



# WHOLESALE REFORM IN UZBEKISTAN: THE KEY TO ENABLING DIGITAL CONNECTIVITY



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## BACKGROUND

Following the appointment of a new president, Shavkat Mirziyoyev, in 2016, Uzbekistan embarked on a course of wide-ranging economic reforms aimed at modernising the country’s economy and social fabric and transforming its competitiveness. More than three years later those reforms continue, some having borne fruit, while other more structurally focused changes will take longer to come to fruition.

Among the sectors targeted for reform in Uzbekistan is the telecommunications sector, given its increasing role as an engine of broader economic development. While always important, the role of telecommunications has come to the fore in recent times, with its importance of broadband connectivity linked to the digitisation of economies and societies across the globe.

In line with other economies, Uzbekistan seeks affordable access to quality internet services for its government, enterprises and citizens, as a critical tool of economic and social development. The country does this in recognition of the fact that, as well as its ability to boost a country’s competitiveness at a global level, access to the internet has become an essential tool in modern society, in terms of commerce, entertainment, learning, public services, civic participation, social inclusion and more.

Similar to broader reform in the country, while the telecommunications sector requires some structural change that will take time to deliver, effective results can, nonetheless, be delivered in the shorter term



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through applying tried-and-tested approaches and methodologies.

In this article we look at some of the background to the telecommunications sector in Uzbekistan; we emphasise the importance of affordable access to quality internet services; we highlight how affordable access has been achieved in more developed markets; we look at some of the challenges facing the sector in delivering on Uzbekistan's broadband goals; and, drawing on both the EBRD's own experience and some proven best practice, we identify some of the steps that could deliver widespread broadband connectivity at an affordable cost.

In particular, we look at the importance of competition to delivering affordable, high-quality broadband and the central role that an effective wholesale market for telecommunications infrastructure and services plays in enabling competition.

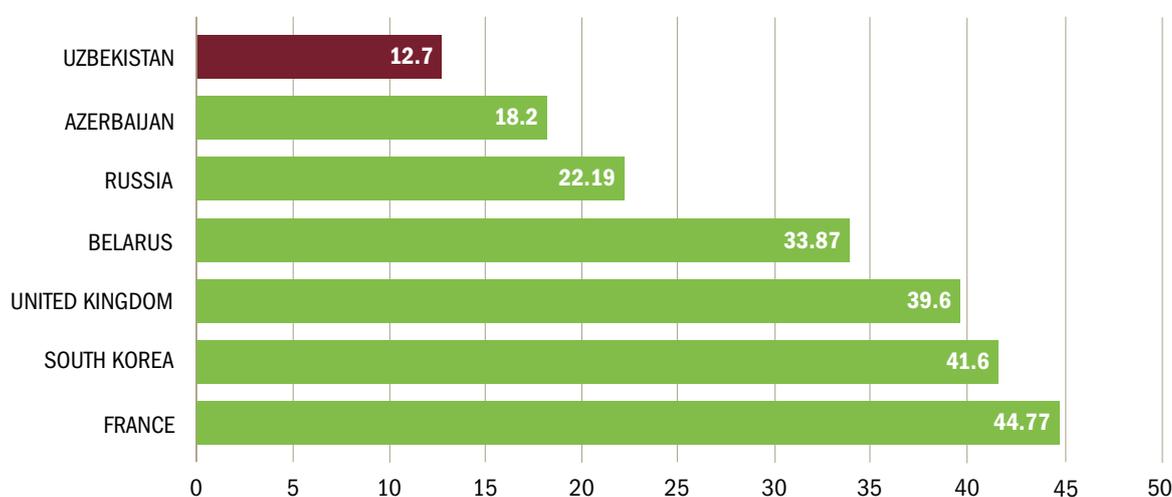
## UZBEKISTAN'S TELECOMMUNICATIONS MARKET

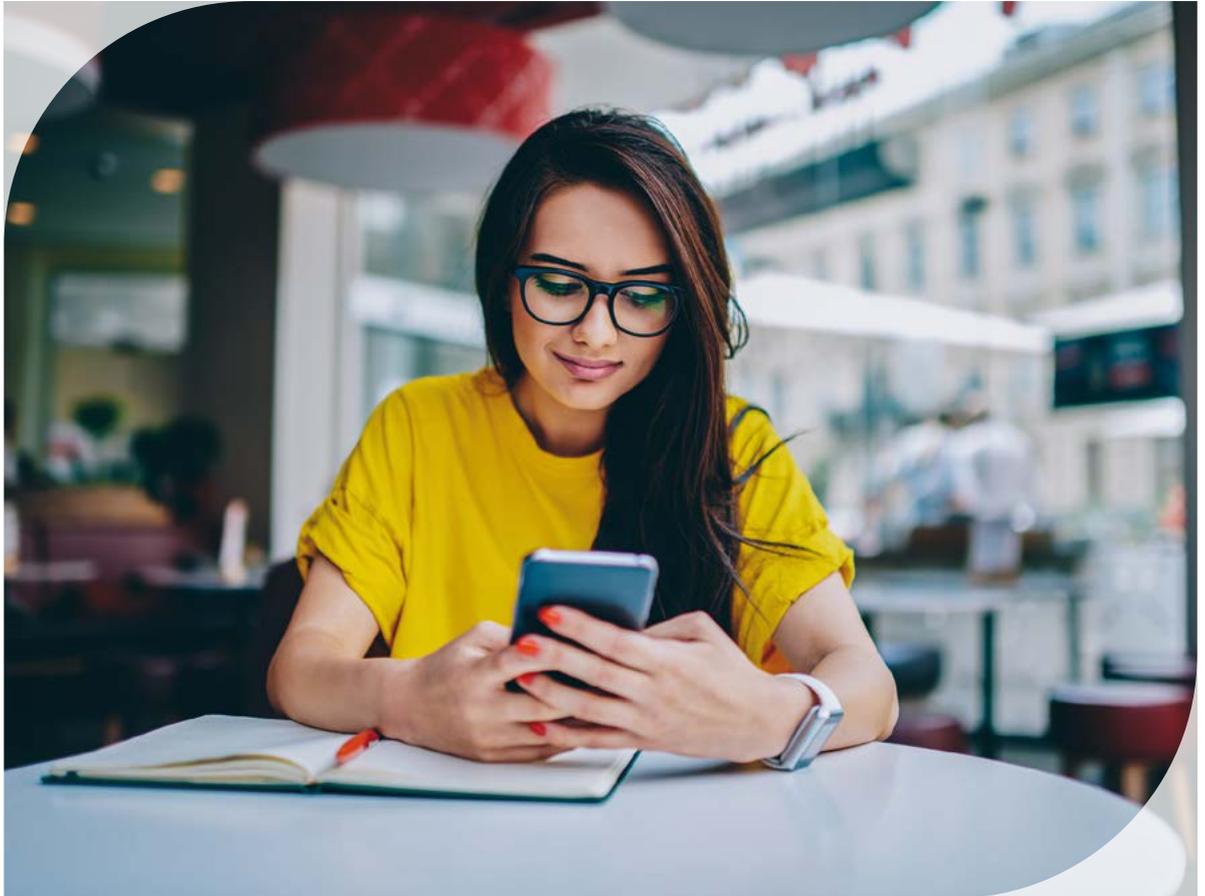
The major player in Uzbekistan's market remains Uzbektelecom (UT), a state-owned, vertically integrated operator. UT holds a dominant position in the fixed-line voice market, while also being the biggest internet service provider and the owner of most physical telecommunications infrastructure in the country. Most other operators depend on infrastructure leased from UT to provide service.

While in large cities (for example, in Tashkent or Samarkand) customers usually have the opportunity to choose among several providers for fixed internet services, in towns and rural areas either no internet service is available or UT is the only provider.

While fixed broadband penetration in Uzbekistan reached 12.7 customers per 100 inhabitants in 2018,<sup>1</sup> this remains relatively low compared with regional neighbours such as Russia,<sup>2</sup> Belarus<sup>3</sup> and Azerbaijan<sup>4</sup> and significantly less than advanced markets such as South Korea<sup>5</sup> and some countries in the European Union (EU). Connection speeds are also reportedly low<sup>6</sup> while prices can be high.

**Chart 1:** Fixed broadband penetration (% of population), end of 2018





Against this background, in 2018 the government of Uzbekistan announced ambitious development goals for the telecommunications sector, including increasing liberalisation and actively seeking private investment.<sup>7</sup> The government has also committed to improving access to digital government services<sup>8</sup> as a means of improving public service delivery and advancing digital development. In this context, the government has also committed to resolve longer-term challenges by providing high-productivity, well-paid employment opportunities, especially for young people, while reducing the high disparity in living standards between rural and urban areas.

### **THE SOCIOECONOMIC IMPACT OF BROADBAND INTERNET CONNECTIVITY**

Broadband internet is a driver and enabler of virtually all of today's commercial enterprises that are critical to underpinning the digital economy. It enables new business models, new processes, new inventions and new and improved goods and services to emerge. While investments into

infrastructure deployment are direct contributors to gross domestic product (GDP) growth, the deployment of broadband networks can also have an indirect impact on GDP, through positive externalities that will enhance the overall productivity of the economy.<sup>9</sup>

Beyond the economy, high-speed broadband connectivity is also increasingly becoming a key conduit of modern society, in terms of enterprise, entertainment, learning, public services, civic and social cohesion and more. Essential to such connectivity is investment in the high-speed, high-capacity infrastructure that underpins fast broadband services. Therefore, investment in telecommunications infrastructure for the expansion of broadband services is fundamental to ensure that the demand of residential customers, businesses and the government is met, thus widely contributing to the overall benefit of the national economy and society.

## LIBERALISATION OF TELECOMMUNICATIONS NETWORKS

The engine that drives broadband services is connectivity, through the “interconnected networks” (in other words, the internet), and underpinning that connectivity is the physical infrastructure. In many economies around the world, liberalisation that actively promotes competition in the provision of services to end-users has deepened the broadband market – in terms of network reach, capacity, cost to consumers, choice and quality. Liberalisation of the telecommunications markets has been achieved by policymakers and regulatory bodies using three key enablers:

- the removal of exclusive monopoly rights historically given to incumbent national telecommunications operators
- allowing the entry of new market players under fair and competitive market conditions
- the passage of national incumbents from state ownership to private ownership, so that effective policymaking and operational control are separated.

While de-monopolisation has been achieved to a certain extent in Uzbekistan, the remaining significant market power of UT in the fixed network appears to be preventing the emergence of a truly competitive marketplace. Therefore, establishing an effective framework that will allow for the entry of new market players under fair and competitive market conditions should be a priority for the government, if its broadband and digitisation goals are to be within reach.

Although there are many dimensions to an effective framework for a competitive marketplace, such as licensing rules, institutional structures and efficient spectrum allocation, the most critical part of the framework is the development of a robust wholesale market, allowing cost-based, non-discriminatory access to dominant operator infrastructure and service delivery.

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## THE DEVELOPMENT OF WHOLESALE MARKETS

In modern telecommunications markets, effective wholesale markets have become essential to the development of information and communications technology (ICT) services that are fully competitive and attractive to investors. The most important wholesale element of the market consists in an existing network operator offering to allow another operator or service provider to use its network. By having this wholesale offer, other operators – particularly new entrants – can choose to use existing infrastructure or to invest in their own infrastructure. A new entrant can therefore enter the retail market by offering services to end-users over an existing network, without the significant cost of establishing a new network to reach the same end-users. Existing network operators can also make interconnections through wholesale agreements to allow their end-users to connect with the end-users of other networks. This is the case for calls or internet connections, where the caller or internet user needs to establish a connection to another user or an internet service provider served by another network operator.

Regulators worldwide have recognised the importance of wholesale services because there is the potential for one party – a network provider – to obstruct the development of a competitor by refusing interconnection, or by making the wholesale offer at the price needed to ensure that the competitor has an economic path to its retail market. Under best practice regulation, competitive markets have now developed efficiently, with regulators focusing entirely on wholesale markets, leaving retail markets unregulated. This balance has proved attractive to market players because it allows them to compete freely at the retail level, while having favourable conditions to make economic decisions about infrastructure growth.

Effective wholesale markets have enabled network infrastructure to be separated from the service provided to the end-user. Many competitive services can be provided over a single network infrastructure. Under best practice regulatory conditions, telecommunications businesses can now choose, at any point in their business development, to invest in infrastructure to serve any chosen location or to use another pre-existing network through a wholesale agreement.

It is best practice for the regulator to oblige an operator's wholesale access offer to use cost-related wholesale charges, using set cost-calculation methodologies.

### PRACTICES IN UZBEKISTAN

While aspects of best practice illustrated above are clearly present in the laws and regulations covering the telecommunications sector in Uzbekistan, the effective implementation of those laws and regulations is less clear. In particular, the apparent absence of an effective wholesale market appears to be preventing the emergence of a market that is meaningfully competitive.

Thus, although wholesale infrastructure access is legally required in Uzbekistan, its practical implementation lags behind that mandate. Despite UT's recognised monopolistic position and official significant market power status, the price for wholesale services provided by the company appears to lack a basis on reported cost or a transparent system for its approval. Additional mandatory wholesale services (for example, access to last-mile fibre and copper networks) appear to be provided based on



commercial agreements, similarly without transparency in pricing, clear guidelines and requirements or non-discriminatory service level agreements.

Overall, the price-setting mechanism is not transparent, as UT develops price proposals without clear guidelines or detailed requirements normally set by the regulator. The best-practice approach would see the regulator developing cost-reporting requirements for operators and performing price control usually based on developed pricing models.

### HOW CAN UZBEKISTAN TRANSFORM ITS TELECOMMUNICATIONS SECTOR?

Uzbekistan appears to be following the classic trajectory seen in many other countries at a similar stage of their market development. While a competitive marketplace is largely provided for in the laws and regulations of the sector, either those instruments lack sufficient detail to make their provisions effective or the sector's

institutional structure or regulatory capacity is ill-suited to delivering on government targets.

To fully deliver on these targets and build on the results of the country's initial liberalising steps, a clear programme of sector reform needs to be implemented, ranging from an overhaul of licensing and spectrum allocation rules to the separation of the policymaking and regulatory functions, privatisation and establishment of provision for universal service. While some of these activities require longer-term structural changes, improvements to the wholesale market could be implemented relatively quickly, largely within the current legal and regulatory framework, potentially creating a more competitive environment in the shorter term.

These improvements could be achieved by applying tried-and-tested regulatory rules and methodologies, including those related to accounting separation, data gathering, analysis, cost recovery and tariff regulation. Tariff regulation should require cost-based prices and accounting systems that provide detailed costing data for



specific types of access and/or interconnection services. Best practice shows that where such obligations are effectively applied to a dominant incumbent – UT, in the case of Uzbekistan – they will enable fair, clear and precise determination of the use, efficiency and level of competition regarding existing infrastructure, allowing the imposition of set remedies and more efficient access to and maximisation of the use of existing infrastructure.

## CONCLUSION

In line with global trends, Uzbekistan evidences a clear desire to use digitisation and broadband to transform its economy. To date, however, efforts to achieve this have fallen short. The country still lags behind most regional comparators in terms of the coverage, speed, quality and price of fixed broadband.

While current laws and regulations have opened up the market and introduced some competition to the retail markets, in order to truly harness the power of the internet and digitisation to transform its economy, further steps to enable the effective functioning of wholesale market in telecommunications infrastructure (currently dominated by the incumbent UT) should and can be quickly taken. Time and again, international experience has shown that establishing an effective wholesale market will increase competition, attract private investment, improve quality and decrease prices.

Drawing on existing sector laws, regulations and institutions, a fully functioning wholesale market can be made operational in Uzbekistan relatively quickly (within 12 to 18 months) by ensuring all relevant provisions of those laws and regulations are effectively implemented, and the existing regulatory body under the Ministry of Information, Technologies and Communication is provided with a modest increase in capacity (for example, through increases in resources and being provided with temporary external expertise).

Although the current sector laws and regulations will need to be revised and supplemented – and institutions enhanced – to take full advantage of the benefits digitisation has to offer, the current legal and regulatory environment affords a sufficient basis to jumpstart sector reform through enforcing an effective wholesale market for broadband infrastructure and services.



- 1 Latest available figure for Uzbekistan (2018) – ITU.
- 2 At the end of 2018, the fixed broadband penetration rate for Russia was 22.19 per cent (ITU).
- 3 At the end of 2018, the fixed broadband penetration rate for Belarus was 33.87 per cent (ITU).
- 4 At the end of 2018, the fixed broadband penetration rate for Azerbaijan was 18.2 per cent (ITU).
- 5 At the end of 2018, the fixed broadband penetration rate for South Korea was 41.6 per cent (ITU).
- 6 Average fixed download speed for Uzbekistan in October 2019 was 18.9 Mbps, placing the country 119th out of 176 countries. Average mobile download speed in the same month was 9.4 Mbps, placing the country 136th out of 141 countries (Ookla Speedtest Global index – [www.speedtest.net](http://www.speedtest.net)).
- 7 Presidential Decree 5349, 19 February 2018.
- 8 Via “e-Government Development Program 2013–2020”.
- 9 Research has shown that investment in broadband networks can deliver the greatest benefits in terms of the GDP growth compared with traditional fixed and mobile networks. For example, a 10 per cent increase in fixed and mobile teledensity has been shown to have an impact of a 0.5 per cent and 0.7 per cent increase in GDP, respectively. Whereas a 10 per cent increase in broadband penetration can have almost double the effect of fixed teledensity and almost threefold of the mobile teledensity and can boost GDP by 1.3 per cent. Other research indicates similar impact of investments in broadband networks, ranging between 0.9 and 1.4 per cent (such as studies carried out by the World Bank and the Organisation for Economic Co-operation and Development).

