

## Turkmenistan

***The mobile-cellular market is developing intensively in Turkmenistan. Public institutions are being connected to the Internet and the number of Internet users is growing.***

**Mobile services:** At the beginning of 2017, mobile cellular services were provided by two telecommunication operators: Altyn Asyr (state-owned) and MTS. The Turkmenistan government has recently announced the creation of a second state-owned operator (Ai Nazar). Around 77 per cent of the market is controlled by Altyn Asyr, which provides 2G, 3G and LTE services. 3G was launched in 2010 by Altyn Asyr and the company put an LTE network into operation in 2013. Mobile services are becoming more affordable for the population. In 2015, Turkmenistan launched its first telecommunication satellite.

**Fixed services:** National telecommunication company TurkmenTelecom has a monopoly in fixed telephone services. In 2015, there were around 700 exchanges (PBXs) in the country, 90 per cent of them are digital. In the early 2000s, TurkmenTelecom was the only provider of Internet services. Internet access used to be restricted for the general population. Public Internet access was introduced in 2008, but the prices were high. In 2014, Wi-Fi networks started to develop. The TEA (Transit Europe-Asia) is a terrestrial optical fibre cable line that formed the basis for the optical fibre telecommunication network of TurkmenTelecom.<sup>466</sup> Additional lines were deployed to the Caspian Sea. Optical fibre lines connect all major cities in the country.

**Government policy:** The government adopted the national programme of social and economic development of Turkmenistan 2011-2030. There are no ICT-specific policy documents; however, ICT activities are actively implemented in banking and financial spheres, health care, and education. For instance, following the project of ICT support in Turkmenistan that was launched in 2011 in collaboration with United States Agency for International Development (USAID), teachers and officials acquired open access to the Internet, trainings and consultations in ICT, and pedagogical materials. In 2013, a project on electronic document exchange in health care systems was launched. Such ICT projects create demand on ICT infrastructure, which is deployed by the

Key indicators for Turkmenistan (2017)	CIS	World
Fixed-telephone sub. per 100 inhab.	11.8	19.8 13.0
Mobile-cellular sub. per 100 inhab.	162.8	138.3 103.6
Active mobile-broadband sub. per 100 inhab.	15.3	72.0 61.9
3G coverage (% of population)	75.8	80.3 87.9
LTE/WiMAX coverage (% of population)	67.0	61.1 76.3
Individuals using the Internet (%)	21.3	68.6 48.6
Households with a computer (%)	10.7	68.1 47.1
Households with Internet access (%)	11.1	73.6 54.7
International bandwidth per Internet user (kbit/s)	2.5	66.8 76.6
Fixed-broadband sub. per 100 inhab.	0.1	17.8 13.6
<b>Fixed-broadband sub. by speed tiers, % distribution</b>		
<i>-256 kbit/s to 2 Mbit/s</i>	42.4	12.2 4.2
<i>-2 to 10 Mbit/s</i>	31.1	25.1 13.2
<i>-equal to or above 10 Mbit/s</i>	26.5	62.7 82.6

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

national and private operators. Special attention is also given to the network capacity increase for international voice and data traffic transiting. A new optical fibre line connecting Turkmenistan and Kazakhstan was launched in 2013.

**Conclusion:** In cooperation with international organizations, Turkmenistan is drawing up new sectoral development programmes and is implementing ICT projects. The telecommunication sector is rapidly developing. Modern optical fibre and satellite communication lines are covering the territory of Turkmenistan. ICT technologies are steadily transforming the country.