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DCCP DIGITAL CONNECTIVITY & CYBERSECURITY PARTNERSHIP

KAZAKHSTAN COUNTRY SNAPSHOT

MAY 2023

The Digital Ecosystem Country Assessment (DECA), a flagship initiative of the Digital Strategy, supports USAID Missions to better understand, work with, and support country digital ecosystems. The DECA looks at three pillars of a country's digital ecosystem: (1) Digital Infrastructure and Adoption; (2) Digital Society, Rights, and Governance; and, (3) Digital Economy. The Kazakhstan DECA was carried out between June 2023 and December 2023. It included desk research, 107 interviews with a variety of stakeholders, and was guided by USAID's Central Asia Regional Development Cooperation Strategy (RDCS) and the Department of State's Kazakhstan Integrated Country Strategy (ICS).

Kazakhstan's growth towards digitalization across its government and economy displays a true potential for innovation and progress. The Government of Kazakhstan (GoK) aims to position Kazakhstan as a regional digital hub, creating several impressive digital initiatives over the last few years. The COVID-19 pandemic has also accelerated the growth of digital financial services (DFS) and e-commerce in Kazakhstan. Despite these improvements, there is still much progress to be made. The country does not yet have a strategic digital literacy roadmap or framework. Poor quality of connectivity in rural areas, a lack of relevant digital content in the Kazakh language, limited digital literacy, foreign-driven disinformation campaigns, and limited consumer protection and safety measures for the digital ecosystem risk widening the digital divide.

KAZAKHSTAN'S DIGITAL ECOSYSTEM AT A GLANCE

INTERNET ACCESS & USE

MNOs: (Total MNO subscriptions share by network (Mar 2023)

- **42.4%** Beeline Kazakhstan (formerly KaR-Tel)
- **32.1%** KCELL (owned by Kazakhtelecom)
- **25.6%** Tele2-Altel (owned by Kazakhtelecom)

Population covered by at least 3G mobile network: (ITU 2022) **98%**

Cost of 1GB of mobile broadband data as percent of GNI per capita: (A4AI 2021) **0.91%**

Mobile phone ownership: (ITU 2022)

- Female 95%
- Male 90%

INTERNET AND DIGITAL GOVERNANCE

UN E-Government Development Index: (2022) **86%** 29/193 COUNTRIES

Global Cybersecurity Index: (2020) **31/182** COUNTRIES

DIGITAL FINANCIAL INCLUSION (Findex 2021)

Accounts: (% age 15+) **81%** 77.8% RURAL

Made a digital online payment for an online purchase: (% of internet purchasers, age 15+) **29%**

Top Three Digital Payment Service Providers:

1. Kaspi Bank
2. Halyk Bank
3. Bereke Bank

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RELEVANT POLICIES, REGULATIONS, & LEGISLATION

- **Key government entities**: Ministry of Digital Development, Innovation and Aerospace Industry (MDDIAI); State Technical Services
- **Digital Strategies**: Digital Kazakhstan (2018-2022), Technological Breakthrough through Digitalization, Innovation and Science 2021
- **Telecommunications**: Law On Informatization, 2015; "On Communications" Law, 2004; "On Mass Media" Law, 1999 (amended in 2019); 250+ Program 2020-2022
- **Cybersecurity and data protection**: Law on Personal Data and its Protection, 2013; Law on Dactyloscopic and Genomic Registration, drafted in 2016, to take effect in 2024; "Cybershield of Kazakhstan" Concept, 2017
- **Digital Finance**: The Strategic Development Plan of Kazakhstan until 2050; Concept of the RK Financial Sector Development until 2030, 2014; Concept of Improving Financial Literacy 2020 – 2024; The RK Open API and Open Banking Development Concept 2023–2025
- **Tech startup environment**: The RK Law No. 576 On investment and venture funds, 2004; The RK Minister of Information and Communications Order No. 415, 2018; The RK Constitutional Law No. 438-V On the Astana International Financial Center, 2015

KEY FINDINGS	RECOMMENDATIONS
Cybersecurity: Kazakhstan has made progress in bolstering its cybersecurity framework, however there is a clear cybersecurity skills and preparedness gap across the domestic digital ecosystem. Although there are many cybersecurity organizations in Kazakhstan, only a handful are active.	**Strengthen cybersecurity capacity and resilience through strategic frameworks, workforce development, and targeted research and awareness**. Technical assistance should be provided on a comprehensive cybersecurity regulatory framework. Kazakhstan's cybersecurity workforce can also be strengthened through increased partnership with international entities and universities. Public awareness can be promoted and a cyber resilient culture can be cultivated by embedding basic cyber hygiene programs into development programs.
Regional Digital Hub: The Ministry of Digital Development, Innovations and Aerospace Industry has created several initiatives and projects to expand fiber-optic connectivity, increase the percentage of internet users, and attract Big Tech companies to invest in Kazakhstan by 2027.	**Support the GoK to develop Kazakhstan as a regional digital hub**. Provide expert support to implement the Accessible Internet national project across areas such as privatization of national operators, 5G rollout, Open RAN pilot implementation, and new partnerships with Big Tech companies. It may also be beneficial to facilitate knowledge exchange and capacity-building for deploying electric smart grids featuring experts from countries that have successfully implemented smart grids.
Digital Government Systems: The GoK has made commendable strides in enhancing digital government service delivery and engagement and continues to expand digital accessibility throughout the country. In order to bolster these efforts Kazakhstan needs to strengthen its whole-of-government capability for digital transformation and bring digitalization to public administration at all levels and all regions of the country.	**Support a whole-of-government digital transformation**. They may be an opportunity to support the GoK in creating a comprehensive, forward-looking digital strategy. In order to implement this, it will also be important to establish a centralized digital office for coordinated strategy and implementation. There is a need to build interoperable and robust information systems coupled with targeted skills-building and training. Finally, it will be important to support MDDIAI in establishing effective monitoring, evaluation, and impact assessment measures to ensure continuous learning and growth.