



THE 2016 INFORMATION COMMUNICATIONS TECHNOLOGY SECTOR ASSESSMENT IN SUMMARY



An important component of the EBRD's legal reform work is its assessment of the laws and practices of the countries where the Bank invests. Legal Transition Programme (LTP) lawyers monitor and analyse the status of legal transition in these countries and develop measurement tools to assess the legal and regulatory risk for the Bank's investments. Assessments cover specific legal sectors, benchmarking their development in each country against international or harmonised standards. Or they cover countries as a whole, judging the progress made in that jurisdiction in establishing commercial laws that are internationally acceptable.

One of the sectors most relevant to the EBRD's activities and benefiting from the greatest amount of Bank expertise is the information and communications technology (ICT) sector. ICT, including broadband internet, plays a vital role in the development of knowledge-based economies, and constitute an area of strategic engagement for Bank investments and policy dialogue. As well as driving productivity and growth, knowledge-based economies can foster equality of opportunity and economic inclusion, for example by improving public service delivery, enhancing access to financial services (such as digital payment systems) and making information more easily available to people living in remote regions.

In 2016, the EBRD conducted an assessment of the status of legal and regulatory frameworks covering ICT infrastructure in 20 countries of operations¹ and will publish the findings of this exercise on the Bank's website in 2017.² The purpose of this article is to summarise the findings and recommendations of the assessment, which was the first evaluation of the ICT sector that the LTP had carried out since 2012.

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ASSESSMENT OBJECTIVES

The assessment focuses on ICT infrastructure that enables consumers, organisations and businesses to participate fully in the knowledge economy – looking, for example, at electronic communications networks providing access through high-speed broadband services, as well as the market for digital services. The digital services that are most relevant to the knowledge economy include high-speed internet, eGovernment, eCommerce and digital broadcasting.

The assessment considers the presence or otherwise of enablers of and impediments to investment in the ICT sector in terms of policies, legislation and regulations. This activity in turn supports the development of specific technical cooperation programmes tailored to each individual country. These programmes will help with the formulation of policies, the modernisation of legislation, the strengthening of the sector institutions and the fostering of better conditions for investment. The emphasis here is on practical support for the modernisation of countries' legal and regulatory frameworks, focusing in particular on the rollout of affordable, high-speed broadband and the attendant development of the ICT sector.

THE EU AND THE KNOWLEDGE ECONOMY

The “Digital Agenda” of the European Union (EU) employs a number of key policy and regulatory enablers for the ICT sector. For example, there are clear policy objectives aimed at providing all EU citizens with access to high-speed broadband.

In addition to examining the enablers that are already in place in the countries under assessment and the results that have been achieved to date, the assessment compares them with the policies, regulatory enablers and results observed under the EU's current regulatory framework. The EU model was chosen because it represents an achievable set of practices that have already been implemented in the ICT markets of a wide range of countries.

REGULATORY TRENDS

Legal and regulatory frameworks governing ICT infrastructure markets have undergone significant changes since the latter part of the 20th century, driven by the rapid development of digital technologies and the internet. The pace of the ICT market's transformation has varied from country to country. One of the main determinants of the speed of the transition from monopolistic to competitive

markets has been the progress made by each country's policy-makers in terms of adopting policy, legal and regulatory frameworks that facilitate such developments.

Following the wave of privatisations in the electronic communications sector that began in the 1980s, most of the investment in that sector is now made by private investors. In recent years, however, a parallel role for public investment has been found in the form of subsidies, subject to clear rules on state aid. Such subsidies have primarily been used to accelerate private investment in more remote regions, where lower commercial returns on investment would otherwise result in some citizens remaining without access to the full range of public and commercial ICT services.

ASSESSMENT METHODOLOGY

The assessment examines the development of countries' ICT sectors, the legal and regulatory conditions prevailing in those countries and the penetration of broadband services, comparing them with what investors would generally consider good practice – namely, the average situation in an EU country. The document looks at the various countries' positions in the United Nation's world rankings on the development of eGovernment, eParticipation and eCommerce, as well as examining information published by the International Telecommunication Union on ICT development, broadband penetration, internet usage and the affordability of ICT services.

Taken together, the various components of this comparative analysis provide an overall assessment of the investment potential in each country. On the basis of the current gaps in ICT services, the cost of giving everyone in these 20 countries access to high-speed broadband would be in the region of €100 to €200 billion. The full text of the assessment describes in detail the benchmarks used.

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SUMMARY OF MAIN FINDINGS

Despite significant progress with the adoption and implementation of best practices in terms of policies, legislation and regulation, market conditions continue to vary widely when it comes to investment in broadband infrastructure. This results in significant variation from country to country in terms of broadband take-up, internet usage, eGovernment services and use of eCommerce. Overall, the countries assessed generally lag behind in terms of the development of ICT and the use of broadband services by citizens and businesses.

One of the main reasons for this is the existence of a very large gap between the penetration of broadband in those countries and levels seen in the EU. On average, there are only 66 broadband subscriptions per 100 residents in the countries assessed, compared with 108 per 100 residents in the EU. There are also clear differences between the two in terms of the development of online services, the level of broadband infrastructure (especially in rural areas), internet usage levels and the affordability of ICT services.

At the same time, demand for broadband services remains extremely high. Total (fixed plus mobile) broadband penetration has grown at an average

annual compound rate of 44 per cent since the EBRD's 2012 assessment of the electronic communications sector.³ Broadband users are also demanding higher speeds and improvements in quality as ICT markets develop. All of the countries under assessment are developing eGovernment as a means of improving access to public services and increasing the efficiency of their delivery. Meanwhile, businesses in those countries are increasingly adopting online eCommerce models in the interests of efficiency and competitiveness.

However, on the basis of their world rankings for eGovernment and eCommerce, those countries continue to lag behind their EU neighbours. In the area of eCommerce, there is a need for legal safeguards to ensure privacy and online security, with more involvement in online payments on the part of the banking sector, in order to foster greater confidence among users and encourage participation. There is also a general need to improve the scope and efficiency of eGovernment services and promote their use.

The most important step now is to reduce the "broadband gap" between the countries assessed and EU averages. In the EBRD region, although demand is generally being met in urban areas under increasingly competitive conditions, the investment

required to extend high-speed broadband infrastructure into less profitable rural areas is not yet being provided. Effective access to ICT markets requires high-speed broadband infrastructure based on next-generation technologies (mainly fibre-optic backbone networks allied to mobile-based technology for the harder-to-reach areas). All countries need to invest more in high-speed broadband infrastructure, yet many countries still lack a number of key enablers.

KEY RECOMMENDATIONS

1. National policies for the ICT sector should continue to emphasise the importance of a knowledge-based economy for the achievement of sustainable growth and benefits to society. Policy, legal and regulatory frameworks should foster the development of ICT, establishing conditions that will allow all citizens and businesses to be given online access to public services and commercial markets via competitive modern broadband services.

2. The development of eGovernment services should be continued, with a particular focus on promoting the full use of online public services by consumers and businesses. All enablers required to foster confidence in eCommerce should be put in place,

including the protection of users' data. Specific assistance should be given to small and medium-sized enterprises when it comes to adopting ICT services and acquiring digital skills.

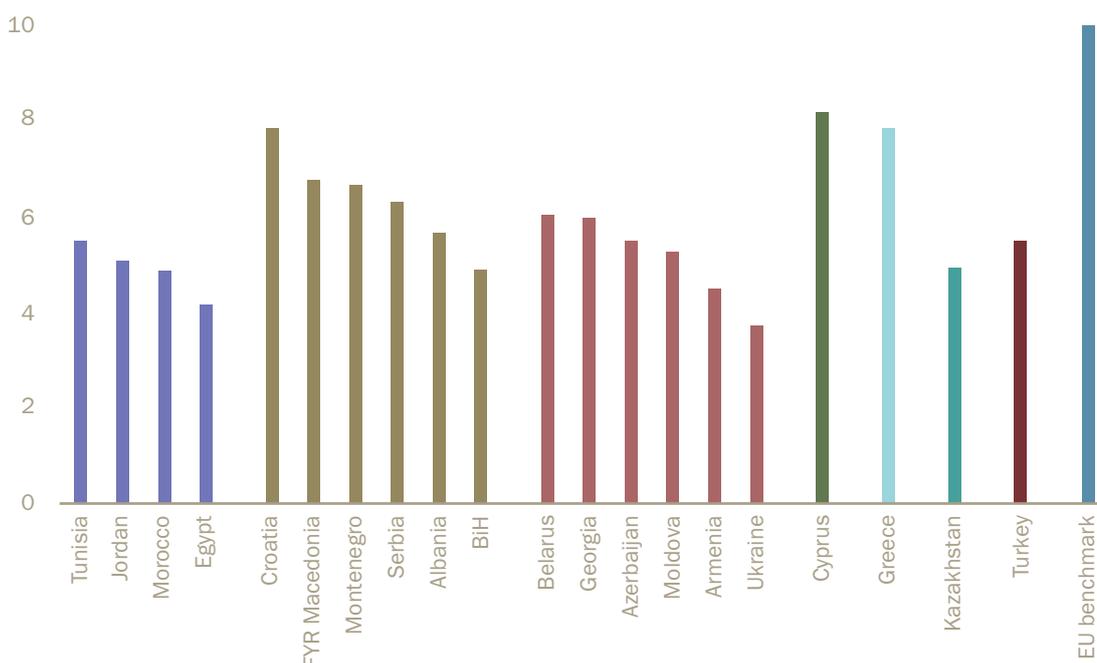
3. Enablers fostering investment in essential ICT infrastructure should be put in place with a view to achieving universal access to high-speed broadband. The key enablers are as follows:

- (i) a clear broadband policy, with clearly defined targets (such as universal access to high-speed broadband)
- (ii) a clear national broadband plan which sets out specific legal and regulatory enablers, implementation measures and timetables for efficient investment, making full use of competitive markets
- (iii) specific broadband infrastructure projects in rural areas.

COUNTRY SCORES

The assessment gives detailed information on the countries' overall ICT scores, using the average level of development in the EU (which corresponds to a score of 10) as a benchmark. The overall assessment score represents a combination of

Chart 1 Quality of legal and regulatory frameworks governing ICT infrastructure in the EBRD region



10 is the maximum score and represents a high quality of the legal and regulatory regime governing ICT infrastructure

Source: 2016 EBRD ICT assessment.



a number of components: a clear policy framework, eGovernment, eCommerce, the legal and regulatory framework, digital broadcasting, fixed broadband, mobile broadband, internet usage and affordability. Chart 1 indicates how the countries scored in each of these areas.

CONCLUSION

The 20 countries assessed vary widely in terms of access to ICT services. Broadband penetration levels range from 20 to 98 per cent of the population. In terms of the development of ICT services, those countries' world rankings for eGovernment and eCommerce range from 30th to 108th. Internet usage ranges from 36 to 77 per cent of the population, while the cost of fixed broadband services varies widely, ranging from around 1.1 to around 6.0 per cent of gross national income per capita.

The relationships between the development of ICT, broadband penetration, the affordability of ICT services and internet usage are complex, and there

is no single determinant of the effectiveness of ICT markets. The key enablers appear to be broadband infrastructure (as reflected in the penetration rates for fixed and mobile broadband) and the competitiveness of the market (underpinned by a sound legal and regulatory framework).

Countries that score highly in terms of these key enablers appear to enjoy raised levels of ICT development and provide more affordable internet services covering more of the population. Other factors also play a role, including the development of eGovernment and eCommerce – which are, in turn, linked to the level of broadband penetration.

¹ Namely, the four southern and eastern Mediterranean (SEMED) countries (Egypt, Jordan, Morocco and Tunisia), seven south-east European (SEE) countries (Albania, Bosnia and Herzegovina, Cyprus, FYR Macedonia, Greece, Montenegro and Serbia) and the six Eastern Partnership countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine), plus Croatia, Kazakhstan and Turkey.

² <http://www.ebrd.com/what-we-do/sectors/legal-reform/electronic-communications/assessment.html> (last accessed 12 January 2017).

³ <http://www.ebrd.com/downloads/legal/telecomms/comparative-assessment-2012.pdf> (last accessed 12 January 2017).

