



**MINISTÈRE
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DIRECTION GÉNÉRALE DE L'ADMINISTRATION
ET DE LA MODERNISATION

DIRECTION DES RESSOURCES HUMAINES

SOUS-DIRECTION DE LA POLITIQUE DES RESSOURCES HUMAINES

BUREAU DES CONCOURS ET EXAMENS PROFESSIONNELS

**CONCOURS INTERNE ET EXTERNE POUR L'ACCÈS À L'EMPLOI
D'ATTACHÉ DES SYSTÈMES D'INFORMATION ET DE
COMMUNICATION AU TITRE DE L'ANNÉE 2023**

ÉPREUVES ÉCRITES D'ADMISSIBILITÉ

JEUDI 16 FEVRIER 2023

ANGLAIS

Traduction en français d'un texte à caractère général sur un sujet lié aux techniques d'information, rédigé en anglais, et rédaction de réponses, en anglais, à une série de quatre à six questions, rédigées en anglais, portant sur ce même texte.

Durée : 2 heures

Coefficient : 2

Toute note inférieure à 8 sur 20 est éliminatoire

SUJET

Voir pages suivantes.

Ce dossier comporte 3 pages (page de garde non comprise).

A) Translate into French the paragraphs highlighted in blue (10 points)

B) Answer each of these questions using between 20 (minimum) and 50 (maximum) words per question (10 points):

1) Is Egypt strong in telecommunications?

2) Explain what are the main difficulties encountered by Egypt in its technological development.

3) Explain how the development of 5G network will enable the specific development of the economy in Egypt.

4) How digital transformation contributes to the increase of the GDP in a country.

5) Explain the expression: “Digital transformation is only a fancy moniker to highlight the digitalization”.

Egypt's Telecommunications Market: New Strategies to Come Out of Hibernation?

Wednesday, Jun 01 2022

Insidetelecom – International telecoms business magazine

By Ahmad El Hajj

Digital transformation has become a central topic in the strategic plan of most countries around the world. The progress that has been achieved in different areas of technology has mandated a complete restructuring of different sectors that contribute to the country's gross domestic product (GDP). Digital transformation is only a fancy moniker to highlight the digitalization that affected various operations, mainly to reduce costs, simplify management, and develop new use cases that increase the profitability of key contributing sectors.

Egypt is among the countries that embraced the transformational wave given the importance of the information and communication technology (ICT) sector which contributed to 5 percent of the GDP in the fiscal year 2020/2021. As a result, the ministry of communications and information technology (MCIT) has pinned high hopes on its "Digital Egypt" strategy which aims at creating a digital society. The telecom industry is among the focus areas towards meeting the strategy goals with the MCIT aiming to improve the quality of infrastructure, extend service provision to villages, and invest in the fiber network.

Current Operator Landscape

The telecom operations in Egypt date all the way back to the 1800s with telegraph services. The mother company, Telecom Egypt, has enjoyed its place as the sole communications service provider until the 1990s and the deployment of the GSM cellular network, the first truly devised mobile system. The GSM era saw a liberalization of the Egyptian market with many external players joining such a promising ecosystem.

Two providers emerged as the main operators of the first GSM networks, Orange Egypt (formerly known as Mobinil) and Vodafone Egypt (formerly, Click GSM). [...] The telco market welcomed controversially a fourth operator in 2017, Telecom Egypt's We. The controversy comes from the fact that Telecom Egypt also has a major share in Vodafone Egypt.

[...] According to the latest ICT indicators report published by MCIT, the mobile penetration rate is of 89.69 percent with a 7.08 percent drop to the same period last year. The MCIT attributes the drop to the new recommendations of the international telecommunications union of using active line subscriptions instead of registered lines in the calculations. The internet penetration rate is below 60 percent. To this end, the MCIT has committed to improve the internet quality notably through the fiber infrastructure, in addition to increasing its adoption among the citizens. The national telecommunications regulatory authority (NTRA) further facilitated the switching between internet service providers without additional fees.

Wireless Technologies in Presence: Still No 5G?

The Egyptian market is one where 2G, 3G, and 4G coexist with no commercial 5G network available yet. The adoption of newer technologies is normally delayed by a few years compared to the global average. The second generation was introduced with the first two operators in 1998 whereas the third generation was deployed in 2007. Finally, the fourth generation LTE network was deployed in 2017. As a comparison, the first commercial 3G network was deployed in 2001 in Japan whereas the first 4G network was rolled-out in Stockholm and Oslo in 2009.

The three technologies also coexist in the allocated frequency bands at 700 MHz, 900 MHz, 1800 MHz and 2100 MHz.

The preparations for later 5G commercial networks in well underway. The NTRA has allocated several frequency bands in the 2600 MHz to the four operators for an amount of USD 1.61 billion. [...]

So What's Next?

To say it in simple words, Egypt is about to experience what other countries did three years ago. The gradual deployment of 5G networks will open the way to new use cases and applications, new investments and partnerships. The average revenue per user (ARPU) will consequently increase leading to further gains from the telecom sector. Given the low internet penetration rate, it is rather imperative to develop use cases which will guarantee wide adoption. Smart agriculture and farming using internet of things is one particular example given that agriculture in Egypt is the major component of the economy accounting to 11.3 percent of the GDP. The NTRA has already issued the regulatory framework for internet of things provision in the country. Among the targets cited by the NTRA are smart cities, smart transportation systems, and enabling Industry 4.0.

In preparation for the next period, investments in data centers have been going well and steady. Another reason for investing in data centers is the central location of Egypt between Africa and the Middle East which could make the country an important data hub.

A national system has been also set by the MCIT to improve cybersecurity, protect the infrastructure of critical sectors and build national capacities specialized in cybersecurity. This has in particular allowed the country to rank among the leading ones according the global cybersecurity index issued by the international telecommunications union.

Summary

Egypt is one of the most promising telecom markets in the world with a very large number of mobile subscribers and diversified economic sectors that could notably benefits from additional investments in the telecom infrastructure and introduction of new wireless technologies. The path to a digital Egypt will certainly go through drastic and rapid changes in the country. Up to this moment, the country has been lagging behind in terms of its adoption of new technologies. The beginning of the 5G era should however lead to an intensified development. The NTRA has a major role in following aggressive strategies and providing incentives to the different operators to invest in these newer evolutions. Reducing spectrum license fees and promoting increased competitiveness are two major strategies that can be followed.