FTTH MENA Panorama 2017

Annual Study by FTTH Council MENA & Idate
MENA Broadband Status

Market at September 2017

Fibre to the Home Council Middle East & North Africa

www.ftthcouncilmena.org

Agenda

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Study Background

Objectives, available results

Objectives

- Mission on behalf of the FTTH Council MENA
- Objective: to provide a complete summary of the status of FTTH/B in MENA at **Sept. 2017**
  - **17 countries analyzed** (1)
  - **Distinction between architecture: FTTH/B vs FTTN** (FTTN/C+VDSL, FTTx+Docsis 3.0)
  - **Information on the national Broadband market** (national program, regulation, overall figures)
  - **FTTH/B Definition by FTTH Councils Worldwide**(2)

Characterization of each project includes:
- Organization initiating the project
- Key parameters & Figures
- Technical parameters
- Financing & Business model

► Methodology used

- Desk research
- **Bottom up approach**
- **Direct contacts with FTTH players (questionnaires, phone interviews) & IDATE's partners in MENA**
- Information exchange with FTTH Council MENA members

(1): Algeria, Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Sudan, Tunisia and UAE
(2): FTTH/B definition available at : www.ftthcouncil.eu/documents/Publications/FCGA%20-%20Definition%20of%20Terms%20-%20Revisions2016.pdf

Available results for MENA

> About 50 projects listed in 17 MENA countries at September 2017

Quantitative

FTTx Evolution	September 2017	
	Subscribers	**Homes Passed**
FTTH/B Evolution (Total)	**6 250**	**63 815**
Tunisie Telecom	[redacted]	
Ooredoo		
Orange Tunisia		

Qualitative

Saudi Arabia	
Population (estimated 2016)	32 275 687
Households (estimated 2016)	5 250 000
National Regulation for FTTH/B & government initiatives	- The Telecom industry is ruled in the country by the Communications and IT Commission (CITC). - There is not a specific regulation on FTTx. **2006:** Mobily, Bayanat Al-Oula and ITC announced an agreement in order to deploy and maintain a national fibre-optic backbone network called the Saudi National Fibre Network (SNFN) **2016:** The Saudi Vision 2030 was published in order to promote the deployment of fibre optics (among other infrastructures) in the country. The objective was to cover 90% of homes in dense areas and 66% of homes in non-dense areas by 2020. - *October:* The CITC plans to award unified telecoms licences to the four ISPs in Saudi Arabia, in order for them to provide fixed, mobile and data services across the country. **2017:** - *March:* The CITC has awarded Zain to deploy Phase 1 of its National Broadband expansion Plan. The regulator planned to reach 70% of rural areas by 2020. - *August:* The regulator reported that high-speed internet access is available to 50% of the rural area (approx. 70.000 people).
Broadband Current situation	The broadband market is very dynamic in Saudi Arabia, promoting the economic development of the nation. First FTTH/B deployments began in 2008-2010, with several players involved in rollouts. By September 2017, ADSL is still the dominant fixed broadband access technology. However, FTTH technology is growing rapidly in the country. The competition between the two leading players in that field seems to be a good driver. It is also important to note that during 2016, the total number of Fixed Broadband subscribers has decreased due to fixed-wireless subscriptions reduction.
5G / 4G Summary	- In Saudi Arabia, TD-LTE services were launched by the two domestic players in 2011. FDD-LTE services were launched in 2013 by Mobily and STC. - Population coverage stood at above 85% as at October 2016. **2017:** - *January:* STC announced it achieved speeds of 70 Gbps in a 5G trial. - *March:* STC and Nokia signed a Memorandum of Understanding to work on 5G and IoT technologies. Trials are planned to demonstrate the capacity of 4.5G Pro and 4.9G, before preparing for 5G and dedicated applications. - *March:* Nokia and Zain signed a similar Memorandum to develop 5G and IoT applications. Main 5G use cases considered include industrial networking, smart factories and offices, remote healthcare, virtual reality and advanced video services. The t smart city initiative will focus Saudi city Jeddah. - *May:* STC and Huawei announced results of their 5G using the 3.5GHz band and Massive MIMO technology.

Status of Broadband in MENA

Leading access technologies – National programs

> **More than 29.5 million fixed BB subscribers and 269 million Mobile BB subscribers in MENA at September 2017**

ADSL access technology is still leading the Fixed Broadband market but FTTH/B is growing more rapidly now in some countries (Bahrain, Kuwait, Lebanon, Tunisia and Oman) or is already leading in others (UAE, Qatar).

Ratio: FTTH Subscribers / Total Fixed BB Subs	
Bahrain	30,21%
Kuwait	14,64%
Lebanon	0,10%
Oman	11,05%
Qatar	97,15%
Tunisia	1,11%
UAE	99,81%

Source: IDATE for FTTH Council MENA

FTTH/B subscribers represent around 19% of total fixed BB subscribers in MENA by September 2017 compared to 9% one year ago

Mobile BB is the leading choice for many end users in 12 over 17 analyzed markets.

In terms of 4G and 5G development, the region has extended the deployment of 4G networks. **5G** deployment agreements & trials have been observed in countries such as Kuwait, Qatar, Saudi Arabia and UAE.

FTTH/B in MENA

Overview, overall results, main trends in MENA

FTTH/B in MENA – Overall Figures

In September 2017

> 2.83 Million FTTH/B subscribers

> 6.14 Million FTTH/B Homes Passed

Average Penetration Rate : 46%
(from 45 % at September 2016)

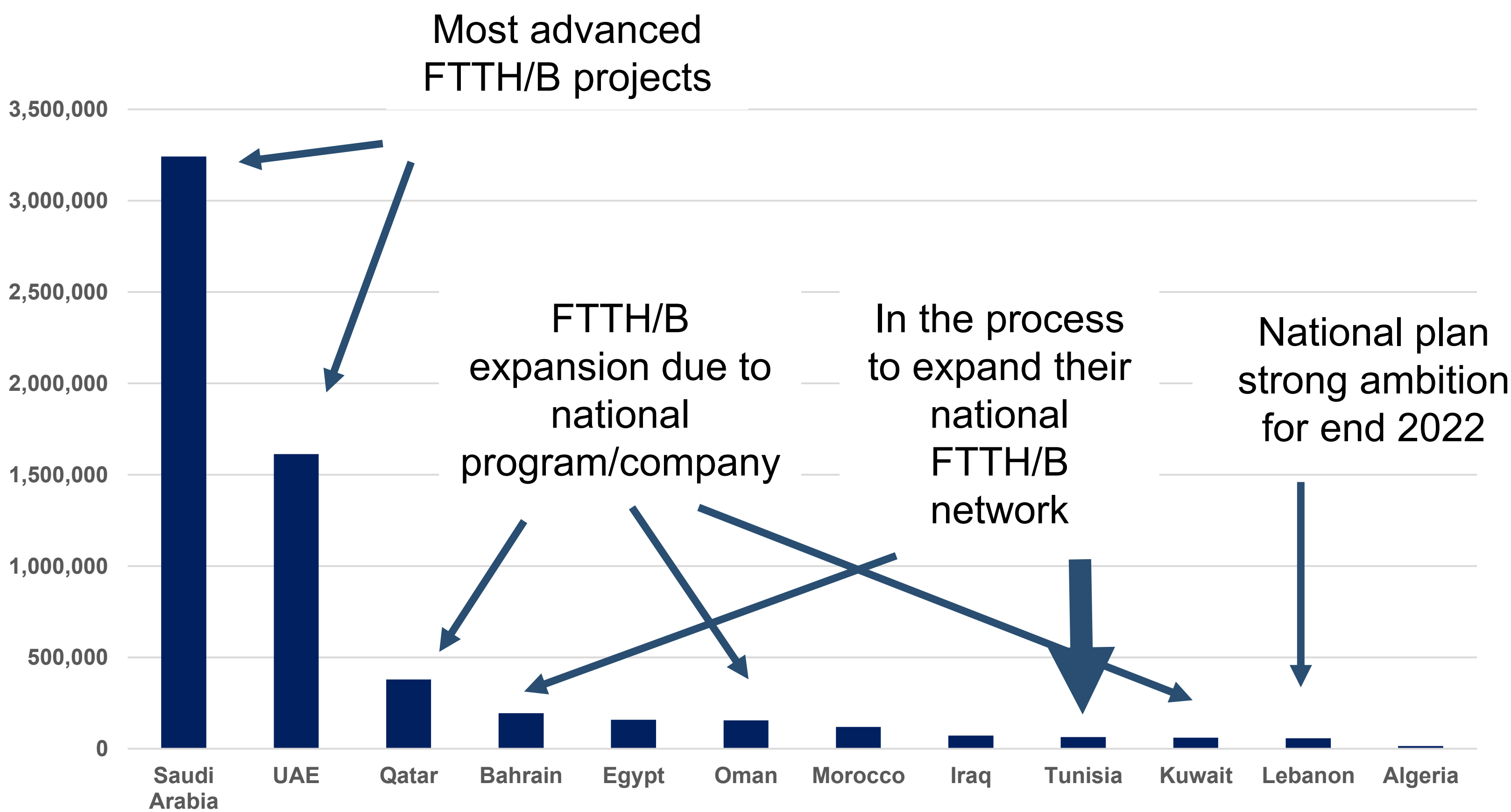
YoY growth

- **Subscribers: +10% … slower**
- **Homes Passed: +9% … stable**

Source: IDATE for FTTH Council MENA

Main trends in MENA's FTTH/B market: Homes Passed

> **2 countries with significant rollouts, more than 1.5 million Homes Passed and this year it reached 3.2 million in KSA**



Source: IDATE for FTTH Council MENA

Conclusion – Main outputs

Main outputs

There are some significant and ambitious FTTH/B projects

- In **UAE** and **Qatar**: FTTH coverage over total households is now reached
- In Qatar: Ooredoo and QNBN program => QNBN is focusing now on Public Sites and is lightly used by Vodafone and Ooredoo.
- In **Lebanon**: It can be observed that there is a plan to increase the number of FTTH Homes Passed from 58 000 at September 2017 to 85% of households passed in a short term
- **Kuwait**: There is a national plan (MOC) that will increase the FTTH Homes Passed to 67.000 by 2017 and a third phase will be implemented in 2018 to increase to 100.000 homes passed.

FTTH/B is a priority: no noticeable FTTN projects announced to date

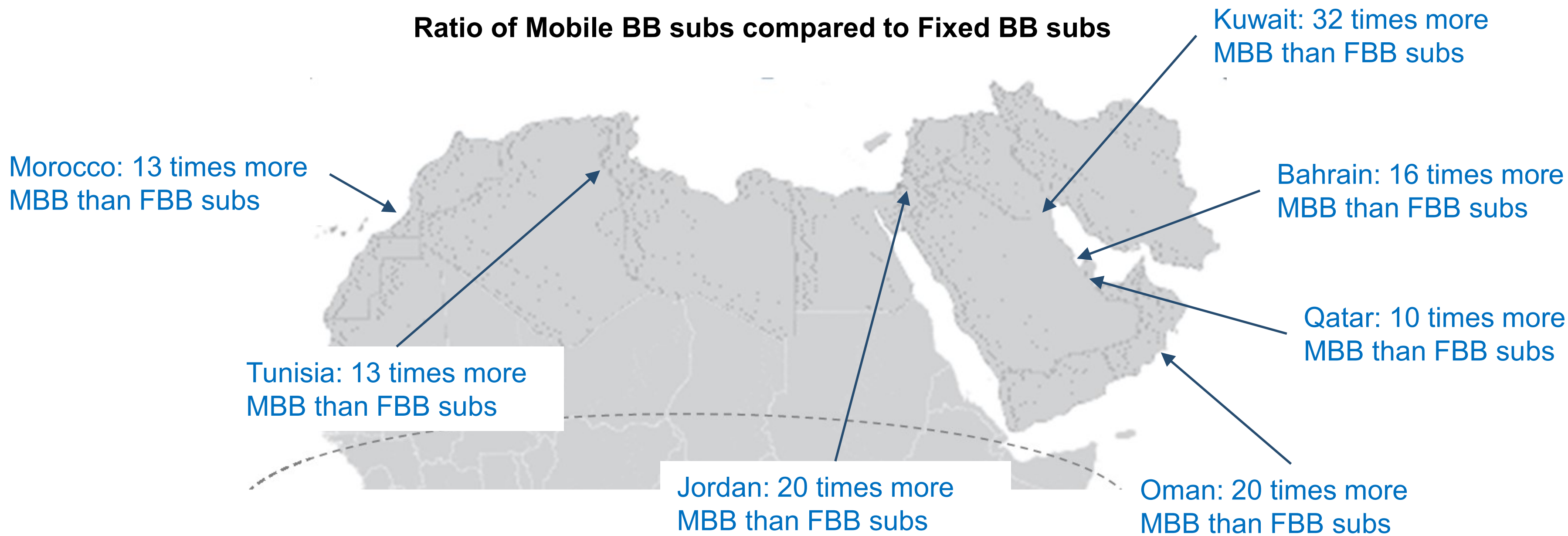
- Most projects, operational or announced, tend to be FTTH rollouts
- However, FTTN + VDSL is still a good solution for players in countries where the Broadband market is not mature yet and the economical context still has to get improved (Morocco, Jordan): the objective of telcos there is to be able to provide higher speed rates to end users, whatever the architecture.

Mobile BB as a competitor for FTTH in the region ?

A real leadership for mobile BB access technologies

- Mobile Broadband subscriptions overpass fixed Broadband subscriptions in several countries (Egypt, Morocco, Jordan,…), and this trend might not change even with the rollout of new networks (The deployment of 4G technologies could compete with Fixed BB services)

Ratio of Mobile BB subs compared to Fixed BB subs

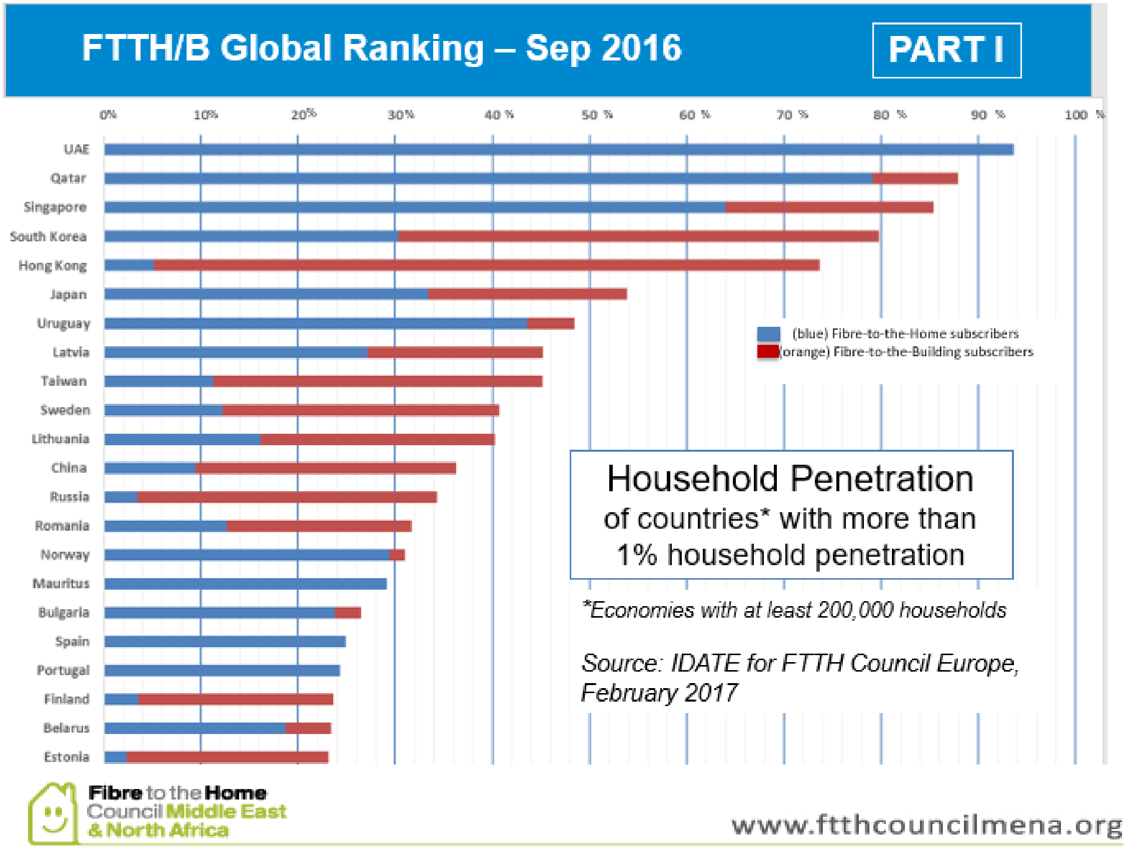


Source: IDATE for FTTH Council MENA

- But this could be also an interesting opportunity for FTTH: not only because of the need for interconnecting base station with fiber will increase (**5G**), but also because there is a trend to demand higher bandwidth that fiber only can manage (**Netflix 4K** is coming in MENA !!)

MENA is progressing in the global ranking !!

- **UAE and Qatar still among World Leaders**
- **Two countries with good progress**
  - **- Bahrain : 25,7%**
  - **- Oman : 6%**
- **6 MENA countries in total**



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