Mongolia

Despite the difficult circumstances of a large landlocked country and the second-lowest population density in the world, Mongolia has made notable strides in telecommunication coverage, in particular using wireless communications.

Mobile services: There are four mobile operators in the country: Modicum, Unite, Skytel and G-Mobile. Mobile penetration (subscriptions per 100 people) exceeded 100 by 2014, when 97 per cent of households had a mobile phone (NSO Mongolia, 2014). Mobile-broadband population coverage is high, with 3G networks launched in 2009 and LTE in 2016.

Fixed services: The incumbent operator Telecom Mongolia was partly privatized in 1995, when a 40 per cent stake was sold to Korea Telecom. Later, the Government of Mongolia bought the share back. It is the country's largest fixed-line carrier. Unlike most other developing nations, there is a relatively high degree of competition in the fixed market, with five operators. Nevertheless, Mongolia's fixed-line penetration is low, owing to the popularity of mobile. Fixed-line subscriptions are now largely bundled into triple play offers. Fixed-broadband choices include DSL, optical fibre and WiMAX, with optical fibre accounting for the largest share of subscriptions. As Mongolia is a landlocked country, national backbone connectivity is critical. Mongolia's domestic fibre-optic networks cover over 38 900 km, and deployment increased by 2.5 times from 2001 to 2017. The government-owned Information Communication Network Company (Netcom) accounts for around half of the country's total fibre-optic deployment. In addition, four very small aperture terminal (VSAT) operators are authorized to work in rural areas. International connectivity is achieved through connections to China and the Russian Federation, and from there traffic is routed to overland Asia–Europe networks and through submarine cables. The Mongolian Internet Exchange was established in 2001, and had around 32 participants by the end of 2017.

Government policy: The country has continuously liberalized the sector over recent decades. Steps include partial privatization of the incumbent telecommunication operator (Telecom Mongolia) in 1995; creation of a regulatory authority, the Communications Regulatory Commission, in 2001; and the introduction of competition in the mobile and Internet markets. The Communications and Information Technology Authority is responsible for sector policies. Several policy documents have established the framework for evolution of the sector over the years. The National Programme on High-Speed Broadband (2011–2015) developed legal and regulatory frameworks to support the expansion of high-speed broadband networks, including targets for speeds of 100 Mbps in urban areas and 50 Mbps in the provinces. The State policy on the development of information and communications technology (2017–2025) was approved by the Government in February of 2017 to ratify the ICT development to the global trend, enhancing e-Governance, digitizing other sectors, increasing the types of e-government services and its prompt delivery.

Key indicators for Mongolia (2017)		Asia & Pacific	World
Fixed-telephone sub. per 100 inhab.	9.5	9.5	13.0
Mobile-cellular sub. per 100 inhab.	126.4	104.0	103.6
Active mobile-broadband sub. per 100 inhab.	80.8	60.3	61.9
3G coverage (% of population)	95.0	91.3	87.9
LTE/WiMAX coverage (% of population)	21.0	86.9	76.3
Individuals using the Internet (%)	*23.7*	44.3	48.6
Households with a computer (%)	32.6	38.9	47.1
Households with Internet access (%)	23.0	49.0	54.7
International bandwidth per Internet user (kbit/s)	22.7	61.7	76.6
Fixed-broadband sub. per 100 inhab.	9.3	13.0	13.6
Fixed-broadband sub. by speed tiers, % distribution			
-256 kbit/s to 2 Mbit/s	27.0	2.4	4.2
-2 to 10 Mbit/s	72.3	7.6	13.2
-equal to or above 10 Mbit/s	0.8	90.0	82.6

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

Conclusion: There is a high degree of competition between Mongolian-led companies in the country's telecommunication markets, resulting in high levels of access. Despite the country's large size and low population density, backbone networks are well developed and international connectivity is assured through cross-border connections to its two large neighbours.