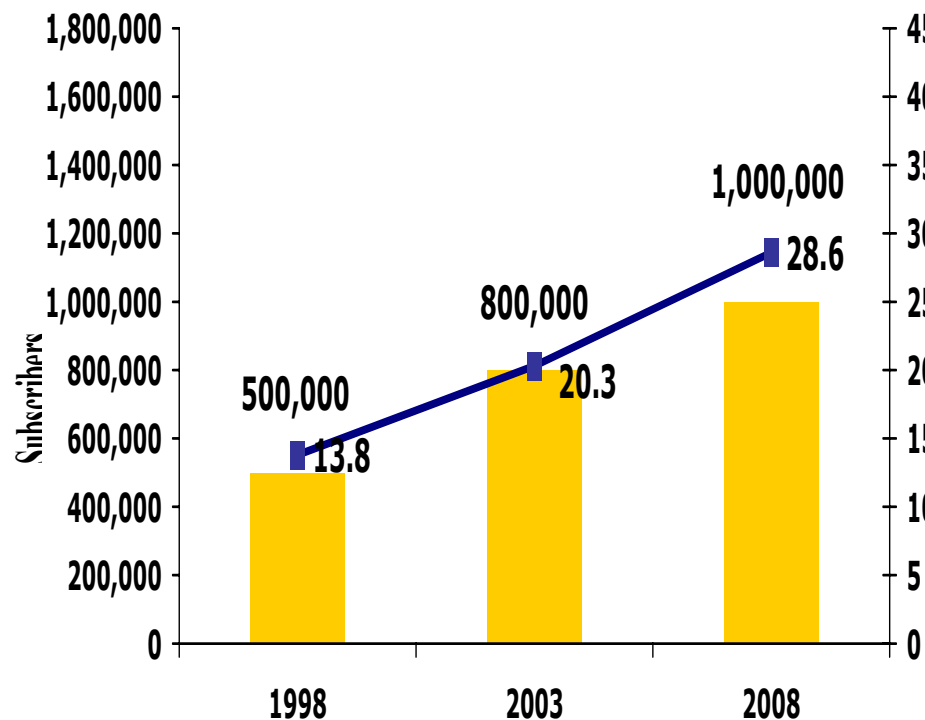
Comparison of International Internet Bandwidth



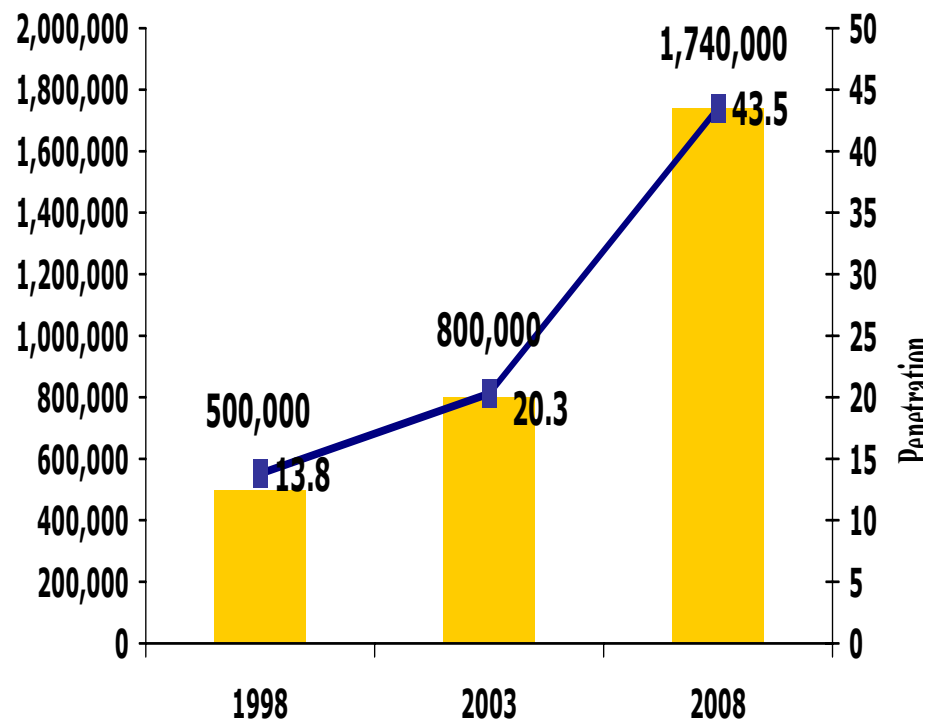
Source: Telegeography & GDF WDI

Were Lebanon to open telecommunications to the private sector for competition, mobile penetration will double in five years ...

Government-Owned Duopoly



Full Competition

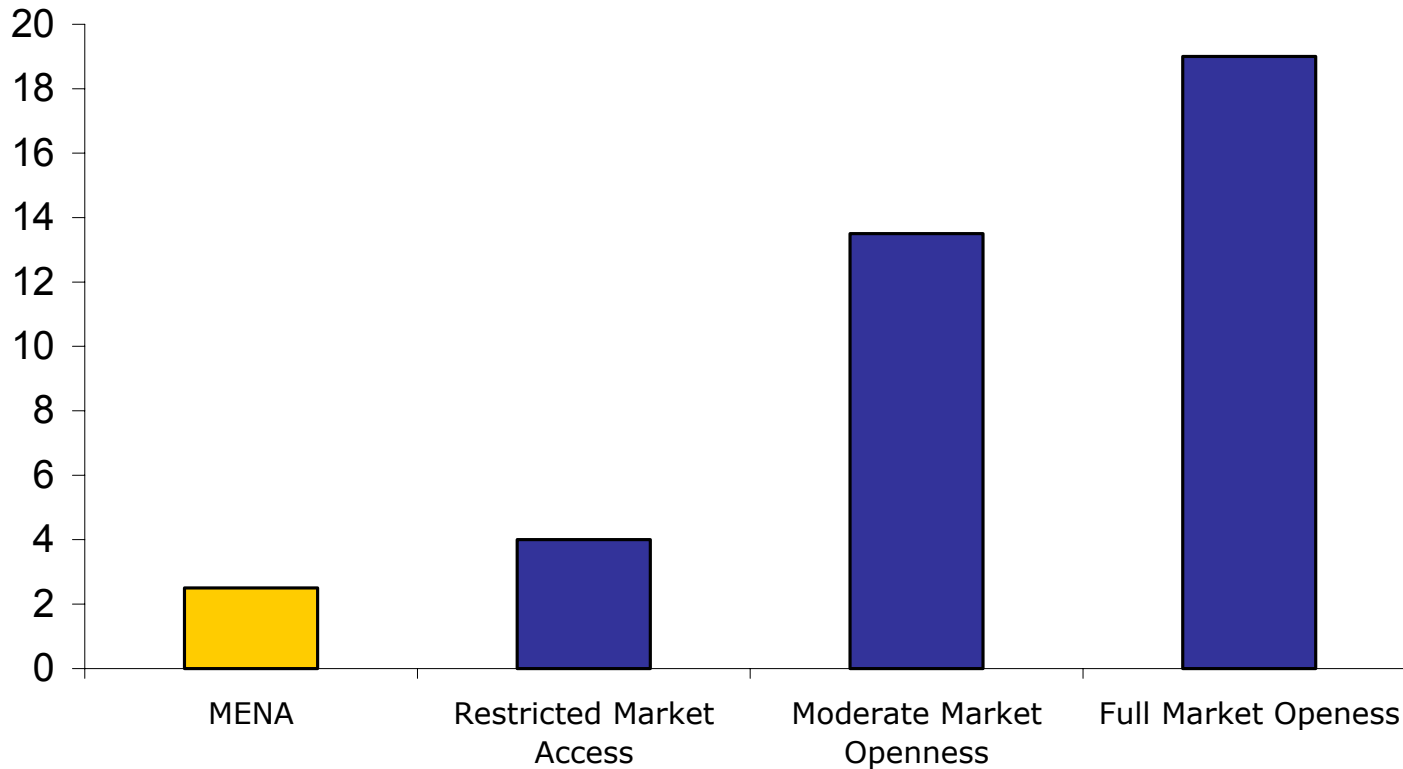


Source: Connexus Consulting

... the number of internet hosts will increase by a factor of ten ...

Potential Impact of Different Liberalization Scenarios on the Spread of the Internet

Predicted internet hosts per 10,000 people

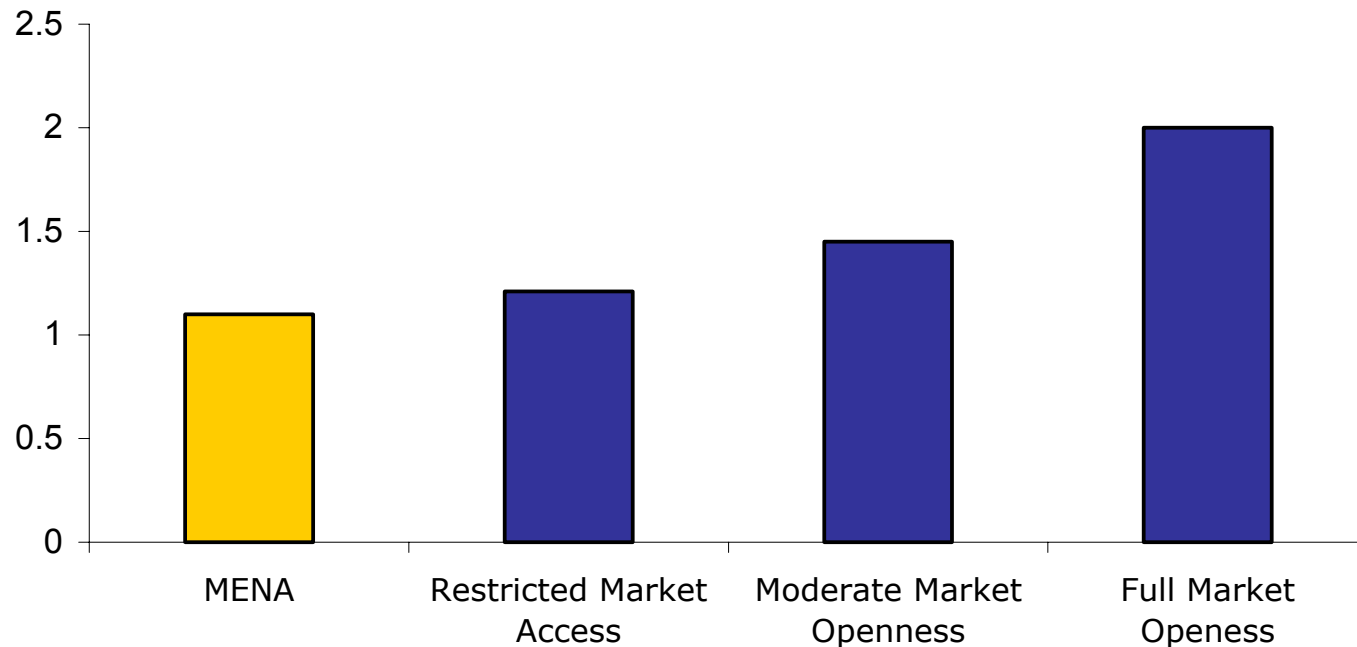


Source: World Bank

... expenditure on telecommunications (as a percentage of GDP) – net of taxes – will almost double ...

Potential Impact of Different Liberalization Scenarios on Expenditures on Telecommunications

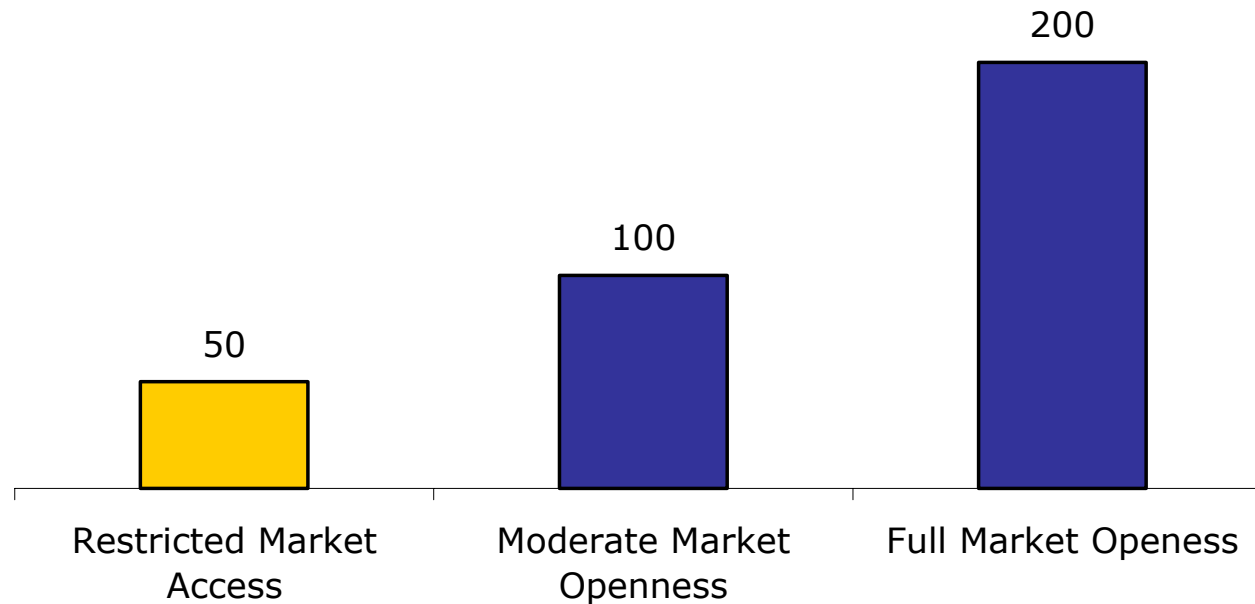
Predicted Telecommunications Revenues in % of GDP



Source: World Bank

... investment in the telecom sector will increase fourfold and add another US\$ 150 million/year of investments ...

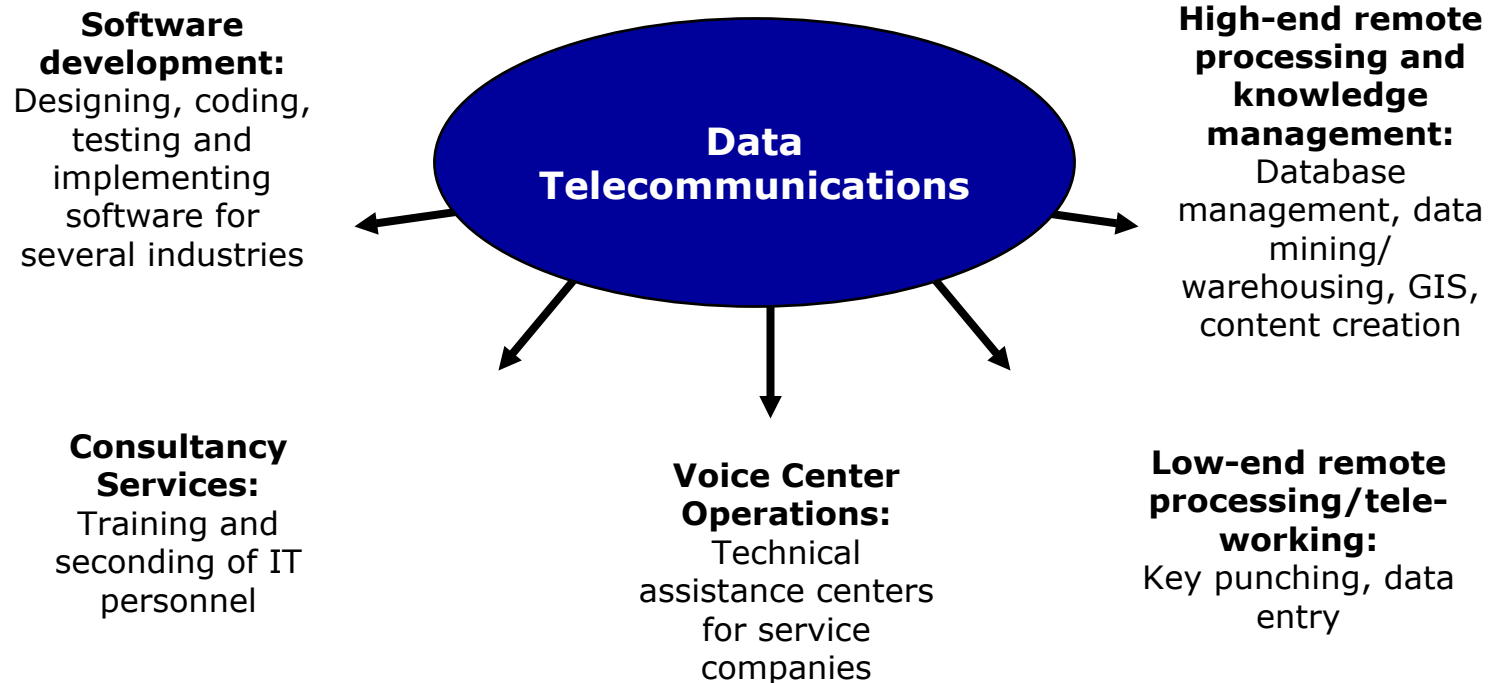
Projected Investment in Telecommunications (US\$ Millions)



Source: Connexus Analysis

Finally, competition in telecommunications will allow Lebanon to become a hub for ICT and create thousands of high value-added jobs

Direct Opportunities from a Better Data Telecommunication Sector



The liberalization and privatization of telecom in Lebanon is a daunting challenge, but the roadmap is clear and simple

Policy

- The Government of Lebanon (GOL) needs to adopt a clear policy to liberalize telecom and open it to competition
- Policymakers should cease to look at telecommunications as a cash cow, whether for the treasury or for their cronies

Independent Regulatory Authority

- GOL must implement Law 431/2002, which calls for the establishment of an independent regulatory authority
- Appointment to the authority must be on the basis of merit and not on the basis of allegiance

Privatization

- GOL must begin the process of privatizing the two mobile operators and the fixed network immediately, bringing a strategic investor for each
- A certain percentage of shares must be listed on the stock exchange

New Licenses

- The regulatory authority, once appointed, must issue new licenses to establish alternative networks to carry data, voice, and media, both domestically and internationally