

Angola

This oil-rich country is aiming to shift from ICTs led by economic growth to ICTs being a leading engine of the economy.

Mobile services: The market is a duopoly between UNITEL and MOVICEL. UNITEL is 25 per cent owned by Angolan investors, 50 per cent by State-run oil company SONANGOL and 25 per cent by Oi of Brazil. MOVICEL was originally a subsidiary of the State-owned incumbent Angola Telecom. In 2010, a majority of shares were sold to several Angolan companies, with Angola Telecom retaining a small share. One factor that affected the competitiveness of the mobile market is the fact that MOVICEL'S network was based on Code Division Multiple Access (CDMA) technology, while UNITEL has used Global System for Mobile Communications (GSM) from the start. In 2010, MOVICEL shifted to GSM. Despite Angola's above-average per capita income in the region, only around two-thirds of households (63 per cent) had mobile phones with a wide variation between urban (83 per cent) and rural areas (31 per cent).⁸ Operators have been moving to widen access and deploy mobile-broadband. MOVICEL introduced 3G in 2010, when it converted its network, some two years after the introduction of the technology by UNITEL. Both operators introduced LTE in 2012, one of the earliest launches of this mobile-broadband technology in sub-Saharan Africa.

Fixed services: Angola Telecom is the State-owned incumbent. Unlike most other countries in sub-Saharan Africa, there are more fixed-telephone operators (four) than mobile operators (two). Nevertheless, Angola Telecom dominates the market. All of the fixed-telephone operators also compete in the fixed-broadband market, along with several fixed wireless Internet service providers (ISPs). Fixed technologies in use include ADSL, optical fibre and cable modem. Angola Telecom has been building out the national fibre backbone and it now reaches all provincial capitals. Angola is well provisioned with undersea fibre-optic cables. It was one of the original countries in sub-Saharan Africa to have a submarine cable link when it connected to SAT-3 in 2002. However, it was not until the arrival of the Africa Coast to Europe (ACE) and, in particular, the West African Cable System (WACS) a decade later that international bandwidth prices were significantly lowered. WACS is owned by Angola Cables, a

Key indicators for Angola (2017)	Africa	World	
Fixed-telephone sub. per 100 inhab.	0.5	0.9	13.0
Mobile-cellular sub. per 100 inhab.	44.7	74.4	103.6
Active mobile-broadband sub. per 100 inhab.	14.6	24.8	61.9
3G coverage (% of population)	85.0	62.7	87.9
LTE/WiMAX coverage (% of population)	8.0	28.4	76.3
Individuals using the Internet (%)	14.3	22.1	48.6
Households with a computer (%)	11.9	8.9	47.1
Households with Internet access (%)	11.3	19.4	54.7
International bandwidth per internet user (kbit/s)	6.9	11.2	76.6
Fixed-broadband sub. per 100 inhab.	0.3	0.6	13.6
Fixed-broadband sub. by speed tiers, % distribution			
<i><256 kbit/s to 2 Mbit/s</i>	31.9	38.7	4.2
<i>>2 to 10 Mbit/s</i>	54.3	37.2	13.2
<i>>equal to or above 10 Mbit/s</i>	13.9	24.1	82.6

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

consortium of the country's telecom operators. Angola Cables also manages the ANGONIX Internet exchange point (IXP). The country's first satellite, Angosat1, is slated for launch in 2017.

Government policy: The Ministry of Telecommunications and Information Technology is the authority for electronic communications in Angola, and is responsible for defining the sector's development policies. The National Plan for the Information Society 2013–2017 is aligned with Angola's national development plan and sector strategies. It aims at bridging current gaps by strengthening the impact of ICTs on economic and social development to promote an inclusive country whose citizens are linked to the world, and have access to education and health and opportunities to develop their personal and professional ideas and skills. The Angolan Institute for Communications, created in 1999, is the sector regulator responsible for telecommunications and posts.

Conclusion: ICT growth has largely been driven by economic growth from the country's large oil reserves. There is now a push to widen and deepen access, infrastructure, human resources, content and e-services, so that ICT plays a major role in the country's economic development strategies.