BAKU TO THE FUTURE: HOW THE EBRD IS HELPING TO DIGITALISE AZERBAIJAN'S ECONOMY

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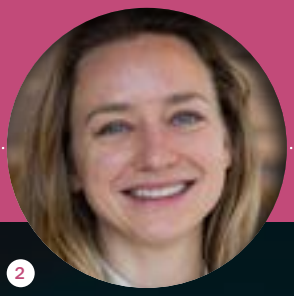

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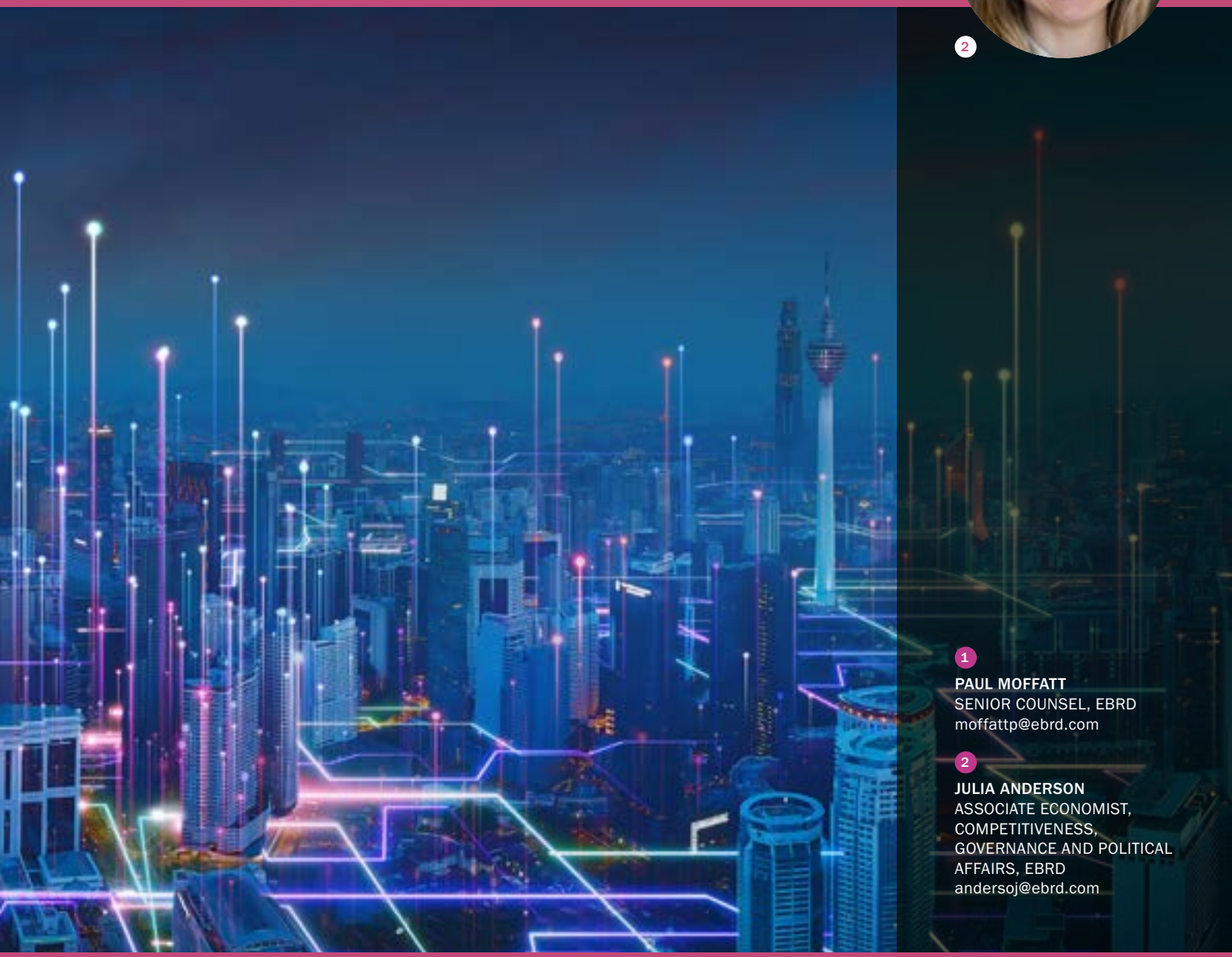

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Hollywood's *Back to the Future* showcases the idea of altering the past to change the future. But Azerbaijan's focus is on using the internet to shape the present and future by deepening and broadening commerce, entertainment, learning, public services, civic participation, social inclusion and more, albeit with fibre optics and radio waves rather than with time-travelling DeLoreans.

INTRODUCTION

In line with all modern economies, Azerbaijan sees affordable access to quality digital services as a critical enabler for both economic and social development. Such access can boost a country's competitiveness on a global level and has become an essential tool in modern society.

Indeed, studies on the economic impact of broadband penetration suggest that a 10 per cent increase in connectivity can significantly boost gross domestic product. According to the World Bank, such an increase can lead to economic growth of about 1.4 per cent in developing countries.[1]

With this in mind, the government of Azerbaijan has embarked on an ambitious programme of digitalisation of the country's economy, with the objective of connecting the whole country with high-speed internet by 2025. Part of this programme commits the government to reform telecoms sector governance and regulation as a means of enabling greater liberalisation, with the aim of driving needed investment into telecoms infrastructure. Admittedly, Azerbaijan has its work cut out for it, having (at the time of writing) one of the slowest internet speeds globally, ranking 117 among 180 countries for fixed broadband internet speed, with an average download speed of 38 Mbps.

To help boost both investment into and reform of the telecoms sector, the EBRD and the Azerbaijani government began a programme of cooperation in 2020. This programme has two main pillars: (1) potential lending by the Bank to help upgrade and extend the country's telecoms infrastructure and (2) an EBRD-led technical cooperation programme to help the government implement sector reform.

This article looks at the telecoms market in Azerbaijan, highlighting the reform measures promised by the government and examining some of the challenges encountered in trying to deliver digital connectivity goals. It also highlights the EBRD's role in the development and reform of Azerbaijan's telecoms sector, in the context of long-standing EBRD/government cooperation on telecoms sector development.

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TRENDS IN TELECOMS

Telecoms infrastructure is the critical enabler of the digital economy, enabling digital connectivity through its "interconnected networks" – that is, the internet. Essential to delivering such connectivity is investment to upgrade and expand the speed, capacity and resilience of that infrastructure.

While the state historically will have been the main investor in the telecoms sector given its formerly state-owned, vertically integrated and monopolistic characteristics, technology, economics and state budget constraints have long since conspired to

1 See Minges (2015).

make the provision of telecoms infrastructure and digital services a largely private sector-led and profitable enterprise.

However, like broader reform in transition economies, the telecoms market requires structural change if it is to attract the types and volume of investment necessary to achieve digital connectivity targets. The structural change that has proven key to the attraction of investment into telecoms is liberalisation that actively promotes private sector-led competition in the provision of services to end-users.

Over the last three decades, policymakers and regulatory bodies have liberalised telecoms markets by using three key enablers: the removal of historic monopoly rights; adoption of clear, fair and competitive market entry and operation rules; and the privatisation of state-held telecoms assets, separating policymaking and operational control.

These measures have produced very positive outcomes, greatly deepening and broadening digital connectivity around the globe – in terms of network reach, capacity, cost to consumers, choice and quality.[2] Though this approach remains the trend, some countries have been slower than others to adopt liberalisation, particularly in fixed broadband markets where the legacy control of last-mile copper networks by state-owned enterprises persists, leading to monopolistic structures in many non-European Union (EU) economies in the EBRD regions.

Mobile markets, on the other hand, tend to be largely competitive. Recognising their profound economic and social impact, governments have been more proactive in liberalising these markets. Mobile networks, which generally require lower initial investment, offer rapid deployment and the ability to service remote areas effectively. Allocating and managing the radio spectrum (over which much of mobile service is delivered) has also proven comparatively simpler than regulating the extensive infrastructure networks underpinning fixed broadband services.

2 Studies such as Ros (1999), Wallsten (2000a,b), Boylaud and Nicoletti (2000) and Ezzat (2015) demonstrate that the combination of privatisation and liberalisation is associated with significant sector improvements in terms of teledensity and service levels (although the impact of privatisation itself is ambiguous in terms of impact on sector performance).

AZERBAIJAN'S TELECOMS MARKET

Although liberalised and competitive in several respects, Azerbaijan's telecoms market can still be characterised as being at an earlier stage of development than others. This characterisation is largely borne out by the concentration of market power of its fixed incumbent operators, the presence of the state as a shareholder in several sector operators and the absence of an effective wholesale market for telecoms infrastructure.

Against this background, the government committed to major reform of the sector and has begun taking concrete steps to deliver on its commitments. These commitments have come in the form of the government's 2016 ICT Sector Strategic Roadmap.[3] This roadmap, implemented under the supervision of the Ministry of Digital Development and Transport, committed the government to revising the telecoms law as a means of adopting and implementing EU reflective regulatory governance and competition safeguards to anchor liberalisation in Azerbaijan.

The government has followed through in its commitment by establishing a sector-specific regulatory authority for telecoms, in the form of the Information Communications Technology Authority (ICTA), preparing a more modern telecoms law (expected to be approved in 2025) and by beginning to adopt and implement market mechanisms through which a liberalised telecoms market can properly function.

The EBRD has followed through on its cooperation commitments, with a key part coming in the form of technical cooperation support for ICTA, Azerbaijan's new sector-specific telecoms regulatory agency. This support will help ICTA to implement some of the key parts of the new regulatory architecture for the sector.

EBRD/ICTA TECHNICAL COOPERATION

The Bank launched its Regulatory Governance and Competition Safeguards technical cooperation programme with ICTA in September 2023. This programme has two main objectives: (1) help strengthen capacity within ICTA and the Ministry for Digital Development and Transport to implement the new regulatory and governance structures for which the government's sector strategy and the forthcoming telecoms law provide and (2) aid ICTA in designing a methodology for analysing and determining the level of competition in key parts of the telecoms market, as well as helping to undertake the analysis itself.

1 See Government of Azerbaijan (2016).

The Bank's technical cooperation programme is helping the Information Communications Technology Authority to prepare the methodology and conduct analyses of the fixed broadband and mobile markets in Azerbaijan.

Building ICTA's capacity has taken the form of a custom-built training programme that focuses on its specific priorities, covering both the conceptual basis for modern regulation across key regulatory topic areas (for instance, licensing, network access, spectrum management and market analysis) and the practical measures necessary to implement those concepts. The training programme has been implemented in eight week-long components.

Support for the market-analysis activities has included assisting ICTA in the preparation of a methodology and enabling regulations for data gathering, analysis and determination, drawn from the EU telecoms framework. The EBRD programme is also tasked with helping to conduct the market analysis and consult on its methodology and outcome.

The market analysis exercise is, perhaps, one of the most fundamental and seminal activities necessary before effective competition can emerge in any telecoms environment. This market analysis is a legally mandated activity that provides the evidential basis on which to determine the market power of market participants and, with that, legitimacy to impose remedial measures that can be applied to address the misuse of any such power.

The Bank's technical cooperation programme is helping ICTA to prepare the methodology and conduct analyses of the fixed broadband and the mobile markets in Azerbaijan. Any finding of dominance in a relevant market will give ICTA the basis and the means to apply a range of competitive safeguards to make sure competition

can emerge or be sustained. Applying these safeguards will be critical to ensuring the emergence of an effective wholesale market for broadband in Azerbaijan.

CHALLENGES IN AZERBAIJAN

Continued state-ownership
Telecoms privatisation has yet to advance meaningfully in Azerbaijan, with the state retaining stakes in a number of operators. The triple role of the government – which sets policies, regulates and participates in the market – may lead to potential conflicts of interest and distort incentives for investments, product innovation and pricing.

However, Azerbaijan's strategy to establish regulator frameworks and enforcement mechanisms prior to privatisation aligns with global evidence. Indeed, the EBRD's own research suggests that privatising after establishing an independent regulator improves sector performance in terms of fixed and mobile penetration and investment, relative to the alternative scenario where privatisation comes first. When governments privatise before they liberalise, full liberalisation tends not to follow until much later.

Telecoms regulatory authority
While the government has established ICTA as a sector-specific regulatory authority, the commitment to establish it as an independent authority has yet to be fulfilled. As it currently stands, ICTA remains within the Ministry for Digital Development and Transport structure, reporting to its minister. That said, while not nominally independent, what matters most in this respect is that ICTA operate with independent character, for example, making evidence-based, fully reasoned and published decisions on a transparent basis and with adequate and ongoing consultation with affected parties. Such an approach will, in time, build the confidence of industry participants and consumers alike.

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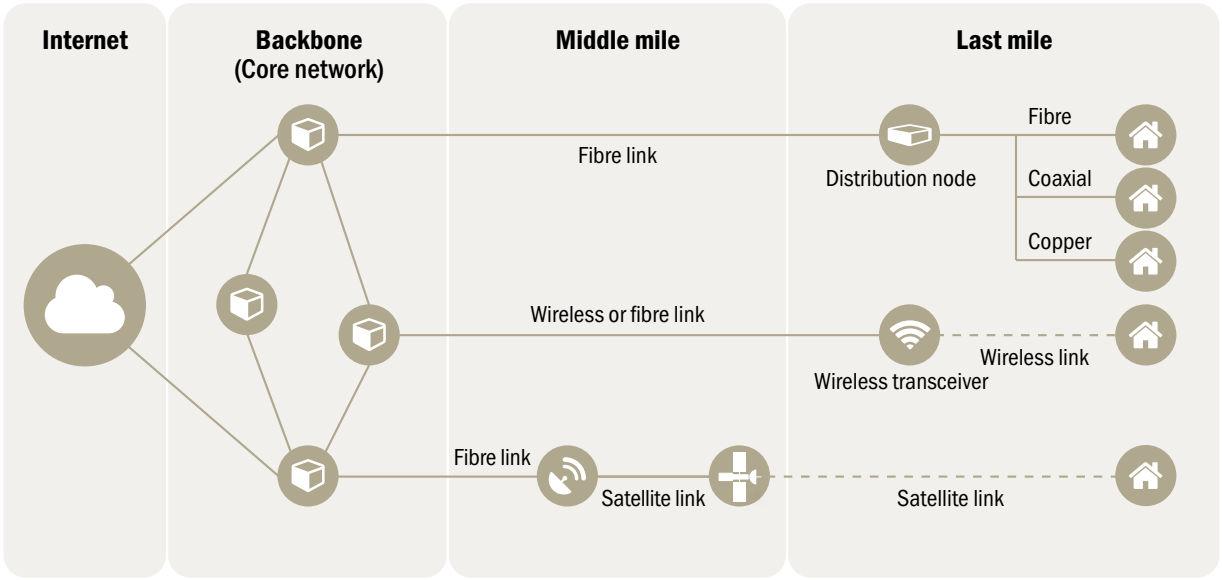
Wholesale market development
Effective wholesale markets allow ease of market entry and are therefore attractive to investors given the prohibitive cost and high risk associated with

Figure 1. The segments of a broadband network



Source: European Court of Auditors (2018).

duplicating incumbent infrastructure – especially ducts, other civil engineering works and last-mile connections. The most important wholesale element of the telecoms market involves an incumbent network operator granting another operator or service provider access to its network, especially to the critical and costly last-mile segment. This access enables other operators – particularly new entrants – to use existing infrastructure to offer services to end-users without the substantial initial investment required to build equivalent infrastructure. Over time, new players can generate enough revenue and experience to start investing in their own competing infrastructure and thus engage in infrastructure competition rather than merely reselling the services of the incumbent operators.

This “ladder of investment” view of market development has inspired regulatory bodies globally to mandate that incumbent telecoms operators provide access to their networks on a cost-based basis. Experience in liberalisation over the last three decades has shown regulators worldwide the importance of ensuring effective wholesale markets, given the potential for existing infrastructure owners (especially those that hold a strong market position) to obstruct the development of competition by refusing competing operators access to that infrastructure, or by offering access on terms and conditions (especially price) that undermine the viability of competing operators or hinder their progression up the investment ladder.

Under best-practice regulation, competitive markets have developed efficiently, with regulators often 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 (regulated) conditions to make economic decisions about whether, when and how to invest in infrastructure as a means of growing their business.

Azerbaijan’s telecoms market is now at the point where the most effective way to attract investment into the expansion of the sector and advance its technological growth is to ensure the creation and smooth operation of an effective wholesale market. While new players are starting to deploy networks to compete with the incumbents' these remain limited to the country’s most profitable, urban areas.

The EBRD's support for ICTA is laying important foundations for an effective wholesale market in Azerbaijan. Determining the level of competition in specific telecoms markets, through formal market analysis activities, will provide the basis for imposing regulatory measures that will help establish a functioning wholesale market. Specifically, where infrastructure owners are found to have a level of market power which allows them to prevent competing operators from accessing their infrastructure on a wholesale basis as a means of delivering services to their retain customers, ICTA can impose tried and tested competition safeguards to mandate such access. Among the measures that can be applied in such situations are transparency, accounting separation and cost-justified wholesale charges.

CONCLUSIONS

Azerbaijan exemplifies the complexity of transitioning to a liberalised telecoms market. In many EBRD countries, governments may be seen to be slow to introduce substantial competition when they own the primary operators, influenced by factors such as national sovereignty, scepticism towards private-sector management of crucial infrastructure and the direct revenues and benefits derived from state-owned enterprises. State-owned incumbents may also be ill-prepared for competition due to operational deficiencies, aging infrastructure and disproportionate public-service obligations. However, historical evidence consistently demonstrates that liberalised markets deliver superior outcomes for households and businesses in terms of service quality, reach and pricing – thereby amplifying the economic and social benefits of digital connectivity.

The EBRD's dual approach of financial investment and technical cooperation is unique in endeavouring to address these challenges simultaneously. By financing state-owned operators, the Bank supports essential infrastructure upgrades and competitiveness improvements that prepare incumbents to withstand competition and lays the groundwork for broader market reforms. By sharing experience and global best practices with governments, the EBRD can illustrate the benefits of liberalisation for propelling national digitalisation goals. In the race to the future, who needs a DeLorean when you can have light-speed, fibre optic-delivered broadband?

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