Sudan

Sudan has suffered from several social conflicts for more than twenty years. As it comes out of these conflicts, Sudan is emerging as one of the largest ICT markets in the region. The country has a relatively well-equipped telecommunication infrastructure by regional standards, including a national optical fibre backbone, wireless fixed line networks, but very limited fibre to the home connections.

Key indicators for Sudan (2017)		Arab States	World
Fixed-telephone sub. per 100 inhab.	0.4	7.9	13.0
Mobile-cellular sub. per 100 inhab.	70.7	102.6	103.6
Active mobile-broadband sub. per 100 inhab.	30.5	53.9	61.9
3G coverage (% of population)	46.0	88.0	87.9
LTE/WiMAX coverage (% of population)	35.0	50.9	76.3
Individuals using the Internet (%)	*30.9*	48.7	48.6
Households with a computer (%)	*19.3*	47.1	47.1
Households with Internet access (%)	*33.6*	50.1	54.7
International bandwidth per Internet user (kbit/s)	2.1	65.3	76.6
Fixed-broadband sub. per 100 inhab.	0.1	5.6	13.6
Fixed-broadband sub. by speed tiers, % distribution			
-256 kbit/s to 2 Mbit/s	61.0	30.7	4.2
-2 to 10 Mbit/s	38.0	33.8	13.2
-equal to or above 10 Mbit/s	1.0	35.4	82.6

Note: Data in italics are ITU estimates. Source: ITU (as of June 2018).

Mobile services: Sudan is one of the largest countries in the region by geographical area and around 55 per cent of its population lives in small towns scattered across rural areas. As a consequence, despite the high competition and big investment, mobile-cellular and mobile broadband penetration are below the average in Arab States and globally. Three transnational operators offer mobile-cellular and mobile broadband services in Sudan: MTN, a Sudatel mobile unit, Sudani, and Zain. Unlike other mobile markets in the Arab States, where the incumbent retains a very large market share, none of the three operators in Sudan has a majority of the mobile market. As a result, the Sudan mobile market is very competitive. All three mobile operators offer 3G services in the 2100 MHz frequency band. In 2016, Zain Sudan was the first operator to launch LTE services, followed by Sudani, which announced the commercial launch of an LTE-Advanced network in late 2016. Sudan has a very competitive mobile market and consequently very low handset-based mobile-broadband prices.

Fixed services: As in many countries, fixed telephony is in decline in Sudan and it is now far below the average penetration in the Arab States region and globally. Fixed broadband penetration is also very low and mainly based on wireless networks. The incumbent fixed operator, Sudatel, started substituting traditional copper lines with CDMA2000 fixed-wireless access in 2005. Competition in the fixed-line market comes from Canar Telecom, which also opted for CDMA2000 technology, and which was upgraded to the EV-DO standard, and like Sudatel, offers wireless broadband services. In 2017 Canar obtained a 2.3 GHz spectrum licence to roll out a time division duplex LTE (TD-LTE) network.

Government policy: Overall responsibility for telecommunication policy is vested in the Ministry of Information and Communications (MCIT). There are two government bodies with responsibility for different aspects of ICT policy and regulation: the National Telecommunications Corporation (NTC), and the National Information Centre (NIC). NIC is primarily concerned with the use of ICT in government. NTC was established under the Telecom Act of 2001, which made it responsible for plans, policies and regulation (including regulating tariffs, licensing operators, frequency management and equipment), while the overall objective of NIC is expanding e-Government services in the country. The NTC funded the universal access and universal service projects through the Sudan ICT Fund, which was established in 2004, and has carried out a range of projects during the last 10 years.

Conclusion: In recent years, Sudan has expanded telecommunication networks and Internet services and the ICT sector witnessed remarkable development. The launch of mobile and fixed LTE networks by several, competing fixed and mobile operators, the roll-out of an optical fibre backbone network, the expansion of CDMA2000 network in rural areas, and the use of satellite broadband services is expected to strengthen the Sudan ICT position among countries in the region.