Harnessing Digital Dividends for Sustainable Development: Supply and Demand Side Initiatives

ITU Regional Development Forum for the Arab Region
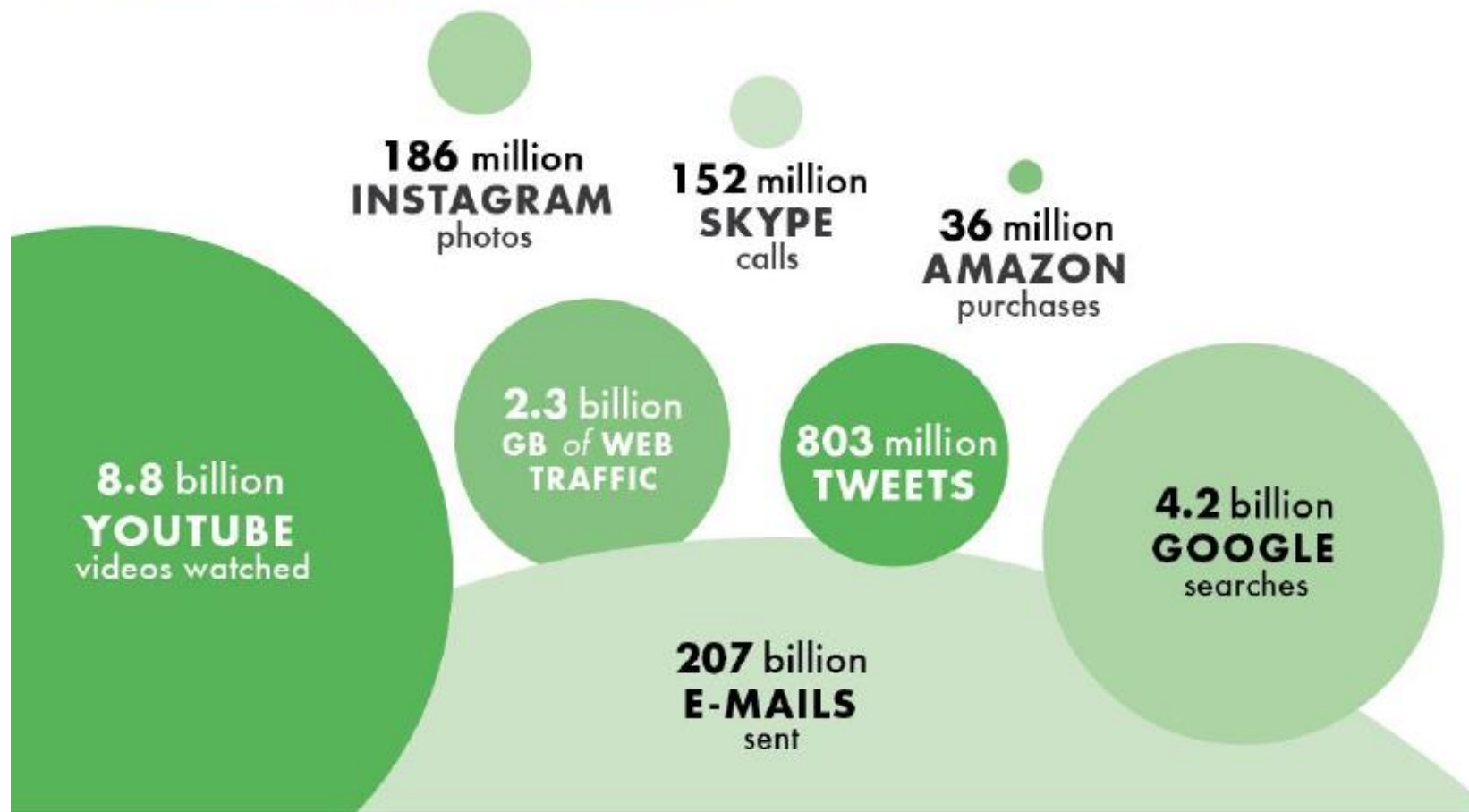
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Context

- **World Development Report (2016)** on "Digital Dividends" paints a clear picture of the remaining digital gap and of the barriers that are keeping countries from reaping the dividends associated with the digital revolution

- **UN Sustainable Development Goals** set the target to "significantly increase access to information and communications technology and strive to provide universal and affordable access to the internet in least developed countries by 2020" (SDG target 9.c)

- **ITU-WDTC (2017) Buenos Aires Plan** included the objectives of fostering:

  o An enabling policy and regulatory environment conducive to sustainable telecom / ICT development

  o The development & use of telecom / ICTs and applications to empower people & societies for sustainable development

Digital revolution has brought many private benefits

A typical day in the life of the internet

186 million
INSTAGRAM photos

152 million
SKYPE calls

36 million
AMAZON purchases

2.3 billion
GB of **WEB TRAFFIC**

803 million
TWEETS

8.8 billion
YOUTUBE videos watched

4.2 billion
GOOGLE searches

207 billion
E-MAILS sent

A significant digital divide remains

6 BILLION *without* BROADBAND

**4 BILLION** *without* INTERNET

2 BILLION *without* MOBILE PHONES

0.4 BILLION *without* A DIGITAL SIGNAL

Divides persist between and within countries—in access and capability

Context in MNA

Mashreq is Strategically Positioned to Become a Regional and International Connectivity Hub

- Mashreq is at crossroad of Africa-Asia & Euro-Asia Traffic

- IP transit prices in Africa are still among the most expensive in the World, competition in different international routes can thus help drive prices down and demand up

- Mashreq can play the role of terrestrial regional transit & regional data repository and cloud hubs
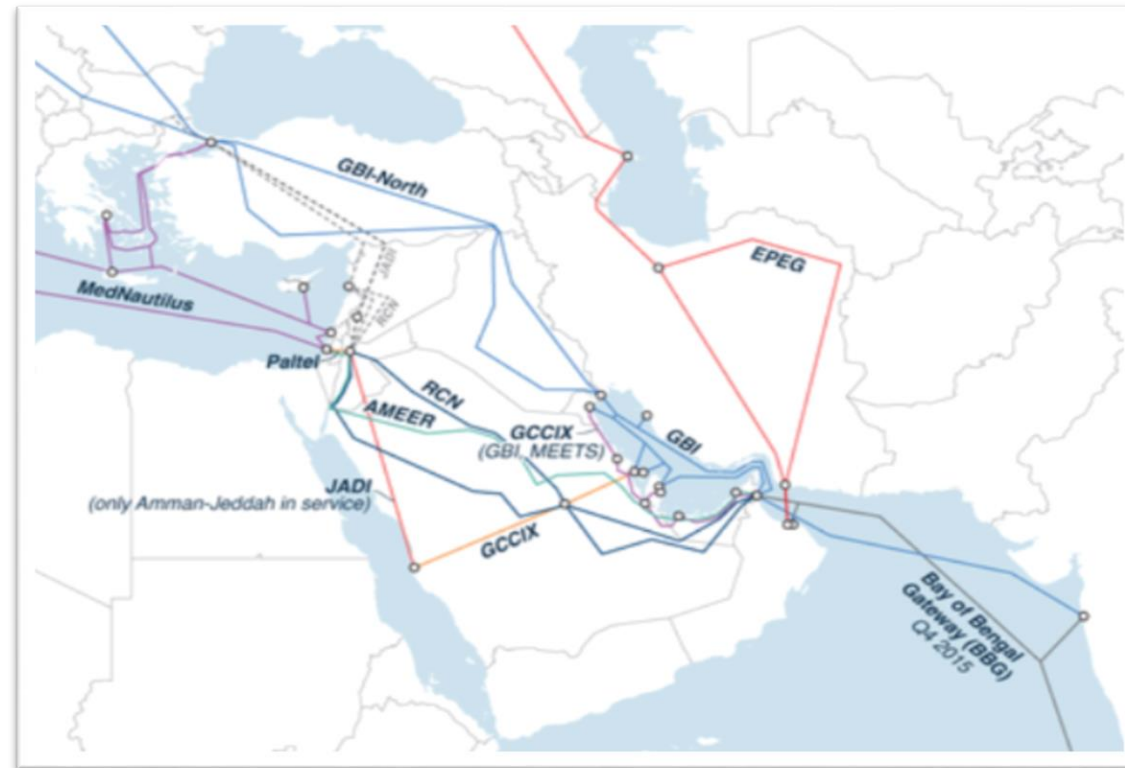
Impact

Develop regional networks, strengthening cooperation, integration, and trade

Increase domestic capacity and strengthen domestic networks for High Speed Connectivity

Increase the role of national players in international market and transfer of know-how

Boost growth in domestic markets for digital technologies, digitally enabled jobs, and opportunities for exchange of goods & services

Broadband Adoption in Jordan & Lebanon

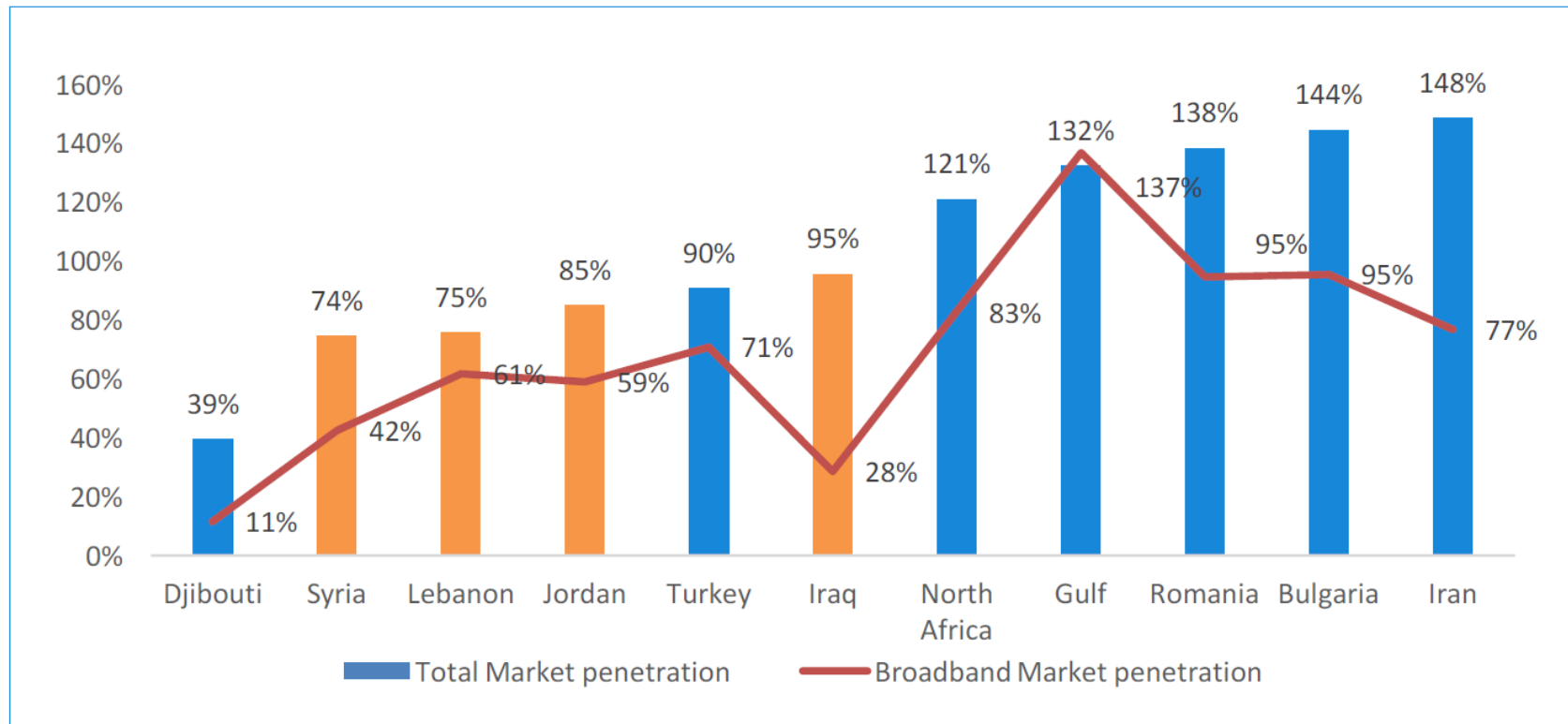## is among the most advanced but have yet to catch up with emerging market

Figure: Penetration of mobile and mobile broadband services (per 100 inhabitants)
Source: GSMA Intelligence, 2018

MNA countries are falling behind in the development of broadband networks, internet access & use, & creation of digital content
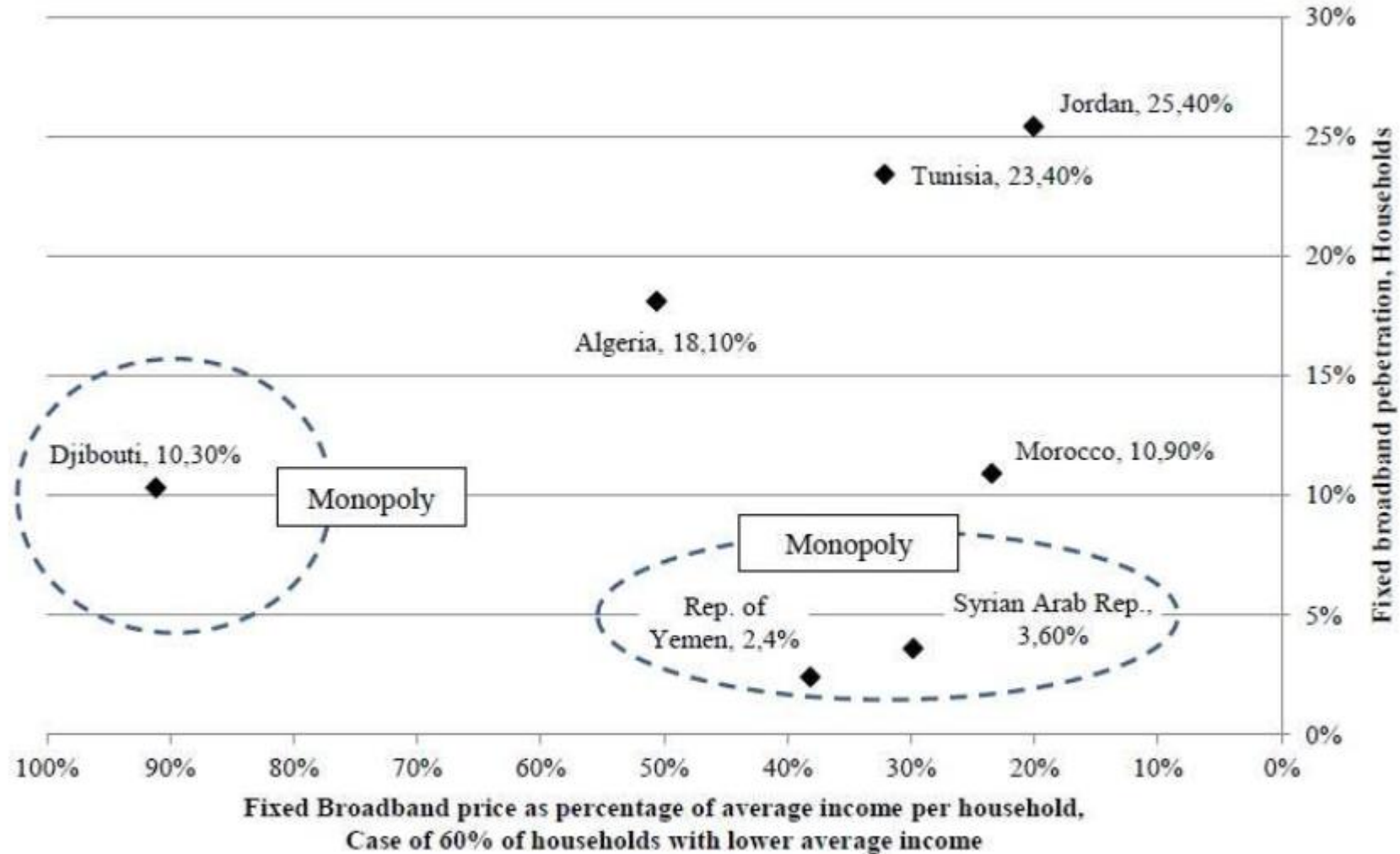
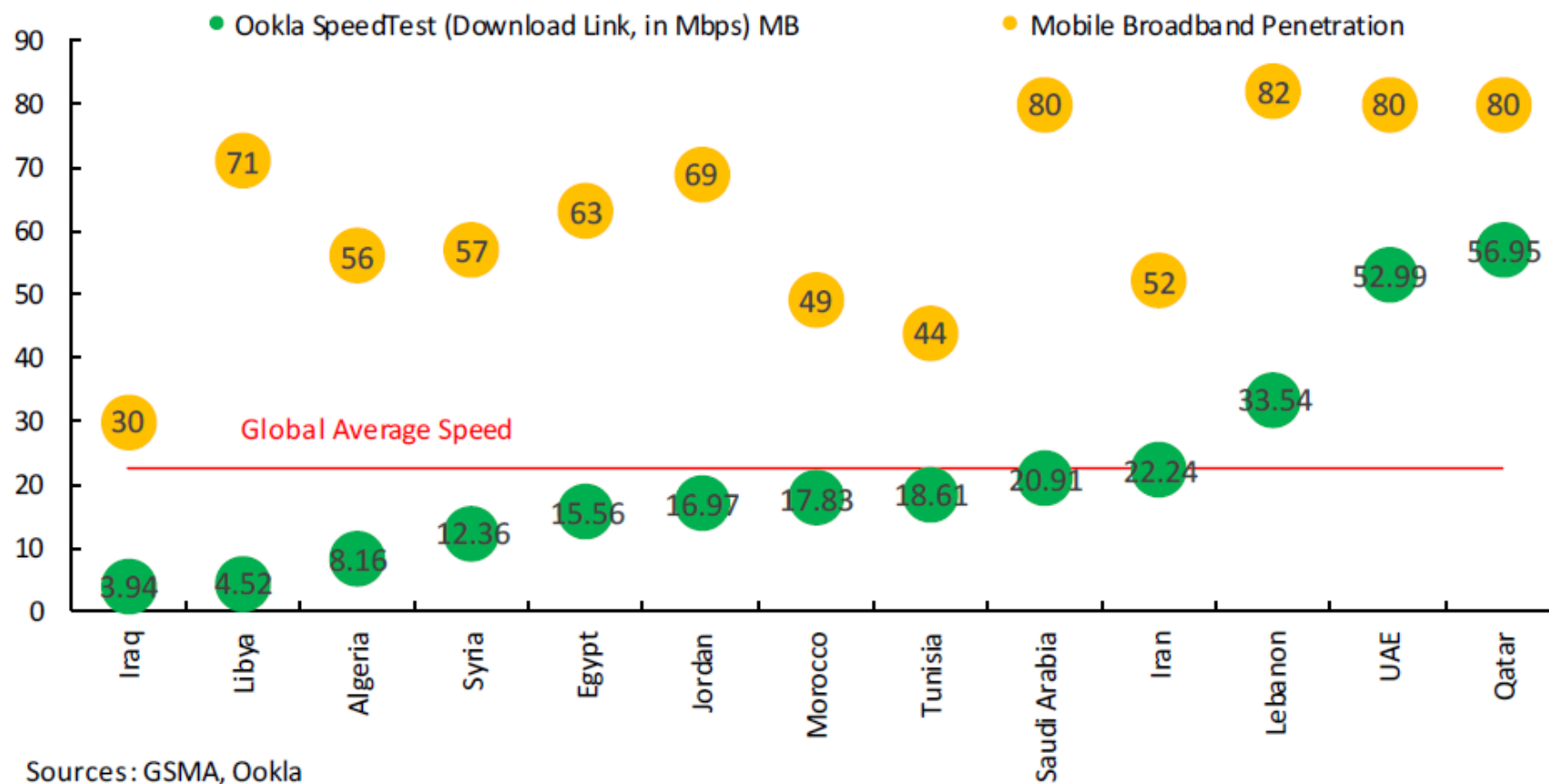| Limited Competition in Internet Services | Limited Access to High Speed Internet | Limited Affordability of high-speed Internet | Limited Use of Broadband Internet |

Source: Broadband Networks in MENA: Accelerating High-Speed Internet Access. World Bank

Affordability

Source: World Bank analysis; Penetration: TeleGeography's GlobalComms Database (http://www.telegeography.com, data retrieved in August, 2013).

Mobile Broadband in MNA

Source: Broadband Networks in MENA: Accelerating High-Speed Internet Access. World Bank

Sources: GSMA, Ookla

Fixed Broadband Download

Mbps
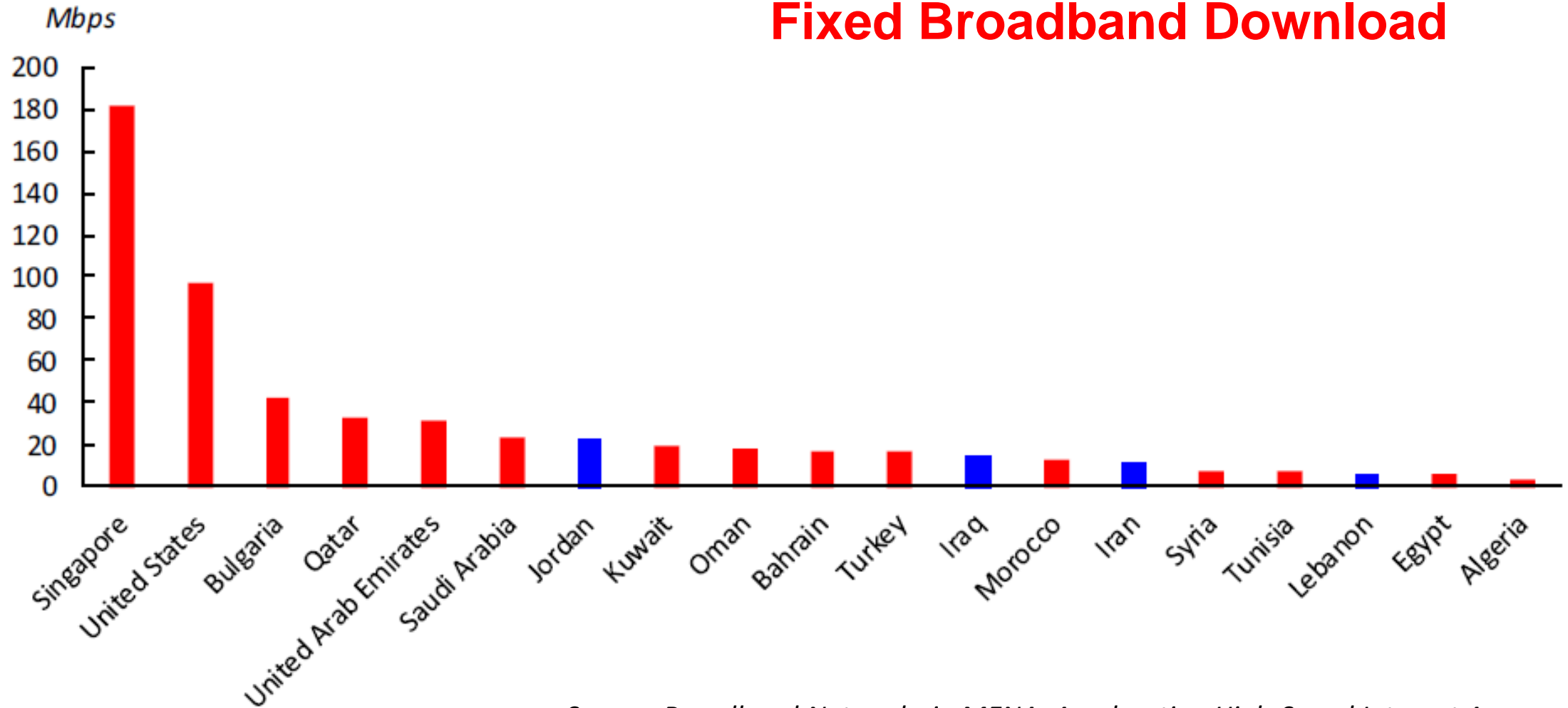
Source: SpeedTest Global Index

Source: Broadband Networks in MENA: Accelerating High-Speed Internet Access. World Bank

Status of Telecom Incumbents in MNA

Company	Status
Maroc Telecom	Majority Private (State 30%)
Algerie Telecom	SOE
Tunisie Telecom	Majority Public (30% private)
LPTIC	SOE
Telecom Egypt	SOE (listed)
OGERO/MOT	Public Concessionaire
Jordan Telecom	Private
Iraq IPTC	SOE
Saudi Telecom	Public Investment Fund owns 70%
Paltel	Private

Many segments of the broadband value chain are still closed to competition.

Source: Broadband Networks in MENA: Accelerating High-Speed Internet Access. World Bank

Challenges in Education & ICT

In spite of the push to incorporate ICT in Education Sector across the Arab World, several countries still lag behind.

- **Access:** In Egypt, on average 120 pupils share 1 computer at Primary level & about 25 students at the Secondary level.

- **Teacher preparedness:** A minority of teachers are prepared to teach basic computer skills or computing in both primary and secondary schools

- **Gender:** Differences across gender do not factor significantly in access to ICT in education. However they seem to favor girls vs boys.

- **Policy:** Several countries have formally developed policies to integrate ICT in education by establishing *"regulatory institutions to ensure that ICT-assisted educational reform takes place."* However, these policies do not translate into practice.

World Bank Group (WBG)
Efforts to Bridge the Digital Divide

Objective: To help implement the SDGs and operationalize the WDR 2016, and make digital solutions available to developing countries with an emphasis on the following areas:

- ***Internet access for all***
- Data and indicators
- Digital economy enabling environment
- Cybersecurity
- Digital government
- Mainstreaming digital services, solutions, and platforms

B. Digital Infrastructure Initiative

Public Sector role	Private Sector role	PPP
• Pass enabling regulation • Be open to sectoral reform and optimize the asset base of state owned enterprises (SOEs)	• Operate and maintain the assets • Provide financing	• For projects which are not fully viable on a commercial basis

WB solution	IFC solution	Blended solution
WB's ICT policy team to provide; • Policy and regulatory assistance to allow the development of open access broadband networks • Assistance for capacity building of regulators.	• IFC to develop carrier neutral backbone projects • IFC to build partnerships with strategic players for the development of such projects and to mobilize investors for commercially viable projects	• IFC to leverage the International Development Agency (IDA) Private Sector Window • IBRD / IDA to provide advice and/or guarantees, as needed.

World Bank's support for the use of ICTs in Education Sector includes:

Policy Development

TA / Capacity Building / Training

Educational Content

Distance Learning

Digital Literacy & Skills Development

M & E

R & D

Thank You!