

Kyrgyzstan

Kyrgyzstan has an open-access and competitive telecommunication market. Mobile services prevail over fixed services. A significant increase in 3G and LTE subscribers is observed and projected in the coming years.

Mobile services: The mobile-broadband market shows advances in the context of 3G/LTE technology deployment, mobile devices availability, and increases in the number of users and Internet traffic growth. The mobile-cellular market started to develop in 1998. Today, there are three active mobile operators (Beeline, MegaCom, and O!) using GSM/3G (900, 1800 MHz), UMTS/WCDMA (900, 2100 MHz) and LTE (800, 1800, 2100, 2500 MHz) technologies. Companies providing services over CDMA and D-AMPS/TDMA networks ceased their operation in 2016. 3G-services were launched in 2010, LTE services emerged at the end of 2011.²⁷⁷ The largest operator has around 40 per cent of the market, while the other two operators have an equal share of the rest of the market. Some fixed network operators have also launched LTE services. In 2015, Kyrgyzstan held the first auction on digital dividend frequencies (790-862 MHz) in the CIS region.^{278 279} It is planned to introduce mobile network portability (MNP) by 2018.²⁸⁰ RAN Sharing technology is also used by mobile operators in order to widen the coverage area of all operators, especially in rural areas.

Fixed services: The fixed telephone network penetration level is below the CIS region average. The national telecommunication operator, Kyrgyztelecom, owns about 70 per cent of the market, serving around 95 per cent of fixed subscribers. It also offers wireless local loop (WLL) services over a CDMA-450 network. Fixed-broadband services were launched in 2006, but its development is hampered by low level urbanization, relatively high prices and competition with mobile-broadband services. Most fixed-broadband Internet access networks are deployed in urban areas. However, both fixed and mobile services require high capacity backhaul networks to meet the growing demand for broadband access. Leading telecommunication operators (Kyrgyztelecom and mobile telecommunication operators) are building fibre-optic networks across the country. In 2015, the total length of fibre-optic lines increased by 36 per cent. By increasing backhaul network capacity, Kyrgyzstan increased the network capacity to transit and terminate larger volumes of international Internet traffic, which is vital because the biggest

Key indicators for Kyrgyzstan (2017)	CIS	World	
Fixed-telephone sub. per 100 inhab.	6.0	19.8	13.0
Mobile-cellular sub. per 100 inhab.	121.9	138.3	103.6
Active mobile-broadband sub. per 100 inhab.	73.7	72.0	61.9
3G coverage (% of population)	75.0	80.3	87.9
LTE/WiMAX coverage (% of population)	50.0	61.1	76.3
Individuals using the Internet (%)	38.2	68.6	48.6
Households with a computer (%)	23.3	68.1	47.1
Households with Internet access (%)	21.1	73.6	54.7
International bandwidth per Internet user (kbit/s)	57.8	66.8	76.6
Fixed-broadband sub. per 100 inhab.	4.3	17.8	13.6
Fixed-broadband sub. by speed tiers, % distribution			
<i>-256 kbit/s to 2 Mbit/s</i>	10.6	12.2	4.2
<i>-2 to 10 Mbit/s</i>	39.4	25.1	13.2
<i>-equal to or above 10 Mbit/s</i>	49.9	62.7	82.6

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

part of Internet traffic in Kyrgyzstan is inbound traffic coming from outside Kyrgyzstan.

Government policy: In 2002, the national strategy, ICT for the Republic of Kyrgyzstan development, set out the following priorities: governance through ICT, ICT education, ICT-economy (e-trade development, etc.). The strategy did not set tangible outputs, terms, and indicators. ICT goals were also described in the Kyrgyzstan development strategy for 2009-2011, such as: national data transmission network construction; integration of national network into the Internet; population provision with telephone services; analogue to digital network transition; laying optical fibre lines, etc. The current national strategy for 2013-2017 focuses on modern technology implementation, particularly, in the state customs service, education, and banking. In 2017, the Kyrgyzstan Government is focused on the Taza koom initiative. Taza koom is a national digital transformation programme aimed at building a strong society centred on human rights, freedoms, values, and potential. The goal of Taza koom is to improve people's lives through the power of technology, digital infrastructure and data. The programme is considered to be a key component of the national strategy of sustainable development till 2040 and involves the development of public services, smart towns and villages, infrastructure, and human capital.²⁸¹

Conclusion: Kyrgyzstan has gradually transformed its fixed-telephone networks from analogue to digital. The Internet market has grown significantly over the past few years. It is expected that current transport network development programmes will facilitate the importance of Kyrgyzstan as a transit country and reduce international Internet traffic costs.