

Sierra Leone

The West African nation has embarked on the expansion of its telecommunications infrastructure following the civil war, including enabling a competitive mobile market and access to submarine cable. More interventions are necessary to bridge the urban rural digital divide and strategize ICT for economic growth.

Mobile services: The country has three mobile operators: Orange, a subsidiary of Senegal's SONATEL, which took over AIRTEL in 2016 and rebranded as Orange; SMART, which launched in 2014 and is owned by Timeturns Holdings, a mobile group registered in Cyprus; and AFRICELL, which launched in 2005 and is owned by a Lebanese mobile group. Fifty-five per cent of households had mobile phones in 2013, including 85 per cent in urban areas but just 41 per cent in rural ones. One of the challenges is the lack of electricity in many rural areas. In respect to mobile-broadband, the first 3G network was launched by AFRICELL in 2011, followed by Orange in 2012 and SMART in 2014.

Fixed services: Sierra Leone Telecommunications Company (SIERRATEL) is the State-owned incumbent. It has been progressively rebuilding network infrastructure damaged during the country's civil war. SIERRATEL provides fixed-telephone service using copper lines and, more broadly, CDMA wireless local loop. SIERRATEL offers fixed-broadband with its CDMA EVDO fixed wireless product. There are also fixed wireless broadband operators. There is a national broadband network spanning around 400 km constructed. It forms part of the ECOWAS Regional Backbone initiative, stretching from the Liberian to the Guinean border. The country's first undersea fibre-optic cable link became a reality in 2012, when Sierra Leone connected to the ACE system. The connection is managed by Sierra Leone Cable Limited (SALCAB), incorporated as a limited liability company in 2012 and 100 per cent owned by the Government of Sierra Leone. SALCAB manages the Government's assets in the national backbone and ACE, and provides cost-based open access to telecommunication companies in the country. Open access to ACE was stymied until 2015, when the Parliament voted to end SIERRATEL's monopoly over international gateways.

Key indicators for Sierra Leone (2017)	Africa	World	
Fixed-telephone sub. per 100 inhab.	0.2	0.9	13.0
Mobile-cellular sub. per 100 inhab.	87.7	74.4	103.6
Active mobile-broadband sub. per 100 inhab.	25.6	24.8	61.9
3G coverage (% of population)	40.0	62.7	87.9
LTE/WiMAX coverage (% of population)	0.0	28.4	76.3
Individuals using the Internet (%)	13.2	22.1	48.6
Households with a computer (%)	5.6	8.9	47.1
Households with Internet access (%)	15.6	19.4	54.7
International bandwidth per Internet user (kbit/s)	0.1	11.2	76.6
Fixed-broadband sub. per 100 inhab.	0.7	0.6	13.6
Fixed-broadband sub. by speed tiers, % distribution			
<i>-256 kbit/s to 2 Mbit/s</i>	66.7	38.7	4.2
<i>-2 to 10 Mbit/s</i>	10.2	37.2	13.2
<i>-equal to or above 10 Mbit/s</i>	23.1	24.1	82.6

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

Government policy: The sector policy-maker is the Ministry of Information and Communication. The National ICT Policy dates from 1999. Initiatives included (a) amending the legal and regulatory framework; (b) establishing a Centre for ICT Intelligence; (c) improving Internet connectivity; (d) expanding fixed and mobile networks in remote areas; (e) developing services and applications by local suppliers; (f) building capacity and developing national ICT skills; (g) providing ICT services and skills for the marginalized/disadvantaged; (h) developing geo-information; (i) providing affordable universal access/service; and (j) conducting an ICT and E-readiness Survey. The National Telecommunications Commission is the sector regulator guided by the Telecommunications Amendment Act of 2015.

Conclusion: Despite the challenging circumstances emerging from civil war, Sierra Leone has a competitive mobile market and is making efforts to improve Internet connectivity. The Government has facilitated access to wholesale networks and adopted a new telecommunications law that establishes the foundation for deeper infrastructure development and enabling ICT in other sectors of the economy.