

Mongolia eTrade Readiness Assessment



**United
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NOTE

Within the UNCTAD Division on Technology and Logistics, the E-Commerce and Digital Economy Branch carries out policy-oriented analytical work on the development implications of information and communication technologies (ICTs) and e-commerce. It is responsible for the preparation of the Digital Economy Report (DER) as well as thematic studies on ICT for Development.

The Branch promotes international dialogue on issues related to ICTs for development and contributes to building developing countries' capacities to measure the information economy and to design and implement relevant policies and legal frameworks. It also monitors the global status of e-commerce legislation (UNCTAD Cyberlaw Tracker). Since 2016, the Branch has coordinated a multi-stakeholder initiative entitled eTrade for all (etradeforall.org), which aims to improve the ability of developing countries, particularly least developed countries (LDCs), to use and benefit from e-commerce. The initiative is also behind the UNCTAD eTrade for Women (eT4W) programme, launched in 2019, which aims to promote a more inclusive digital economy, in particular through its network of Advocates. These female digital entrepreneurs are active in all developing regions and contribute to capacity-building, mentoring and awareness raising activities for more inclusive gender policies.

For statistical purposes, the data for China do not include those for Hong Kong Special Administrative Region of China (Hong Kong, China), Macao Special Administrative Region of China (Macao, China) or Taiwan Province of China.

Reference to companies and their activities should not be construed as an endorsement by UNCTAD of those companies or their activities.

The following symbols have been used in the tables:

Two dots (..) indicate that data are not available or are not separately reported. Rows in tables have been omitted in those cases where no data are available for any of the elements in the row.

A dash (-) indicates that the item is equal to zero or its value is negligible;

Reference to "dollars" (US\$) means United States of America dollars, unless otherwise indicated;

Details and percentages in tables do not necessarily add up to the totals because of rounding.

Reference to "MNT" means Mongolian tögrög or tugrik. For the purpose of this report: 1 US\$ = MNT 3,404.09 (13 November 2022).



PREFACE

The eTrade for all Initiative, launched at the fourteenth Ministerial Conference of UNCTAD in July 2016, is a practical example of how to harness the digital economy in support of the 2030 Agenda for Sustainable Development, notably the following Sustainable Development Goals (SDGs):

- Goal 5: Achieve gender equality and empower all women and girls.
- Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
- Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
- Goal 17: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development.

The initiative seeks to raise awareness, enhance synergies, and increase the scale of existing and new efforts by the development community to strengthen the ability of developing countries to engage in and benefit from e-commerce by addressing seven relevant policy areas:

- E-commerce readiness assessment and strategy formulation
- ICT infrastructure and services
- Trade logistics and trade facilitation
- Payment solutions
- Legal and regulatory frameworks
- E-commerce skills development
- Access to financing

As part of the initiative, UNCTAD works with Governments of developing countries and key stakeholders to improve their digital economy capabilities through the eTrade Readiness Assessments (eT Readies). The eT Readies analyse the digital and e-commerce ecosystems of beneficiary countries and provides policy recommendations based on the challenges and opportunities for e-commerce development identified across the seven policy areas. To operationalize those recommendations, UNCTAD established an Implementation Support Mechanism (ISM) in 2020. Through the ISM, UNCTAD has been increasing in-country coordination support and building national capacities to ensure more efficient and effective implementation of e-commerce policies and initiatives.

The eTrade Readiness Assessment of Mongolia is the thirty-third such assessment conducted by UNCTAD. This report is expected to contribute to the efforts of the Government of Mongolia to build a robust, safe, and business-friendly environment for e-commerce and digital economy development. Ensuring the potential benefits of e-commerce requires a strong prioritization from the government and a great commitment from development partners. With the eTrade for all partners and coordination through the United Nations Resident Coordination Office in Ulaanbaatar, UNCTAD is committed to supporting Mongolia in its resolve to make e-commerce work for the country's economic diversification and overall development.

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ABBREVIATIONS

ACWL	Advisory Center on WTO Law
ADB	Asian Development Bank
ADSL	Asymmetric Digital Subscriber Line
AFCCP	Authority for Fair Competition and Consumer Protection (of Mongolia)
ALAMGC	Agency for Land Administration and Management, Geodesy and Cartography (of Mongolia)
AI	Artificial intelligence
API	Application Programming Interface
APTA	Asia-Pacific Trade Agreement
ASYCUDA	Automated System for Customs Data
ATM	Automated Teller Machine
BIT	Bilateral Investment Treaty
BOM	Bank of Mongolia
CAIS	Customs Automated Information System
CAREC	Central Asia Regional Economic Cooperation
CERT	Computer Emergency Response Team (CERT)
CPS	Country Partnership Strategy
CPTA	The Framework Agreement on the Facilitation of Cross-border Paperless Trade in Asia and the Pacific
CRC	Communications Regulatory Commission (of Mongolia)
CTG	Council for Trade in Goods (WTO)
DEA	Digital Economy Agreement
DEPA	Digital Economy Partnership Agreement
EBRD	European Bank for Reconstruction and Development
EPA	Electronic Partnership Agreement
ERMC	Europe-Russia-Mongolia-China (cable system)
ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
eT4a	eTrade for all
FRC	Financial Regulatory Commission (of Mongolia)
FX	Foreign Exchange
GATS	General Agreement on Trade in Services (WTO)
GLEIF	Global Legal Entity Identifier Foundation
GTFP	Global Trade Facilitation Programme
IPCH	International Postal Customs House
IRENA	International Renewable Energy Agency
ISO	International Organization for Standardization
ITA	Information Technology Agreement (WTO)
ITC	International Trade Center
ITU	International Telecommunication Union
JICA	Japan International Cooperation Agency
JSI	Joint Statement Initiative
KOICA	Korea International Cooperation Agency
KYC	Know Your Customer



LDC	Least Developed Country
LEI	Legal Entity Identifier
LLDC	Landlocked Developing Country
MASM	Mongolian Agency for Standards and Metrology
MCGA	Mongolian Customs General Administration
MCUD	Ministry of Construction and Urban Development (of Mongolia)
MDDC	Ministry of Digital Development and Communications (of Mongolia)
MED	Ministry of Economy and Development (of Mongolia)
MEDS	Ministry of Education and Science (of Mongolia)
MES	Ministry of Education and Science
MOJHA	Ministry of Justice and Home Affairs (of Mongolia)
MNT	Mongolian Tughrik
MOF	Ministry of Finance (of Mongolia)
MFA	Ministry of Foreign Affairs (of Mongolia)
MOU	Memorandum of Understanding
MRTD	Ministry of Roads and Transport Development (of Mongolia)
MSE	Mongolian Stock Exchange
MSME	Micro, Small & Medium Enterprises
NBFI	Non-Bank Financial Institution
NETC	National Electronic Transaction Center
NGO	Non-Governmental Organization
NHRC	National Human Rights Commission of Mongolia
NSO	National Statistics Office
ODR	Online Dispute Resolution
OECD	Organisation for Economic Co-operation and Development
PKI	Public key infrastructure
POS	Point of Sale
PPP	Public-Private Partnership
QR	Quick Response (code)
RTGS	Real-time gross settlement
SADEA	Singapore-Australia Digital Economy Agreement (SADEA)
SECO	State Secretariat for Economic Affairs (Switzerland)
SME	Small and Medium Enterprises
SMS	Short Message Service
STEM	Science, technology, engineering, and mathematics
SWIFT	Society for Worldwide Interbank Financial Telecommunication
TDB	Trade and Development Bank of Mongolia
TPR	Trade Policy review (WTO)
TVET	Technical and Vocational Education and Training
UN	United Nations
UNCITRAL	United Nations Commission on International Trade Law
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund



UNIDO	United Nations Industrial Development Organization
UNRCO	United Nations Resident Coordinator's Office
UNSDCF	United Nations Sustainable Development Cooperation Framework
UPU	Universal Postal Union
USOF	Universal Service Obligation Fund
WB	World Bank
WCO	World Customs Organization
WTO	World Trade Organization

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EXECUTIVE SUMMARY

Introduction

Mongolia is a lower middle-income, landlocked, natural-resource-rich, small economy in transition,¹ bordering China and the Russian Federation. With a vast territorial expanse and low population density, it faces an important urban-rural divide. Of the 3.41 million population, 48 per cent live in the capital Ulaanbaatar.²

Mongolia generated an average annual growth of 7.8 per cent during 2010-2019 according to EBRD, driven mainly by the mining sector, which contributes to high volatility of the economy resulting in the frequent “boom and bust cycles”.³ Extraction industries (copper, coal, iron ores, and gold mining) strongly dominate Mongolian economic and export profiles. It has implemented policies that attract mining resource-seeking investments from abroad. In the face of the global crises, Mongolia experienced a contraction in exports, heavily affected by border closures caused by China’s COVID restrictions. GDP averaged 4.8 per cent in December 2022.⁴

According to the National Statistics Office (NSO), Mongolian exports in 2021 showed strong domination of mineral products (81.28 per cent in total exports) and precious metals (11.09 per cent), with other commodities, such as textiles (four per cent), machinery, and agricultural products having only minor shares (less than 1 per cent). In 2021, by value, China absorbed 88.4 per cent of Mongolian exports, with Switzerland and the Russian Federation taking 10.1 per cent and 1.3 per cent in exports, respectively. Imports have mostly originated from China (46.2 per cent), the Russian Federation (35.9 per cent), and Japan (8.3 per cent).

Mongolia embarked on an overall progressively open economic policy upon its accession to the World Trade Organization (WTO) in 1997, predominantly in

the trade in goods sector. Less so in services trade, where only six sectors were partially liberalized. Mongolia has taken recent steps towards economic diversification.⁵ This includes a strong emphasis on digitization and digitalization of production processes and the provision of government financial services (including payments), which have been incorporated into multiple recent policy and strategy documents issued by different government agencies, as well as legal enactments. These efforts are supported by various development partners, including the United Nations (UN), the Asian Development Bank (ADB), the Central Asian Regional Economic Cooperation (CAREC), the European Bank for Reconstruction and Development (EBRD), Japan (JICA), the Republic of Korea (KOICA), Switzerland (SECO), the European Union (EU), the World Bank Group (WB) and others, implementing a series of ambitious projects within the country.

The digital transformation underway in Mongolia is conducive to the development of e-commerce, both at the domestic and cross-border levels. This Assessment examines the current challenges and opportunities of the digital economy in Mongolia, offering policy recommendations on how the government and development partners can maximize the benefits of digitalization for trade. The main findings are set out below.

E-commerce readiness assessment and strategy formulation

Mongolia is in the initial phases of e-commerce development. It has made substantial progress in establishing an ecosystem supporting e-commerce domestically. While no reliable estimation of the size of the national e-commerce market can yet be made, all sources - desktop research, stakeholder consultations, and the eT Ready surveys - confirmed a certain level of private sector and consumer engagement

¹ UN, ‘About the UN in Mongolia’, United Nations in Mongolia, accessed 15 October 2022, <https://mongolia.un.org/en/about/about-the-un>; WBG, ‘World Bank Country and Lending Groups, Country Classification’, World Bank Data Help Desk, 2022, <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>

² NSO, ‘Population Annual Report, XA-3’, National Statistics Office, 15 March 2022, https://www2.1212.mn/tablesdata1212.aspx?tbl_id=dt_nso_0300_004v1&ln=en

³ EBRD, ‘Mongolia Country Strategy 2022-2027’, sec. ‘Implementation of Previous Strategy (2017-2021)’, <https://www.ebrd.com/documents/strategy-and-policy-coordination/mongolia-strategy.pdf>

⁴ NSO, ‘Gross Domestic Product: <https://www2.1212.mn>

⁵ Accession of Mongolia, Schedule CXXXIV - Mongolia, Part II - Schedule of Specific Commitments of Services’ (World Trade Organization, 27 June 1996). More extensive commitments in services were made in the Agreement between Japan and Mongolia for an economic partnership, where Mongolia made commitments in education services; environmental services; health-related and social services; transport services; and recreational, cultural, and sporting services.



in e-commerce. The Government of Mongolia does not have a stand-alone e-commerce strategy and e-commerce is hardly mainstreamed into the national or trade sectoral development strategies. In terms of institutional arrangements, the Ministry of Foreign Affairs (MFA) is currently leading the e-commerce development. Inter-ministerial coordination as well as public and private dialogue are much needed to ensure that the various initiatives conducted by other key players are aligned and that stakeholders' needs are taken on board.

ICT infrastructure and services

Mongolia possesses a relatively well-developed ICT infrastructure. Access to the Internet and ICT devices in Mongolia follow the overall development / geographical divide pattern, with Ulaanbaatar showing the best connectivity while certain rural areas suffer from poor connectivity. As a mobile (rather than fixed) broadband country, Mongolia features higher ownership and proficiency with smartphones for Internet access, including for online purchases, sales, or payments. The online experience of Internet users does not appear to be seamless yet, as both the speed and quality of the connection remain low when compared to regional and international benchmarks. Sectoral dynamics and select national policies are not promotive to private investments in the sector, while fiscal space limits public investments. Some ICT development measures, such as 5G deployment, differ from the digitalization priorities and are more driven by the implementation of e-government initiatives than by the further expansion of digital trade.

Trade logistics and trade facilitation

The landlocked status of Mongolia explains a strategic reliance on China and the Russian Federation for access to maritime trade routes. The large size of its territory further leads to significant difficulties in domestic and cross-border logistics, aggravated by the ageing infrastructure and a limited budget available for relevant infrastructure development projects. This also affects the development prospects of international transit corridors through Mongolian territory. Besides, customs clearance procedures are recognized to be lengthy and burdensome. Goods traded via e-commerce are subject to regular customs clearance. The Trade Facilitation Agreement (TFA) implementation is in progress, supported by several development partners' initiatives. While about

80 per cent of the measures are notified to the WTO as implemented, a dedicated domestic assessment suggests occasional gaps in compliance with some of these commitments.

Mongolia's internal and cross-border deliveries mostly happen by rail or road, with an insignificant share of cargo (primarily cross-border) being transported by air. Despite constant progress, the share of paved and improved roads remains limited, with several areas underserved, notably in the northwest of the country. The performance of the transportation services market is undermined by the absence of international competition, because the sector was never open to foreign service providers. Smaller parcels, including those transacted via e-commerce, are predominantly delivered by road transport in light of the cost, speed, punctuality, reliability, and security concerns. While the domestic deliveries market is saturated, featuring 95 licensed providers, most of those ensure deliveries in Ulaanbaatar and the larger cities only, with MongolPost covering all other more distant and less easily accessible destinations. The absence of a unified addressing system makes this a difficult task.

Mongolia joined a considerable number of international treaties and arrangements tackling different aspects of border clearance, transport, transit, and logistics of relevance to trade facilitation and paperless trade, including the United Nations Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific (CPTA) (2016). Mongolia has also concluded a Free Trade Agreement (FTA) with Japan, containing provisions dedicated to trade facilitation.

Payment solutions

Due to the COVID-19 pandemic and multiple steps to increase the percentage of the population holding a bank account (bancarisation), and the resort to electronic payments to distribute social welfare benefits by the government, the level of domestic electronic payments adoption in the country is high. E-banking and mobile banking, both offered by all banks nationally, payment cards of different types, and electronic wallets are widely used, even if not all of them appear to be interoperable. QR code payments are also gaining popularity. Small electronic payments and payment card transactions are normally processed within 24 hours (including RTGS finalization). Commercial banks and fintech increasingly use Application Programming Interface



(API); however, their regulation has not yet been put on the agenda of the Bank of Mongolia (BOM). Cross-border electronic payment fees remain high and the process separating the main transaction from the payment is not sufficiently seamless.

Several smaller cross-border e-wallet providers are present in the Mongolian market, and financial institutions offer both outgoing and incoming monetary transfers in a number of currencies via SWIFT, having established corresponding relationships with banks in a total of 18 countries and, occasionally, also through MoneyGram, Western Union, Contact, and PayEasy gateways. Some bank card issuers offer limited cross-border payment options, such as the possibility to register as a merchant and receive incoming payments (UnionPay) or a resort to swifter commercial transfers (Visa B2B connect) to some of their cardholders.

Legal and regulatory frameworks

The legal framework of Mongolia contains a considerable number of rules of relevance to e-commerce, which address certain aspects of electronic transactions, consumer protection, privacy, protection of commercial secrets, cybersecurity, cybercrimes, and open governmental data. The Law on Access to Information featuring open data rules and the Law on Cybersecurity were adopted, while the E-signatures and Privacy laws were revised in 2021. Mongolia's rules of relevance to e-commerce are only partially based on international standards, are not known to stakeholders, largely lack implementation, and even, at times, conflict among themselves. Mongolia has recently joined some of the key international treaties relevant to e-commerce rules and trade transactions, which they facilitate, globally and regionally, such as the CPTA (2016) and the United Nations Convention on the Use of Electronic Communications in International Contracts (2005). Mongolia's only FTA, with Japan, contains an e-commerce chapter.

Mongolia is participating in elaborating the global rules for digital trade at the WTO Joint Initiative on E-commerce (albeit, without having made any submission to date), and in the regular work of the WTO under the Work Programme on Electronic Commerce 1998.

E-commerce skills development

Modern e-commerce skills comprise ICT, social/business/leadership skills, consumer digital competencies, and linguistic proficiencies, which are necessary to help entrepreneurs and consumers thrive online.

Mongolians score moderately on both basic and standard ICT skills, according to the International Telecommunication Union (ITU). In 2021, approximately 31 per cent of the population was estimated to possess basic skills, 22 per cent standard skills, and three per cent advanced ICT skills.⁶ The development of ICT skills is embedded in the general education curriculum. However, from middle school through vocational training to university, the short time allocated to the dedicated classes, insufficient access to the ICT equipment and the Internet, and a lack of expertise among teachers leads to limited learning outcomes, in particular in rural areas outside of Ulaanbaatar.

The number of higher education graduates in IT is low compared to the other professional areas, based on the available data. Employment in the sector features fewer women than men. Innovative approaches bridging high school and university curricula in preparing mid-level engineers combining theoretical, practical as well as communication, creativity and leadership skills are attempted, albeit on a small scale.

The incubation programmes offered by public (National IT Park) and private sector providers are scarce. Incubators and accelerators occasionally run digital capacity-building courses and activities targeting the general public, entrepreneurs or particular groups, such as high school students from rural areas. Some efforts were recently made to improve the accessibility of digital solutions for women, people with disabilities, the rural population, and the elderly.

Access to financing

Most Mongolian private sector technological startups are self-financed, using resources from personal savings or loans or available through membership in corporate groups and, later, revenue generated from their business activities. Other sources of initial financing are limited, as most institutional lenders or grantors require evidence of organizational continuity,

⁶ ITU, <https://www.itu.int/itu-d/reports/statistics/2021/11/15/ict-skills/>



thus are unlikely to step in before the acceleration phase.

The financing options available to startups involved in Mongolia's digital and technological innovation activity vary. Governmental funding and support are provided either directly to startups or through technological or scientific partners and academic institutions associated therewith in the form of grants, reimbursable funding, as well as tax relief and support for engagement in the outreach activities, such as international fairs and exhibitions, office space and utilities. The Law on Innovation (2009) also authorizes some other funding options, such as the capital of the startup company from the primary capital market; equity capital of the organization participating in innovation activities; loans, aid and donations from foreign countries and international organizations; and other sources not prohibited by law. In practice, these tend to include self-financing and loans from banks and non-banking financial institutions (NBFIs), including those co-financed by international partners.

Reducing the risk of non-performing loans, Mongolian banks and NBFIs have adopted varied practices to ensure a return on investment. They appear to be reluctant to provide SME credits outside of the partnerships with the government or the donor organizations that have opened and disbursed dedicated credit lines, or other security measures, such as different types of collateral and pledges of receivables. Many loan products are short-term and

are subject to relatively high-interest rates, reducing their attractiveness to young enterprises. Only entities formally registered as SMEs are eligible for many dedicated lending products.

Crowdfunding and venture capital solutions slowly emerge as potential technological startup financing sources without yet being legally regulated.

Coordination between multiple agencies with relevant competencies for startup funding, notably the Ministry of Education and Science, (responsible for innovation) BOM and the Ministry of Finance (MOF), is insufficient, preventing coherent planning and budgeting.

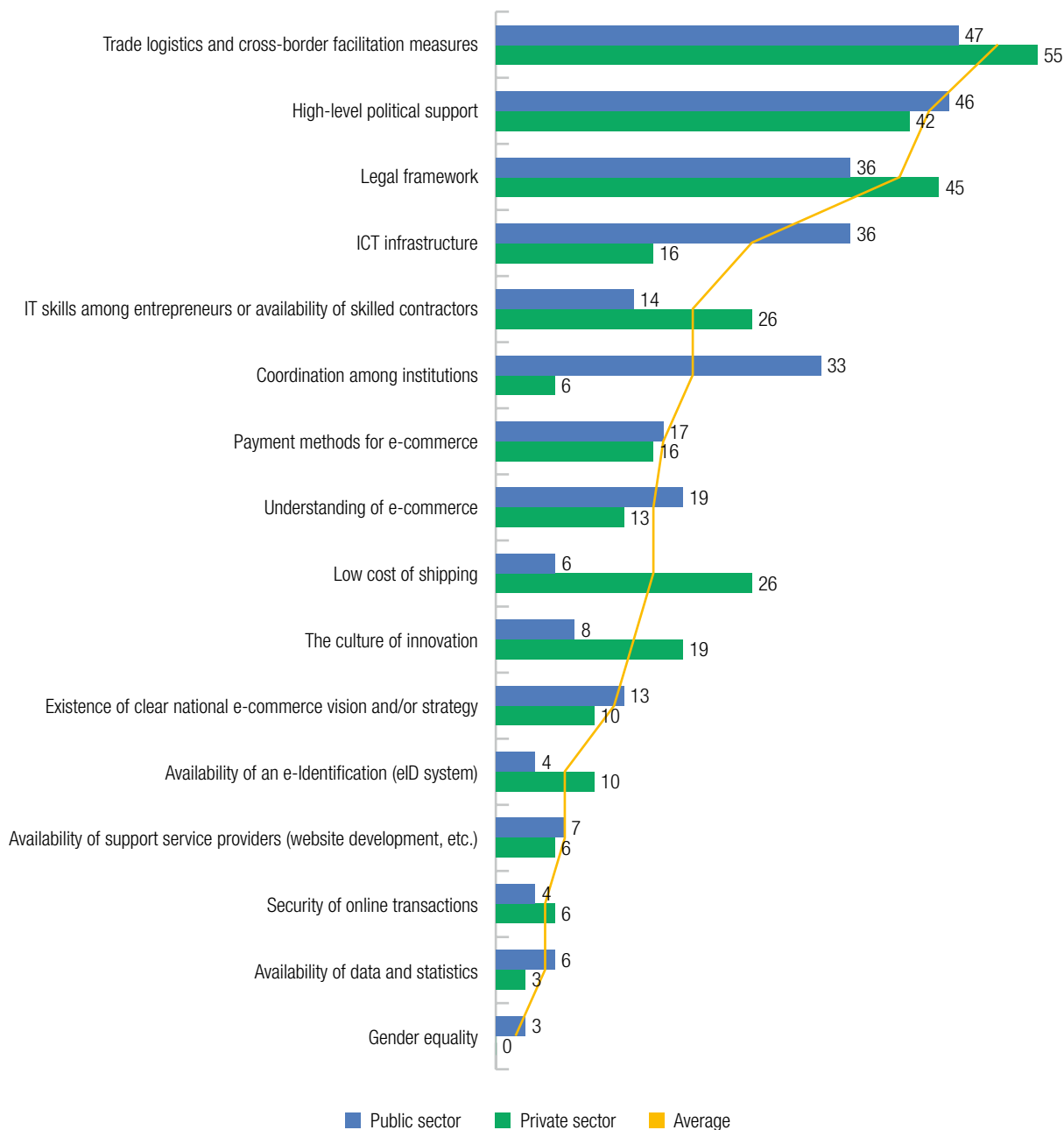
Enabling factors for development of e-commerce in Mongolia

Public and private sector stakeholders have prioritized further facilitation of cross-border trade and logistics, high-level political support, and supportive legal framework among the key factors that could be conducive to e-commerce growth in Mongolia. While the valuation of other elements differs, public sector participants have emphasized further development of the ICT infrastructure, better inter-institutional coordination in the domain, and a better understanding of e-commerce. In turn, the private sector representatives attributed high importance to the low shipping cost, availability of skilled employees, and further nurturing of a culture of innovation (Figure 1).



Figure 1: Enabling factors for e-commerce development in Mongolia (%)

(Survey respondents: public sector, 96 and private sector, 31)



Source: UNCTAD



METHODOLOGY

The eTrade Readiness Assessment of Mongolia aims at identifying the main barriers and opportunities for e-commerce development in the seven eTrade for all policy areas by providing a detailed diagnostic of the digital ecosystem and identifying key policy actions for which support can be mobilized. These policy areas are E-commerce readiness assessment and strategy formulation, ICT infrastructure and services, Trade logistics and trade facilitation, Payment solutions, Legal and regulatory frameworks, E-commerce skills development and Access to financing.

The information provided in this report is based on qualitative and quantitative data collected from desk research, responses from the three online surveys (public, private and consumer), the results of the national multi-stakeholder and bilateral consultations, and specific contributions made by eT4a and development partners.

UNCTAD has developed a five-step methodology for the project in order to: i) ensure a high level of participation and engagement of key stakeholders in the overall assessment process, ii) raise awareness of the opportunities offered by e-commerce (through capacity-building and knowledge sharing), iii) strengthen the public-private sector dialogue and enhance inter-ministerial coordination and policy coherence in the field of e-commerce, and iv) mobilize support from development partners to accelerate the country's digital transformation.

✓ **Phase 1 | Initial consultations, March – May 2022**

Initial consultations and outreach were conducted with the Mongolian government and the community of eTrade for all and development partners in Mongolia, through the UN Resident Coordinator's Office (UNRCO), the EBRD, and the Republic of Korea as main funding partners.

✓ **Phase 2 | Institutional setting and mapping, May 2022**

This included the establishment of an eT Ready National E-Commerce Task Force, composed of designated focal points in relevant ministries, agencies, chambers of commerce, business associations and others, and a kick-off meeting with focal points. A mapping of national stakeholders and resident development partners active in e-commerce and digital development in Mongolia was conducted.

✓ **Phase 3 | Data collection, June 2022**

– *Desk review:* A comprehensive desk research was carried out to analyse secondary data (national and sector-specific strategies, relevant programme, and policy documents) and compile statistics and digital-related indicators.

– *Three (3) online eT Ready Surveys:* Two questionnaires (for public and private stakeholders) and a consumer readiness survey were carefully adapted to the national context and disseminated online between 15 June and 15 August 2022. A total of 51 valid responses from the private sector, 115 from the public sector, and 264 responses from consumers were collected and analysed for the assessment.

– *National multi-stakeholder consultations,* from 21 to 23 June 2022: A series of consultations were organized in Ulaanbaatar and online through focus group discussions with relevant experts and stakeholders covering the seven key policy areas and e-commerce startups and incubators. A roundtable with resident development partners was held on 23 June 2022, in collaboration with the UNRCO, to present the project and identify synergies with ongoing digital activities and technical assistance projects in the country.

– *Bilateral meetings:* A series of meetings were organized with key e-commerce players and public institutions to discuss their role in ongoing e-commerce initiatives and elaborate on key issues raised during the national consultations. Similarly, several coordination



meetings were organized during the project with the UNRCO and development partners.

✓ **Phase 4 | Report drafting, July – November 2022**

- First draft of the assessment covering the seven key policy areas, and the eT Ready Action Matrix.
- Initial (internal and external) review by UNCTAD, EBRD and eT4a partners.

✓ **Phase 5 | Finalization and launch of the report, November 2022 – May 2023**

- National workshop to review and validate the results of the eT Ready Assessment and Action Matrix by national stakeholders in February 2023.
- Final draft of the report.
- National launch of the report, including a high-level policy dialogue around e-commerce and a donor roundtable to mobilize support for policy implementation.



FINDINGS UNDER THE SEVEN ETRADE FOR ALL POLICY AREAS

1. E-COMMERCE READINESS ASSESSMENT: STAKEHOLDERS' PERSPECTIVE

Mongolia has made substantial progress in establishing an ecosystem supporting e-commerce domestically. Stakeholder consultations and the eT Ready surveys confirmed certain level of private sector and consumer engagement in e-commerce. Domestic e-commerce is far more developed than cross-border e-commerce. The analysis of consumer and business e-commerce readiness surveys provided in this chapter looks into the nature, habits and challenges faced at the domestic and cross-border levels.

1.1 E-commerce consumers and SMEs readiness in Mongolia

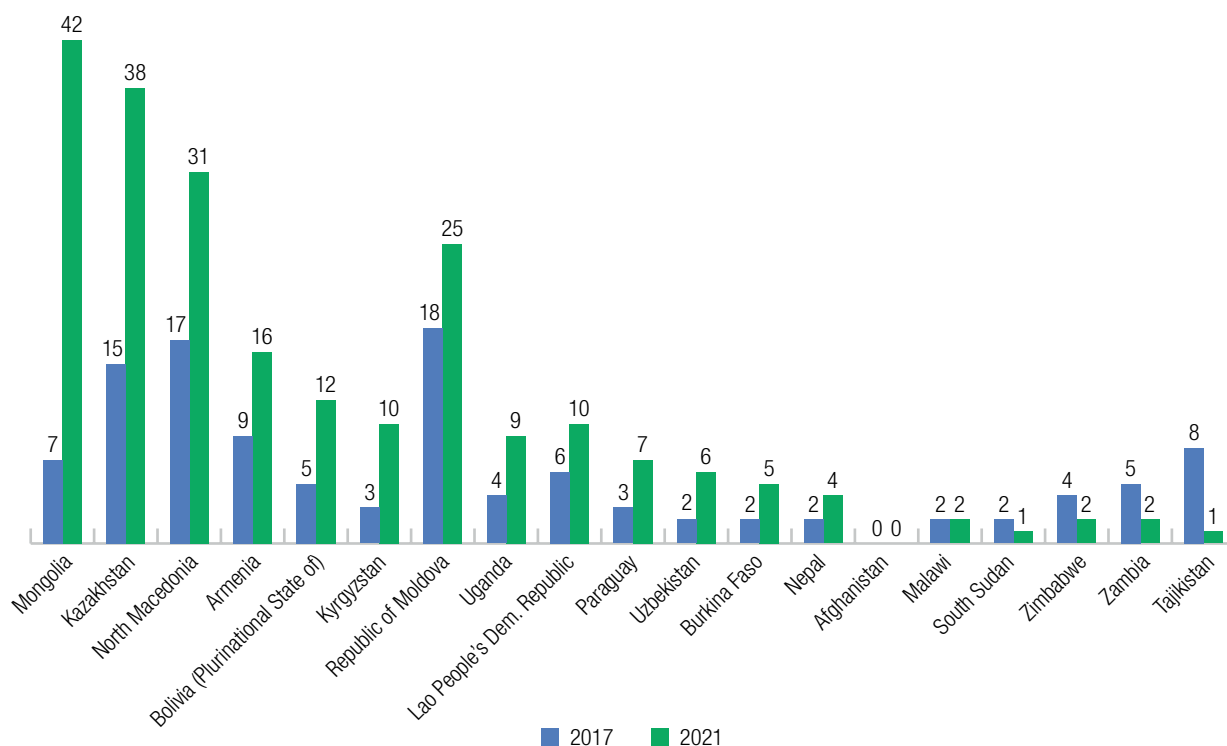
Domestic e-commerce

While no reliable estimate of the size of the national e-commerce market could yet be made, desktop research, stakeholder consultations, and the eT Ready surveys, all confirmed a certain level of private sector and consumer engagement in e-commerce. For instance, 53 per cent of the businesses that

participated in the survey reported selling, while 20 per cent stated purchasing, online. Among the consumer participants, 27 per cent indicated having made online purchases.

The positive dynamic was also confirmed by the World Bank Findex Survey 2021, which stated that the share of people aged over 15 in Mongolia who have bought something online increased six-fold between 2017 and 2021, showing the highest growth compared to the other LLDCs that were assessed (Figure 2).

Figure 2: Share of people age 15+ who used a mobile phone or the Internet to buy something online, selected LLDCs, 2017 and 2021 (%)



Source: World Bank Findex Survey, 2017 and 2021

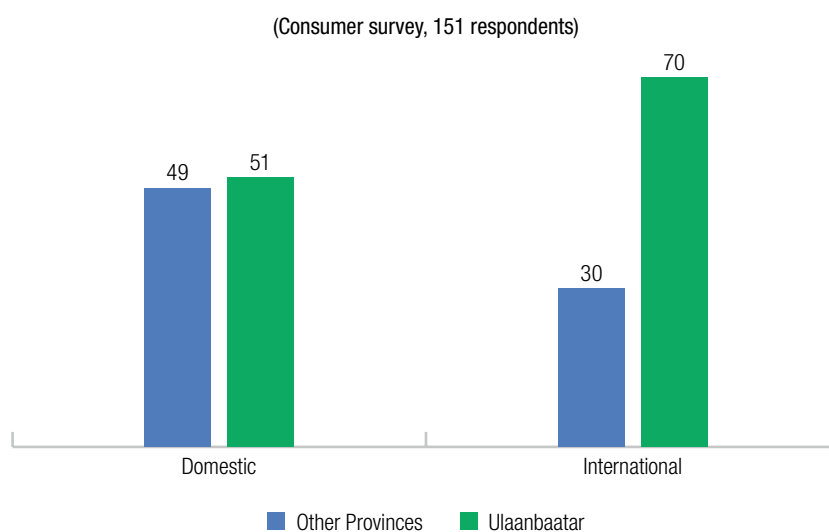


Consumers' e-commerce readiness

Mongolian consumers tend to favour domestic over cross-border purchases. This trend is particularly pronounced in provinces other than Ulaanbaatar (Figure 3).⁷ Actually, consumers in Ulaanbaatar favoured international over domestic 70 per cent to 51 per cent.

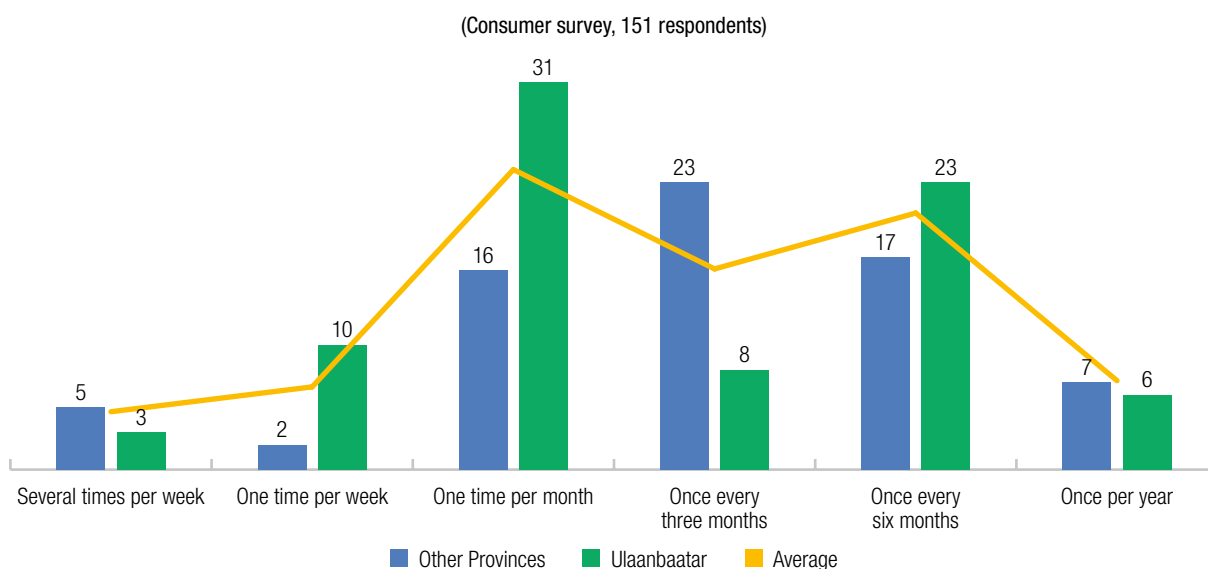
Consumer e-commerce engagement is somewhat more extensive and frequent in Ulaanbaatar than in other provinces, where it appears to still amount to an exceptional experience (Figure 4).

Figure 3: The nature of e-commerce purchases (domestic/international) (%)



Source: UNCTAD

Figure 4: Frequency of online shopping (%)



Source: UNCTAD

⁷ Bulgan, Darkhan-Uul, Dornod, Dornogovi, Dzavhan, Govisumber, Khovd, Orkhon, Ömnögovi, Selenge, Sükhbaatar, Töv, Uvs, and Zavkhan



E-commerce purchases mostly focused on imported fashion products (apparel, footwear, bags, and accessories), personal care products, followed by toys and food (Figure 5). However, some differences were found between consumer preferences in Ulaanbaatar and those in other provinces. For instance, while a large share of orders from the capital are related to electronics and software, furniture and pharmaceutical products feature more prominently in online sales ordered from other provinces.

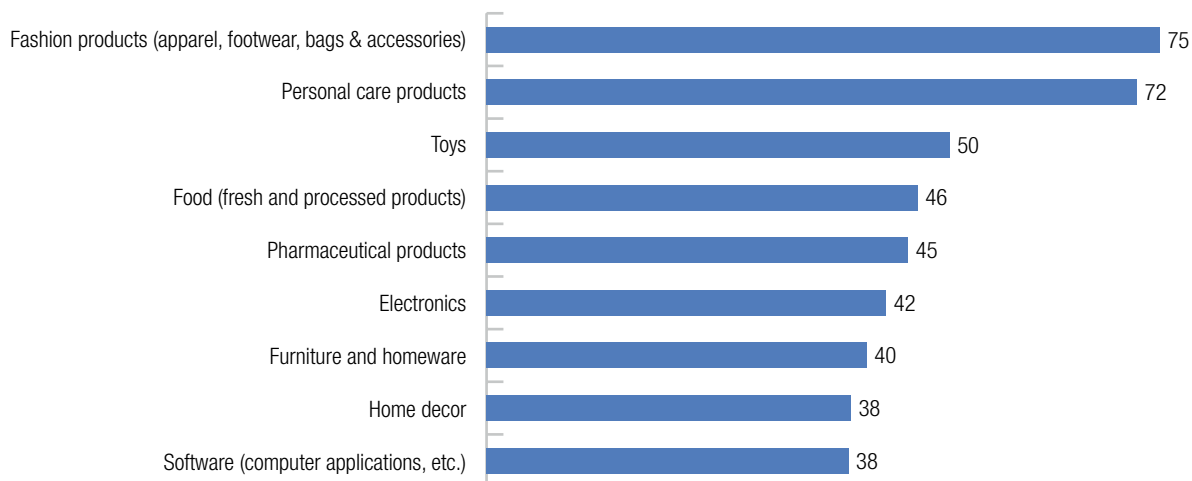
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On the services side, online food deliveries, digital payments, and transportation (train and bus tickets, taxi rides, etc.) maintain the lead across all three stakeholder groups, while acquisitions of event tickets, financial services, and digital advertising were attributed importance by some, but not all stakeholder groups (Figure 6).

Consumers tend to shop directly on social networks (especially in the provinces), using mobile applications, or via merchants' websites. Thus, desktop marketplace traffic is somewhat limited, in particular, outside of Ulaanbaatar (Figure 7).

Figure 5: Products most purchased online (%)

(Survey respondents: public sector, 112; private sector, 31; and consumers, 151)

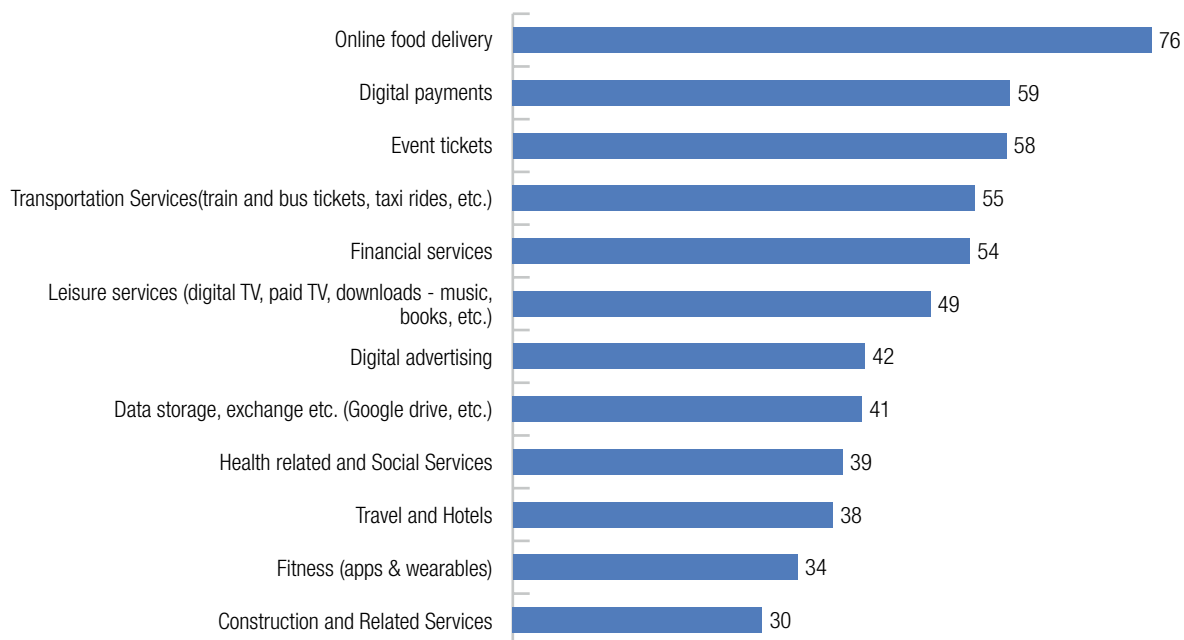


Source: UNCTAD



Figure 6: Services most purchased online (%)

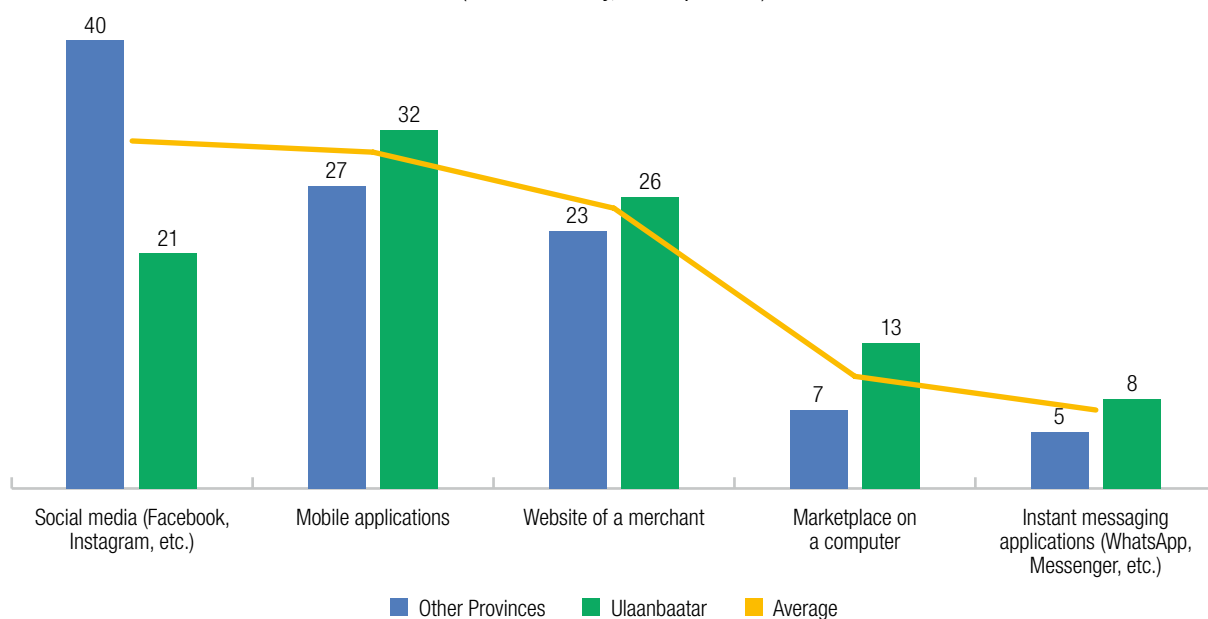
(Survey respondents: public sector, 112; private sector, 32; and consumers, 151)



Source: UNCTAD

Figure 7: Preferred way to make online purchases (%)

(Consumer survey, 151 respondents)



Source: UNCTAD



Among the key reasons preventing Mongolian consumers from purchasing online are the lack of trust in the security of online transactions and dissatisfaction with the delivery services available (notably their cost and duration). Meanwhile, online shopping does not seem to be perceived as costly. Payment solutions are regarded as reliable and, thus, not an obstacle for purchasing online (Figure 8).

SMEs e-commerce readiness

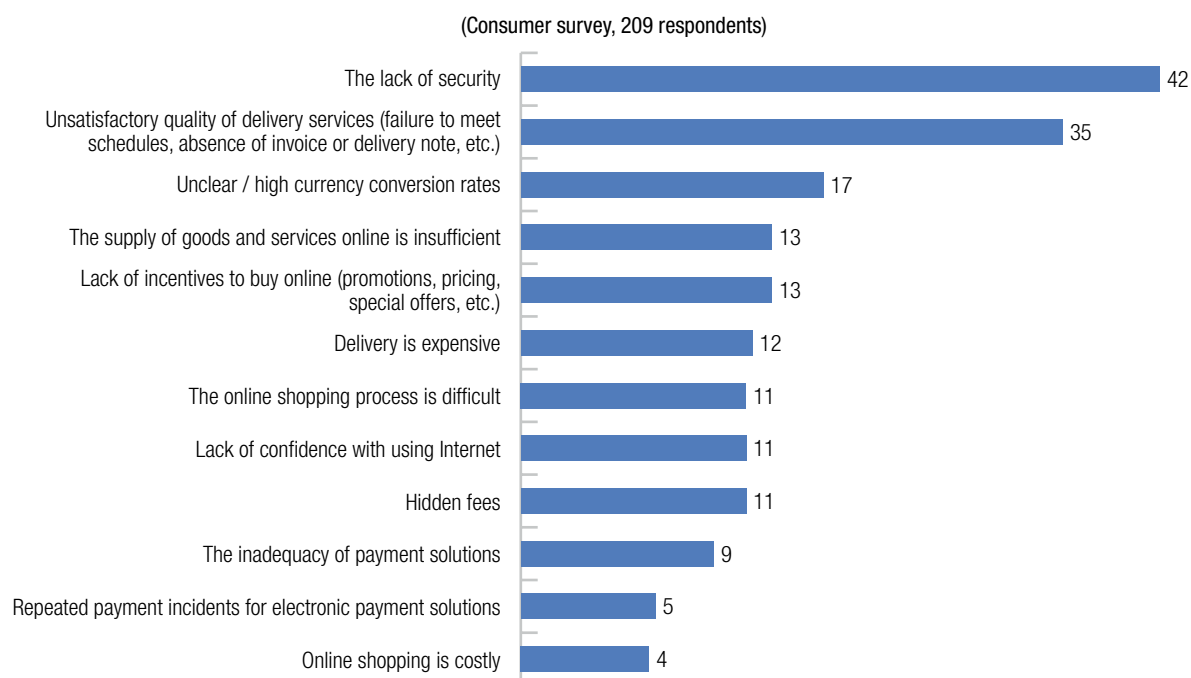
The SMEs representatives who took the survey (private sector participants) involved in e-commerce sales more than the “digital natives” (i.e., businesses) that were established online exclusively (26 per cent of the respondents) referred to “attracting domestic customers” as to the main reason for their online presence (Figure 9), having rated e-commerce as a chance to expand their business operations to foreign markets rather low. Sixty-four per cent of the respondents indicated selling in the domestic market only, six per cent in the international market only, and 30 per cent in both markets. In absolute shares, 96.97 per cent of the private sector respondents are engaged in domestic online sales, and only 36.36 per cent in international ones (Figure 10). Cross-border

e-commerce sales by Mongolian businesses that participated in the survey were made to China, India, the Republic of Korea, the Russian Federation, Türkiye, Ukraine, and the United States of America (USA). Goods and services were purchased from China, Germany, the Republic of Korea, the Netherlands, Ukraine, and the USA.

The private sector participants indicated a strong preference towards using their own websites for goods and services sales (Figure 11). These are followed by social media. While the most widely used social network in Mongolia, Facebook, allows some Mongolian “shops” and “page shops” presence on the network, these are used as displays of products only, with no possibility of completing a purchase.⁸

The use of third-party international platforms was reported to significantly (by three times) exceed the use of the domestic ones (Figure 11). According to data gathered through the surveys, access to international platforms remains limited and informal. In August 2021, MDDC announced conducting trader access negotiations with Amazon; nevertheless, those do not appear to be concluded yet.⁹

Figure 8: Reasons for not buying online (%)



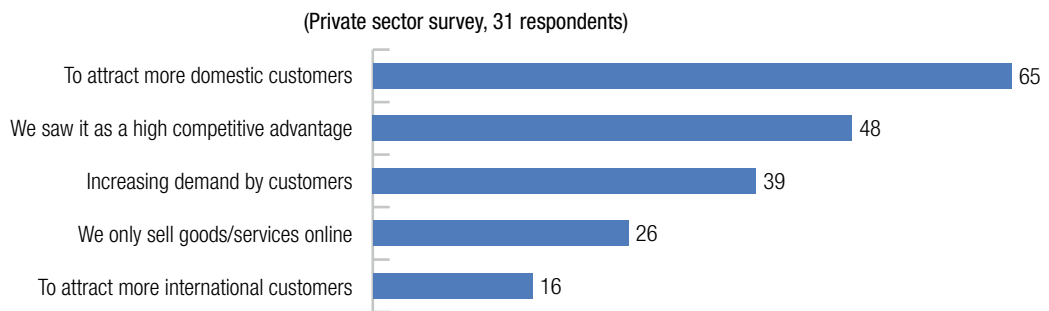
Source: UNCTAD

⁸ Meta, ‘Supported Markets for Commerce Surfaces on Facebook’, Meta Business Help Center, accessed 15 October 2022, <https://www.facebook.com/business/help/549256849084694>. For instance, see Mongolia’s Event Décor’s Facebook “shop” here: <https://www.facebook.com/event.decor.mongolia/shop/>

⁹ Mongolia National Broadcaster, ‘Mongolians Can Soon Sell Their Products on Amazon’, Facebook, accessed 13 October 2022, <https://fb.watch/FTZyN1rDu8/>

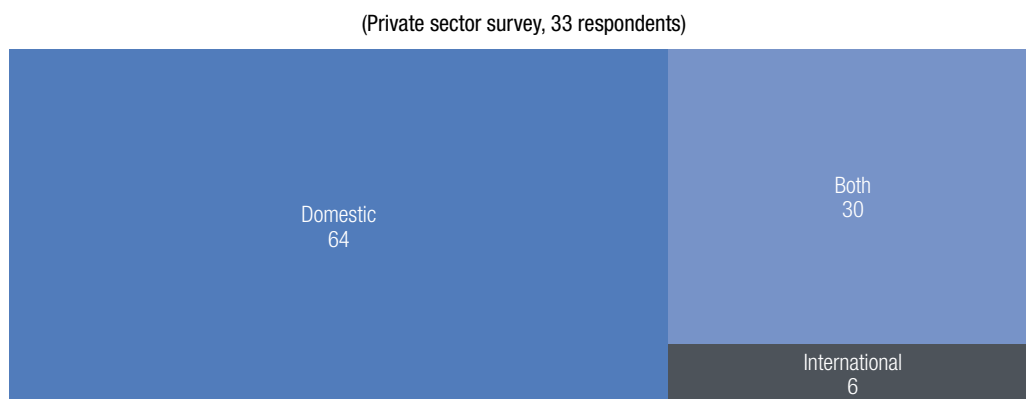


Figure 9: Reason for “going digital” (selling online) (%)



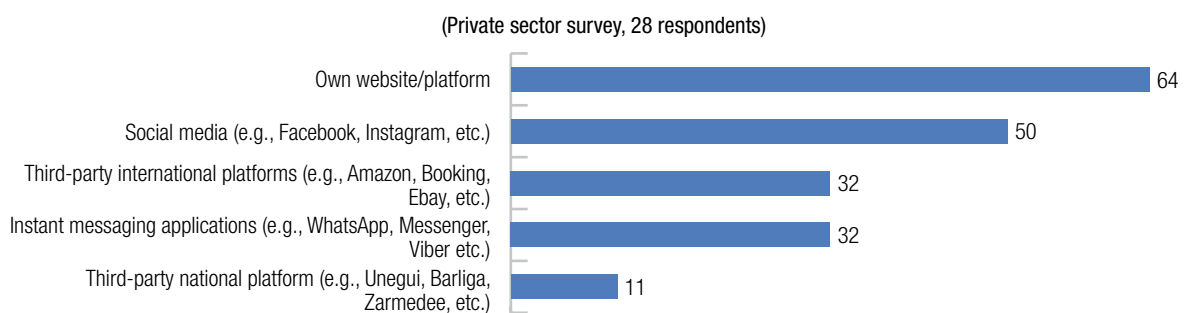
Source: UNCTAD

Figure 10: Nature of e-commerce sales (domestic/international) (%)



Source: UNCTAD

Figure 11: Preferred way to sell online (%)



Source: UNCTAD



According to the private sector stakeholders consulted, the most important obstacles to their e-commerce engagement are unsupportive legal framework, lack of awareness about e-commerce solutions, and high costs of logistical arrangements. Like the consumers, businesses do not find the payment solutions available on the Mongolian market problematic. However, several other factors revolving around financing, security, logistics, digital skills, and the ICT appear to impede their desire to establish themselves online (Figure 12).

Cross-border e-commerce

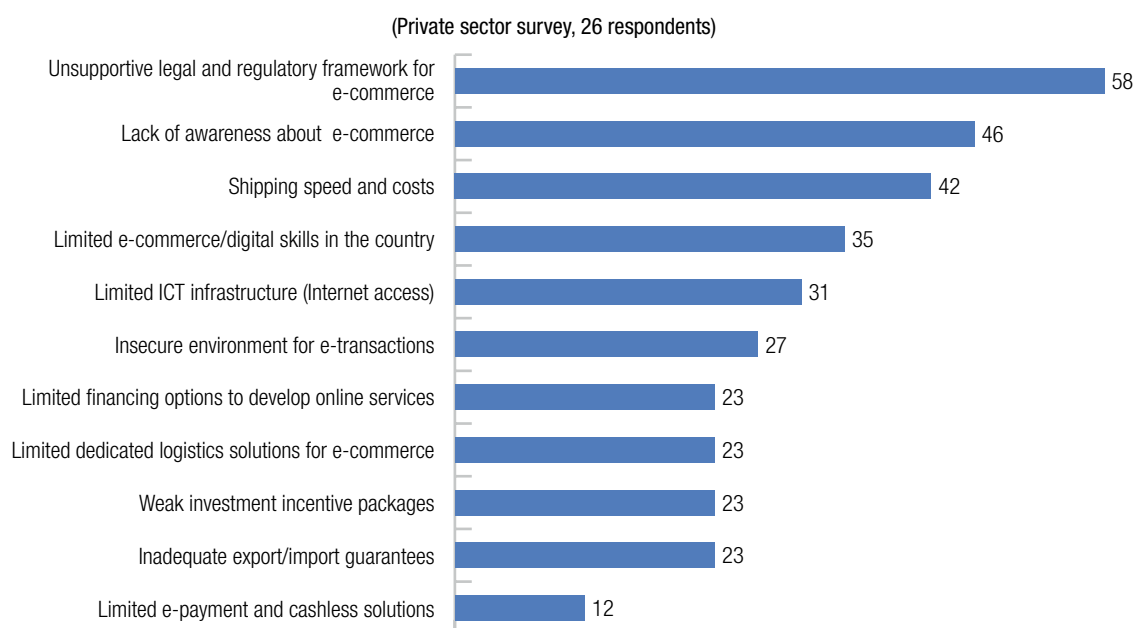
Different from the domestic, cross-border e-commerce remains much less explored by the Mongolian stakeholders. Its import segment mostly consists of purchasing branded goods abroad for personal use or further resale in Mongolia, including through domestic

e-commerce platforms, some of which are established primarily to facilitate this task.

Exports of goods from Mongolia to foreign destinations are as yet sporadic due to several factors, including access to finance difficulties, high fees, and complexity of cross-border payment mechanisms (in particular for the inbound payments), scarcity of skilled personnel, as well as inefficiencies in custom clearance and logistics.

Meanwhile, an export market for ICT services is opening up and lately has been receiving a boost from an emerging technological startup ecosystem. Developments in the ICT sector, in particular programming and related consultancy, as measured by the number of active entities (Figure 13) and by revenue, are also evidenced by the national statistics.

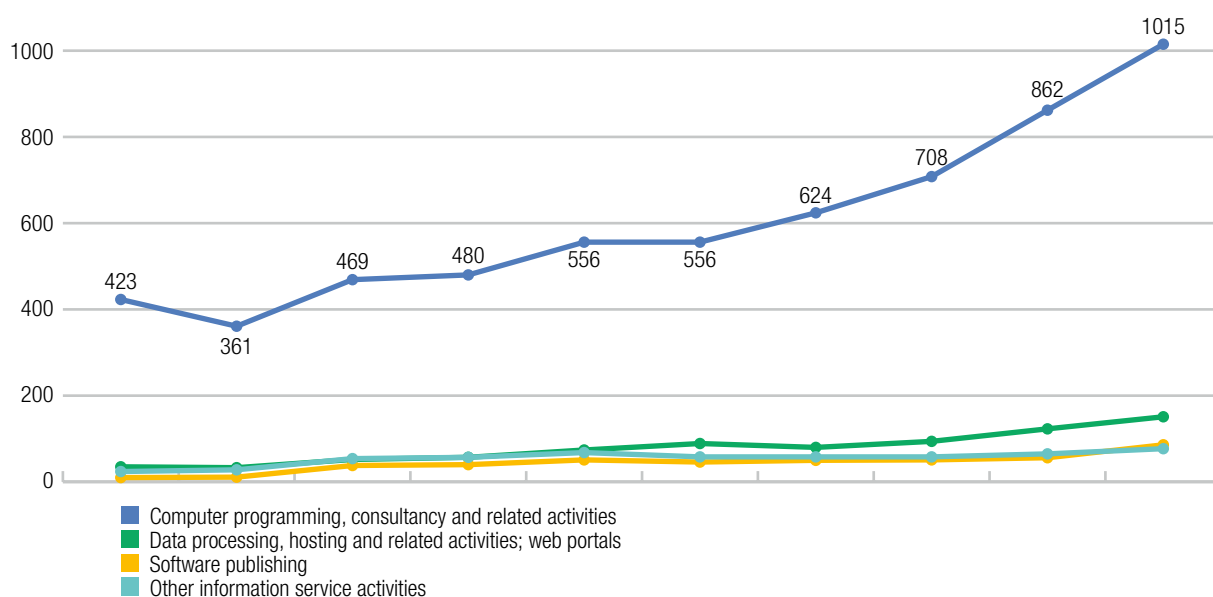
Figure 12: Reasons for not investing in e-commerce solutions (%)



Source: UNCTAD



Figure 13: Number of active businesses providing ICT services



Source: NSO

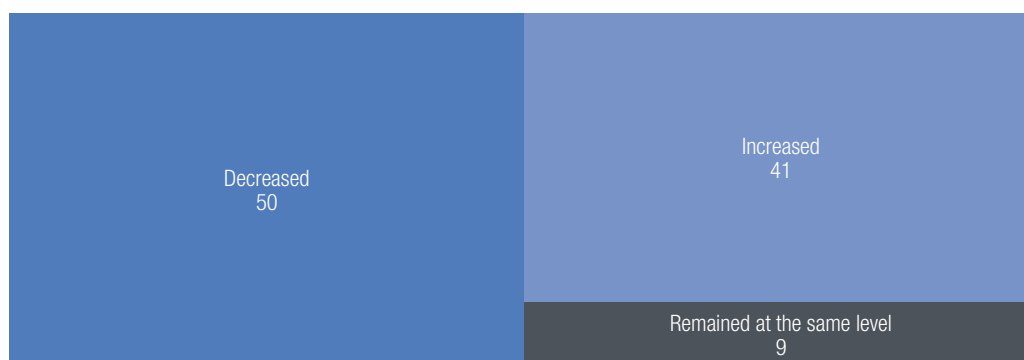
1.2 Influence of the COVID-19 pandemic and current geopolitical situation on the e-commerce development in Mongolia

Mongolia’s economy has been affected by two ongoing crises, notably the COVID-19 pandemic and its aftermath and the war in Ukraine. These developments also affect the dynamics of e-commerce.

The COVID-19 pandemic inflicted varied problems on e-commerce development in Mongolia. The private sector stakeholders have shared diverging (positive and negative) views about particular consequences of COVID-19 on their overall performance, with slightly over 90 per cent of the survey participants confirming the effects of the pandemic on their business (Figure 14). Nonetheless, they tend to agree that, overall, the pandemic boosted e-commerce in the country and supported the wider adoption of e-payments.¹⁰

Figure 14: Effect of the COVID-19 pandemic on the volume of sales (%)

(Private sector survey, 22 respondents)



Source: UNCTAD

¹⁰ BOM Payment System Strategy



As of October 2022, the zero-COVID policy of China was still causing logistic delays, notably due to the increased border clearance time, higher operational costs and the effects on both exports and imports, including products ordered online.

The war in Ukraine, prompting international sanctions, has created uncertainty in Mongolia about access to imports of petroleum products, electricity, and key commodities such as wheat and fertilizer.¹¹ Adaptations had also to be made by the banking sector, partially

interconnected with the Russian banking system, which is now largely disconnected from the Society for Worldwide Interbank Financial Telecommunication (SWIFT), which is widely relied on in Mongolia, including for remittances. Specific commonly used trade routes also had to be changed. The increase in prices prompted by the war, coupled with the resulting reduction in disposable income,¹² might affect a rather price-sensitive e-commerce market of Mongolia, particularly since it is currently dominated by products that are not of primary necessity.

¹¹ U.S. Department of State, '2022 Investment Climate Statements: Mongolia', U.S. Department of State, 2022, sec. Executive Summary, <https://www.state.gov/reports/2022-investment-climate-statements/mongolia/>

¹² Andrei Mikhnev, Ikuko Uochi, and Lydia (Ypsse) Kim, 'Mongolia Post-COVID-19: Risks to an Inclusive Recovery', *East Asia & Pacific on the Rise, World Bank Blogs (blog)*, 18 October 2022, <https://blogs.worldbank.org/eastasiapacific/mongolia-post-covid-19-risks-inclusive-recovery>



2. E-COMMERCE STRATEGY FORMULATION

Mongolia does not have a stand-alone e-commerce strategy and has adopted multiple cross-cutting and sectoral strategies that aim to advance digitization and digitalization, through capacity-building elements and embedding technology into different spheres of human life and economy, contributing to the digital transformation of the country and to the emergence of the digital economy and e-commerce. Mongolia takes part in several international multi- and plurilateral initiatives of relevance to e-commerce rules- and policymaking, in the World Customs Organization (WCO) and the WTO.

2.1 National and sectoral strategies of relevance to e-commerce

The main national strategies are overviewed in Table 1.

According to Vision 2050, “By 2050, Mongolia shall become a leading Asian country in terms of its social development, economic growth and its citizens’ quality of life.”²⁰

The following national development priorities identified by Vision 2050 appear to be of relevance to e-commerce:

- 2.4 Develop internationally competitive national science, technology, and innovation system (identifying the ICT and artificial intelligence as priority areas and referring to e-economy).

Table 1: Key Mongolia’s National Strategies incorporating objectives and actions of relevance to e-commerce

General (cross-cutting) strategies	Sectoral strategies	Digitalization / digital transformation specific strategies
Vision 2050 (long-term)	[TELECOMMUNICATIONS]	Digital Nation 2022-2027
5-year development guidelines (mid-term) ¹³	Regulatory Strategy of the Telecommunications Sector of Mongolia: 2019-2024	Action Plan on Improvement of Universal ICT Skills and Competencies 2022-2026 ¹⁶
Government Action plan 2020-2024 (short term) ¹⁴	National Satellite Program 2012	
Development Plan for 2022		
Mongol Export Program 2019-2023 ¹⁷ (Mongolia’s Trade and Investment Roadmap 2019-2023 issued under the auspices of the Program includes ICT)	[TRADE FACILITATION]	
10.0 (ten) trillion comprehensive plan to protect health and restore the economy” 2021 ¹⁸	[FINANCIAL SERVICES / PAYMENTS]	
	[DRAFT] Strategy for the development of national payment system 2022-2030	
	[INCLUSIVE PUBLIC SERVICES]	
	Open Government Partnership Mongolia, Fourth National Action Plan 2021-2023 ¹⁹	

Source: UNCTAD

¹³ Decision of Great Khural of Mongolia No 23 of 28 August 2020 on the Approval of the Five-Year Main Directions for the Development of Mongolia In 2021-2025, <https://legalinfo.mn/mn/detail/15584>

¹⁴ Decision of Great Khural of Mongolia No 24 of 28 August 2020 on the Approval of the 2020-2024 Action Program of The Government of Mongolia, <https://legalinfo.mn/mn/detail/15586>

¹⁵ Decision of the Government of Mongolia No. 137 of 24.11.2012 on approval of “National Artificial Satellite Programme of Mongolia”, <https://legalinfo.mn/mn/detail/8845>

¹⁶ 2022.07.25 A/2601, A/391, A/1461, A/260, https://mddc.gov.mn/wp-content/uploads/2022/07/DL_Hamtarsan_tushaal_20220725-2.pdf

¹⁷ Decision of the Government of Mongolia No. 278 of 5.09.2018, on approval of Mongol Export Programme, <https://legalinfo.mn/mn/detail/13692>

¹⁸ Decision of the Government of Mongolia No. 42 of 17.02.2021, on approval of “10.0 (ten) trillion comprehensive plan to protect health and restore the economy”, <https://legalinfo.mn/mn/detail?lawId=16160842294411>

¹⁹ Appendix of the Resolution No. 91 of December 31, 2021 of the National Council of OGP Mongolia, https://www.opengovpartnership.org/wp-content/uploads/2022/01/Mongolia_Action-Plan_2021-2023_EN.pdf

²⁰ The Secretariat of the State Great Khural of Mongolia, “Vision 2050” Long-Term Development Policy of Mongolia’, 2020, https://cabinet.gov.mn/wp-content/uploads/2050_VISION_LONG-TERM-DEVELOPMENT-POLICY.pdf vision



- 2.6 Ensure labour economy balance, build a knowledge economy [...].
- 3.3 Render employment support, develop business know-how and skills, and raise the competitiveness of SMEs.
- 4.2 Create an export-oriented economy through promoting development of priority sectors (which include ICT).
- 4.4 Join the economic and trade integration in the region and facilitate trade.
- 4.5 Develop internationally competitive SMEs and increase employment.
- 4.6 Establish an internationally recognized wealth fund to support the objectives of economic diversification, innovation, human development, new technology and green growth.
- 5.3. Develop an effective and efficient e-governance to promote human development.
- 7.5. Guarantee information integrity, confidentiality and accessibility for the state, citizens, and private sector.
- 8.1 Lay fundamental conditions for rapid economic growth by fully connecting to the regional economic integration through an integrated infrastructure network.

Adopted by the MDDC on 18 May 2022, the Digital Nation Strategy (2022-2027) is expected to be co-implemented by the MDDC and MES. It seeks to introduce advanced ICT technologies in all social and economic sectors, contributing to comprehensive development of a digital nation through knowledge and intelligence.²¹ The Strategy aims, among other objectives, to use the information technology advances to comprehensively strengthen the government and improve the quality of life of Mongolians. Among

the key targets set by this instrument: productive, non-bureaucratic and efficient e-government; national security in the electronic environment; capacity-building for the government, private sector, and citizens; completeness, confidentiality, and accessibility of information; improvement of universal digital literacy and bridging of digital divide; and development of the digital economy. The latter is expected to be achieved by promoting information technology, big data, artificial intelligence, the Internet of Things, cloud technology, robotics, drone technologies, and blockchain; introduction of the production of electronics, as well as embedding the ICT products and services in all sectors of society and economy to improve competitiveness.

Besides elaborating policies accommodating the digital economy, Mongolia has also taken concrete steps towards online delivery of e-government services through e-Mongolia and several other dedicated portals (Table 2). These portals are better known in Ulaanbaatar than in the other provinces.

Currently, over 2,000 governmental services are available through e-Mongolia web platform for citizens,²² foreigners, and legal entities in Mongolia online on a computer or through a mobile application.²³ Mongolia has selected the e-governance of Estonia as a model to follow and collaborated with Estonia's E-Governance Academy, as well as with the government of Ukraine, which is also implementing a similar e-government system, when conceptualizing the approach. To increase the use of e-Mongolia outside of Ulaanbaatar, from March to June 2022, the team of MDDC and Mongolia's e-academy organized an introductory rally through 21 Mongolia's provinces, instructing rural population on the ways of using the service. In July 2022, e-Mongolia' centers, which provide online services of government organizations and give instructions and advice related to use of e-Mongolia to citizens, were opened in 14 regions.²⁴

²¹ MDDC, "“Electronic Nation” Documentation Direction (2022-2027)", 2022, https://mddc.gov.mn/wp-content/uploads/2022/07/%D0%9024-20220518-%D0%A6%D0%B0%D1%85%D0%B8%D0%BC-%D2%AF%D0%BD%D0%B4%D1%8D%D1%81%D1%82%D1%8D%D0%BD-%D0%B1%D0%B0%D1%80%D0%B8%D0%BC%D1%82%D0%BB%D0%B0%D1%85-%D1%87%D0%B8%D0%B3%D0%BB%D1%8D%D0%BB-%D0%B1%D0%B0%D1%82%D0%BB%D0%B0%D1%85-%D1%82%D1%83%D1%85%D0%B0%D0%B9_1658190818-1-1.pdf. MDDC

²² 'E-Mongolia', accessed 30 November 2022, <https://e-mongolia.mn>

²³ News.mn, Mongolia wants to deliver digital transformation up to 90 percent by 2024, accessed 11 December 2022, <https://news.mn/en/798147/>

²⁴ Unurzul M., 'E-Mongolia Center Opens in 14 Aimag', MONTSAME-Mongolian News Agency, 20 July 2022, sec. Society, <https://montsame.mn/en/read/300986>. Unurzul M



Table 2: Select electronic systems established by the Mongolian Government

e-Tax ²⁵	Ebarimt ²⁶	iTax ²⁷	ISS ²⁸	Invest in Mongolia ²⁹
Electronic tax reporting system for taxpayers	VAT-payment incentive programme, based on e-reporting of consumer purchases (receipts)	Web accessible National Tax Registration Database, unifying and automating registration and reporting	Software for registering Mongolian and exported goods using barcodes that meet international standards.	Electronic investor registration / investor e-services system

The electronic portals supporting e-government services are conducive to the development of digital literacy of Mongolian population, enhance the comfort of dealing in the digital environment, and contribute to the emergence of digital services ecosystem, which integrates content and software development, telecommunications, and electronic payment services among others. They are, thus, propitious to e-commerce development.

2.2 Participation of Mongolia in international e-commerce law and policymaking

Mongolia became a member of the World Customs Organization (WCO) in 1991. Mongolian Customs General Administration (MCGA) is actively engaging with the WCO Secretariat and development partners in the work leading to implementation of the best international practices in customs clearance, including the implementation of the Revised Kyoto Convention, which Mongolia joined in 2006, and the WTO Trade Facilitation Agreement (TFA), to which it acceded in 2016. This work is important for facilitation of border clearance procedures, particularly crucial for further development of international B2B and B2C e-trade in goods segments. The recent undertakings in this area include engagement in the activities of the SECO-WCO Global Trade Facilitation Programme (GTFP), mostly focused on risk management, as well as the WCO Mercator Programme, which concentrates on the implementation of the WTO TFA.³⁰

Mongolia also participates in both the multilateral and plurilateral (Joint Statement Initiative (JSI) e-commerce work at the WTO. As any other WTO Member, Mongolia is engaged in the work of the WTO Work Programme on E-commerce, 1998, which takes place in the WTO regular bodies – Committee on Trade in Goods (CTG); Committee on Trade in Services (CTS); Trade and Development Committee (CTG); and the General Council (GC), and currently is mostly focused on the Moratorium on Customs Duties on Electronic Transmissions. In 2021, Mongolia circulated a communication emphasizing the importance of trade facilitation, development of services trade, and e-commerce, among others, on behalf of the Landlocked Developing Countries (LLDC) group.³¹ Having stressed the significance of the assistance from the development partners, this communication made a reference to the multilateral WTO negotiations track. Mongolia has not adhered to the ITA (I and II) initiatives liberalizing tariffs on the select ICT goods and components, aimed at facilitating production of such goods and improving access to them.

Since its establishment in 2017, Mongolia has also co-sponsored the WTO JSI on electronic commerce, the most comprehensive international e-commerce negotiations forum of 88 WTO Members, having over 30 different issues of relevance to e-commerce on its agenda.

²⁵ MTA, 'Electronic Tax System (E-Tax)', accessed 30 September 2022, <https://etax.mta.mn>.

²⁶ Electronic Payment Receipt System, 'EBarimt', accessed 12 October 2022, <https://ebarimt.mn/>. Electronic Payment Receipt System

²⁷ MOF, 'iTAX - Tax Administration Integrated System', accessed 12 October 2022, <https://itax.mta.mn/home>; MTA, 'Integrated System of Tax Administration', accessed 13 October 2022, <https://itc.gov.mn/tais>. MOF, 'iTAX - Tax Administration Integrated System'; MTA, 'Integrated System of Tax Administration'

²⁸ Customs, Taxation and Financial Information Technology Center, Department of State Industries, 'Integrated Inventory System', accessed 30 November 2022, <https://itc.gov.mn/iss>. Customs, Taxation and Financial Information Technology Center, Department of State Industries

²⁹ MED, 'E-Invest - Invest in Mongolia', accessed 22 September 2022, <https://e-invest.mn/>; MED, 'Investor Electronic Registration System', accessed 30 November 2022, <https://itc.gov.mn/imc>. MED, 'E-Invest - Invest in Mongolia'; MED, 'Investor Electronic Registration System'

³⁰ WCO, 'WCO Mercator Programme Diagnostic Mission Conducted for Mongolian Customs General Administration', WCO Media, 23 September 2022, <https://www.wcoomd.org/en/media/newsroom/2022/september/wco-mercator-programme-diagnostic-mission-conducted-for-mongolian-customs-general-administration.aspx>.

³¹ WTO, 'Communication from Mongolia on Behalf of the Group of Landlocked Developing Countries' (WT/GC/237, 11 May 2021), <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/GC/237.pdf&Open=True>.



In addition, Mongolia is engaged in the work of several other WTO JSIs considering the issues relevant to e-commerce to a certain extent – the WTO JSIs on MSMEs and on Investment Facilitation for development. Mongolia is yet to make textual or conceptual submissions in these negotiations. On the other hand, Mongolia has not yet joined the JSI on Services – Domestic Regulation and has not adhered to its outcome reflected in the dedicated Declaration, or otherwise expressed intention to undertake additional horizontal domestic regulation commitments. This step, together with further liberalization in the services sector, could help to boost competition in the domestic services market, forcing the quality of the latter to improve.

Finally, Mongolia takes part in the Informal Working Group (IWG) on Trade and Gender, the work of which has cross-cutting coverage, thus is also relevant to the e-commerce domain.

2.3 Engagement in the regional and bilateral initiatives of direct relevance to e-commerce

Following the recommendation of the ESCAP Paperless Trade Readiness assessment conducted in 2019, Mongolia joined the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific (CPTA) in 2022.³² Once implemented, the Framework Agreement, including bilateral and country-group projects launched under its auspices, can facilitate trade between Mongolia, and its close neighbours (unlike China and the Republic of Korea, the Russian Federation has not joined the treaty yet) and regional partners (CAREC countries).

To date, Mongolia has concluded two FTAs: the Asia-Pacific Trade Agreement (APTA)³³ and the Agreement between Japan and Mongolia for an Economic Partnership (EPA)³⁴. The APTA embodies some modest trade facilitation disciplines, mostly reiterating the obligations made by the participating states elsewhere (at the WTO and the WCO). The EPA contains a dedicated e-commerce chapter. While the feasibility of concluding FTAs with the Republic

of Korea, China, and the Eurasian Economic Union (EAEU) is being assessed, it is not clear if these treaties would contain parts or separate obligations conducive to e-commerce.

2.4 Initiatives of relevance to e-commerce run by development partners

The UN Sustainable Development Cooperation Framework (UNSDCF) for Mongolia 2023-2027, for which UNCTAD is one of the 23 implementing agencies, is closely aligned with the national development agenda articulated in Vision 2050.³⁵ Strategic Priority 2 of the UNSDCF, “Green, Inclusive and Sustainable Growth” is of particular relevance to e-commerce. While the framework does not set performance indicators directly measuring the development of e-commerce, the latter appears to be conducive to achieving the Output 2.2, “The policies, strategies and institutions are in place to promote greater diversification and transition of economy, including through creative industry, towards resource efficient and low carbon development, digital transformation, and make it more competitive, technologically innovative, and productive while also transforming the small enterprises towards greener employment, integrating with global value chains, increasing formal participation, resource-efficiency and resilience mitigating any unintended impacts for communities who experience persistent discrimination and marginalization”. In implementing the UNSDCF, the UN agencies are, inter alia, expected to ensure “technical assistance for digital transformation including e-commerce and innovative and integrated solutions” and integration of the Mongolian businesses, including MSMEs, in the global digital trade value chains.

Two of the strategic priorities identified in the EBRD Draft Country strategy for Mongolia (2022-2027) appear to be of particular relevance to the e-commerce development in the country: enhancing Mongolia’s resilience through a stronger, more diversified and stable private sector; and strengthening connectivity and regional integration to support growth and

³² Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific, opened for signature 23 August 2016, No. 56556, accessed 30 November 2022, https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=X-20&chapter=10&clang=_en

³³ Asia-Pacific Trade Agreement (APTA), 2020, [https://www.unescap.org/apta#:~:text=Asia%2DPacific%20Trade%20Agreement%20\(APTA\)%20is%20a%20preferential%20regional,trade%20expansion%20and%20economic%20cooperation](https://www.unescap.org/apta#:~:text=Asia%2DPacific%20Trade%20Agreement%20(APTA)%20is%20a%20preferential%20regional,trade%20expansion%20and%20economic%20cooperation)

³⁴ Agreement between Japan and Mongolia for an Economic Partnership, entered into force on 7 June 2016, chap. 9, accessed 24 October 2022, https://www.mofa.go.jp/a_o/c_m2/mn/page3e_000298.html

³⁵ UN, ‘United Nations Sustainable Development Cooperation Framework 2023-2027 (Mongolia)’, 20 May 2022, https://minio.dev.devqube.io/uninfo-production-main/bd56bb91-43ad-48c0-89c8-ce7ca7b42aaf_UNSDCF_Mongolia_2023-2027_Final_English.pdf



enhance inclusion.³⁶ The latter is consistent with the EBRD commitment to using the digital transition as an enabler of transition in all of the economies and sectors in which it invests, made in the Five-year Strategic and Capital Framework (SCF 2021-25).³⁷

The ADB Country Partnership Strategy (CPS) for Mongolia (2021–2024) aimed at ‘Laying Resilient Foundations for Inclusive and Sustainable Growth’, features three strategic priorities: (i) fostering inclusive social development and economic opportunity, (ii) climate-resilient infrastructure to drive competitiveness and diversification, and (iii) resilience for sustainable, green, and climate-conscious development, as well as five thematic priorities: gender equality; digital transformation; private sector participation, including public–private partnerships (PPPs); institutional capacity and governance; and civil society engagement.³⁸ The CPS is also aligned with Mongolia’s Vision–2050, the Government Action Plan (2020–2024), and with ADB’s Strategy 2030.³⁹ Development of e-commerce is partially mainstreamed via digital transformation and high-level technology thematic priority of the CPS.

Further measures aimed at supporting the Mongolia’s digital trade agenda are provided for and implemented via the Central Asia Regional Economic Cooperation initiative (CAREC), supported by the ADB. Of relevance here are CAREC Integrated Trade Agenda (CITA) 2030⁴⁰ as well as CAREC Digital Strategy 2030.⁴¹ The latter was prepared by the CAREC Secretariat in partnership with the CAREC Institute, ESCAP, the Eurasian Fund for Stabilization and Development, Islamic Development Bank, and the World Bank. The

CAREC Digital Strategy 2030 adopts the mission of creating a data-driven digital regional economy with fast and reliable online access to relevant information and trusted, real-time, user-friendly digital services for all citizens, businesses, and administrations across the CAREC region. This mission will be achieved through several objectives, some of which are of importance to e-commerce: harmonize digital and data legislature to promote an enabling environment; reduce regional trade barriers to increase cross-border trade and expand business opportunities for companies across the region, particularly in e-commerce; improve the digital foundations and create interoperable digital platforms to enable the development of CAREC’s operational clusters.

2.5 Institutional and coordinating mechanisms for e-commerce in Mongolia

Before the assessment, Mongolia had no institutional coordination mechanism for e-commerce. The National E-commerce Task Force was formed in early 2022 to accompany the implementation of this project. Over 20 agencies and private sector stakeholders are currently included in the task force (Figure 15), which the Director General of the Department of Foreign Trade and Economic Cooperation of the MFA chairs. The latter acts as Task Force’s Secretariat.

The engagement of consumers and businesses in the dialogue with the government remains low, because the mechanisms simplifying it are not put in place. For instance, only four out of 52 of the private sector survey participants (8 per cent) confirmed that e-commerce is a subject of the dialogue conducted between the government of Mongolia and private sector.

³⁶ EBRD, ‘Mongolia Country Strategy 2022–2027’, 4. EBRD, 4

³⁷ EBRD, ‘Report of the Board of Directors to the Board of Governors: Strategic and Capital Framework 2021–2025’, 5 October 2020, <https://www.ebrd.com/documents/corporate-strategy/strategic-and-capital-framework-2021-2025.pdf?blobnocache=true>. EBRD

³⁸ ADB, ‘Mongolia, 2021–2024 - Laying Resilient Foundations for Inclusive and Sustainable Growth’, August 2021, 8, <https://www.adb.org/sites/default/files/institutional-document/753311/mon-cps-2021-2024.pdf>. ADB, 8

³⁹ ADB, ‘Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific’, July 2018, <https://www.adb.org/sites/default/files/institutional-document/435391/strategy-2030-main-document.pdf>. ADB

⁴⁰ ADB, CAREC Integrated Trade Agenda 2030 and Rolling Strategic Action Plan 2018–2020 (Asian Development Bank, 2019), <https://www.adb.org/documents/carec-trade-agenda-2030-action-plan-2018-2020>. ADB

⁴¹ ADB, CAREC Digital Strategy 2030: Accelerating Digital Transformation for Regional Competitiveness and Inclusive Growth (Asian Development Bank, 2022), <https://www.adb.org/documents/carec-digital-strategy-2030>. ADB



Figure 15: National E-commerce Task Force of Mongolia



Source: UNCTAD

2.6 Lead agencies in e-commerce development

Currently, the Ministry of Foreign Affairs (MFA) is in charge of foreign trade and economic issues and responsible for the development and coordination of integrated, mid-term and long-term policies for foreign trade and economic cooperation with international, regional and foreign countries. According to the Change Program, Operational Strategy and Organizational Structure of the Ministry of Economy and Development (MED), this newly-created Ministry has also been put in charge of Mongolia's foreign, national, regional and sectoral trade and economic strategies, policy implementation, and economic cooperation, among others. Since the respective competencies of MFA and MED appear to partially overlap, MED is expected to cooperate with MFA. Neither of the agencies has an explicit mandate to deal with e-commerce yet. During the consultations,

MED admitted the lack of experience and capacity to actively engage in e-commerce governance at the moment, noting the institutional history of leadership of the MFA in this domain.

Overseeing the technical side of the digital economy development agenda and concentrating on infrastructure, communications, and e-governance, the MDDC's Department of Policy and Planning; Coordination of e-development policy implementation (in particular, e-government and public information infrastructure divisions); Communications Policy Implementation Coordination (including Space Communications and Posts and Broadcasting divisions); as well as Cybersecurity Policy Enforcement Agency also appear to be important stakeholders in shaping and coordinated implementation of the future e-commerce policies in Mongolia. Nevertheless,



MDDC has also demonstrated its interest in engaging the e-commerce rulemaking by commissioning a study identifying legal and regulatory barriers to e-commerce in Mongolia, supported by the ADB.⁴²

Finally, the National Trade Facilitation Committee, overseeing facilitation of customs clearance and related logistical solutions and reuniting private and public sector stakeholders⁴³ might be instrumental in elaborating solutions related to simplification of customs procedures applied to goods trade through cross-border e-commerce.

2.7 Availability of e-commerce specific data, including gender and other sub-group disaggregated statistics

Collection of the official statistics in Mongolia is undertaken in accordance with the framework set in the Law on Statistics (1997) and is led by the National Statistics Office (NSO). In the non-exhaustive list of official statistics indicators set by the Law, only one is of relevance to the digital development: “i) communication services revenue, number of telephones and radio”. In its turn, the Bank of Mongolia (BOM) has the following merchant indicators of relevance to the

ICT: “Specialized trade in communication equipment; Communication services; Computer and network services; and Telecommunication services”.⁴⁴

The National Program for Development of Statistics for 2017-2020 was aimed at strengthening the national statistical system, including human resource development, improving statistical data management, introducing advanced ICT solutions, strengthening statistical capacity and enhancing statistical business processing, ensuring gender-disaggregation of the statistics, and encouraging user friendliness. The Program has also provided for several digitalization steps, such as digitalization of integrated statistical database.⁴⁵

The gradual digitalization now allows the collection and presentation of abundant data, including through the NSO dedicated web page (www.1212.mn) and the websites of the ministries and agencies. Nevertheless, better alignment of the indicators with those of interest to a broad range of national stakeholders and development partners (for instance, for the sake of use in varied international rankings) could be beneficial for showcasing the dynamics of Mongolia’s economic development, including its digital economy.

⁴² See 5: Legal Framework, for more details

⁴³ MFA, ‘Order No. A/48 on establishment of the National Trade Facilitation Committee’, 18 August 2017, <https://mfa.gov.mn/documentation/61381>

⁴⁴ Bank of Mongolia, ‘Merchant Activity Class Code’, n.d., <https://www.mongolbank.mn/documents/paymentsystems/merchantcode.pdf>. BOM

⁴⁵ NSO, ‘National Program for the Development of Statistics of Mongolia for 2017-2020’, 2017, <https://en.nso.mn/article/259>. NSO



3. ICT INFRASTRUCTURE AND SERVICES

Mongolia possesses a relatively well-developed ICT infrastructure. By the end of the first half of 2022, Internet penetration accounted for 84.3 per cent of the population. Over 90 per cent of mobile broadband subscribers have access to 3G spectrum, over 70 per cent – to 4G/LTE. In turn, 5G deployment, strongly supported by the Government, is imminent, first in Ulaanbaatar and later in the provinces. While the use of fixed broadband, mostly ensured via fibre optic cable connection, grows, particularly in the cities, it currently stands at one-tenth of mobile broadband's spread. The quality of the connection is ranked rather low while its price is perceived as expensive by a considerable share of the stakeholders, especially in the provinces. Satellite plays an important role in serving the underserved areas where there is a lack of terrestrial network due to geographical conditions. However, the lack of access to the Internet is still reported by households in rural areas.

3.1 Policy framework underpinning the ICT sector

ICT in national strategies

Mongolia's long-term development strategy, Vision 2050, identifies the ICT sector as a priority for bolstering an export-oriented economy. The Vision is divided into three stages (2021-2030, 2031-2040, and 2041-2050) and focuses on the creation of a legal environment for cybersecurity, technology-based innovation and integration, and improvement of the country's capacity for risk management, including through the development of national products and services based on space technologies and establishment of national risk management institutions.

ICT in sectoral strategy

A comprehensive Strategy and Action Plan of the Telecommunications Sector of Mongolia (2019-2024) captures multiple actions to be taken across its four objectives: i) To reduce the digital divide and increase access to advanced telecommunication services; ii) To provide safe and reliable communication services to all Mongolians that respect the interests of consumers and conform to the national interests; iii) To enhance competition and support innovation by increasing the benefits of technological convergence, accelerating the digital transition; and iv) To improve the capacity of the Telecommunications Regulatory Commission.⁴⁶

National legal framework of the ICT

The legal framework underpinning the ICT sector is comprised of multiple laws: Law on Telecommunications (2001), Law on Post (2003), Law on Radio Waves (1999), Broadcasting Law (2019), Law on Special Government Fund (2019), as well as the recently adopted / amended Law on Cybersecurity, Law on Electronic Signatures, Law on Transparency of Public Information, and Law on Protection of Personal Information (all – 2021). They are supplemented by multiple regulations, which could be found in the dedicated sections of the CRC and MDDC web pages, albeit in Mongolian only.⁴⁷ The complexity of the regulatory framework continues to increase.

Relevant international obligations

Mongolia has undertaken partial GATS commitments in the area of Telecommunications upon its accession to the WTO in 2013. Namely, it has fully opened several sub-sectors of non-facilities-based telecommunications: electronic mail, voice mail, online information and database retrieval, electronic data interchange, enhanced/ value-added facsimile services (including store and forward, store and retrieve), code and protocol conversion, and online information and/ or data processing (including transaction processing). No commitments were made in the facilities-based telecommunications services sector. Nor has Mongolia adhered to the Reference Paper on Basic Telecommunications (1996),⁴⁸ which establishes important regulatory and competitive safeguards in

⁴⁶ CRC, 'Strategy and Action Plan of the Telecommunications Sector of Mongolia (2019-2024)', 2018, <https://crc.gov.mn/articles/slug11297/mn>. CRC

⁴⁷ MDDC, 'Legal Framework', 12 June 2021, <https://mddc.gov.mn/eng/%d1%85%d1%83%d1%83%d0%bb%d1%8c-%d1%8d%d1%80%d1%85-%d0%b7%d2%af%d0%b9/>

⁴⁸ WTO, 'Services: Telecommunications - Negotiating Group on Basic Telecommunications', 24 April 1996, https://www.wto.org/english/tratop_e/serv_e/telecom_e/tel23_e.htm



the sector. The Law on Telecommunications (2001) appears to reflect the principles of the Reference Paper to a limited extent only (through the definition of the Universal Service and outlining the core competences of the CRC, notably with respect to safeguarding competition on the market). Further analysis of the regulations is necessary to assess the extent to which the rules support competition on the Mongolian telecommunications market. Among them, the recent Procedures for Special Licenses for Activities in the Telecommunications sector (2021) and Procedures for Creating Fair Competition on Telecommunications Market (2021),⁴⁹ both adopted by the CRC. Better transparency of telecommunication laws and policies, as well as their compliance with the thresholds set internationally, might encourage investments in the sector.

New telecommunication rules, notably, enhancement and expansion of the scope of application of the WTO Reference Paper on Basic Telecommunications – to cover value-added communications as well, are currently being negotiated in the WTO JSI on E-commerce, which Mongolia co-sponsors. Raising awareness of these rules among public and private sector stakeholders could help Mongolia to shape its relevant position in the negotiations and to prepare for eventual future implementation.

Annex 5 to the Mongolia-Japan EPA, devoted to telecommunications services, represents a complex blend of rules and appears to apply to both basic and value-added telecommunications. On one hand, it integrates and adds details to the rules reflected in the WTO Reference Paper on Basic Telecommunications (on interconnection, competition, independent regulator, universal service, allocation of scarce resources, transparency, among others). On the other hand, it also integrates new rules, for instance, on data flows, resale of telecommunication services and use of international standards. The state of compliance of Mongolia with the above requirements, or measures taken to achieve it, needs a separate dedicated assessment.

3.2 Institutional framework relevant to ICT

The MDDC was established in 2021 as the successor to the Communications and Information Technology

Authority (CITA) with the mission of developing an electronic nation based on knowledge and intelligence. MDDC's operational priorities in its core competence areas are communication, information technology, space, broadcasting, post, radio frequency and policy of universal service duty. The Ministry is called to ensure the readiness of the basic infrastructure of ICT to meet the growing information and service needs of the economy and society.

The CRC is responsible for creating conditions for efficient and fair competition in the communication market for all types of business entities and citizens. Its main objectives are to facilitate access to safe, reliable, and affordable ICT networks, as well as to support innovation and expansion in ICT. Within its powers, the CRC is responsible for: the state policy in the area of communications; licensing of telecommunications service providers / establishment of condition of delivery of communication services without a license; resolution of disputes between the communications license holders and/or with their customers; developing communications standards and monitoring their implementation; certification of ICT equipment; ensuring network interconnection; approving tariffs for telecommunication services and regulatory service fees; safeguarding fair competition on Mongolia's telecommunications market; implementation of the Universal Service obligation; developing the integrated numbering plan and the conditions for number portability; approving domain name registration procedures and others.

The Information Security branch of the General Intelligence Agency (GIA) is responsible for communications security of all Mongolian government agencies. It encompasses cryptography, emission, physical, transmission, and cybersecurity of government institutions and critical information networks to pursue the tasks identified in Art. 3.6 (Information Security) of the National Security Concept of Mongolia.⁵⁰

The Information Technology Department of the Cabinet Secretariat of Government of Mongolia is in charge of implementing E-Mongolia measures and ensuring digitalization of government services, including through business process re-engineering.

⁴⁹ CRC, 'Procedures for Creating Fair Competition on Telecommunications Market', Communications Regulatory Commission of Mongolia, 9 March 2021, <https://www.crc.gov.mn/storage/PDF/2021/2021-togtool57.pdf>

⁵⁰ MFA, 'National Security Concept of Mongolia', Ministry of Foreign Affairs of Mongolia, accessed 1 December 2022, <http://mfa.gov.mn/en/documentation/55280/>. MFA.



A non-governmental organization, MNCERT/CC provides attack resolution, cyberlearning, cyber awareness-raising training, updates on the latest developments and advisory services in cybersecurity, among others. MNCERT/CC is a member of the Asia Pacific Computer Emergency Response Team (APCERT) and works with national Cyber Emergency Response Teams (CERTs) of 20 countries and CERTs of private organizations. MNCERT/CC has established a memorandum of cooperation with the School of Information and Communication Technology of the University of Science and Technology, the Telecommunications Regulatory Committee, the Capital Information Technology Department, and the National IT Park.

3.3 Access to digital devices

Mongolia is a net importer of ICT equipment and has not yet joined the WTO's Information Technology

Agreement (ITA) or the ITA Expansion (ITA II). The access to digital devices remains uneven. Access to mobile phones is almost universal, reaching 94.3 per cent of Mongolians, according to the ITU (Table 3). Ninety-three per cent of mobile subscribers use smart devices according to the CRC (Figure 16).

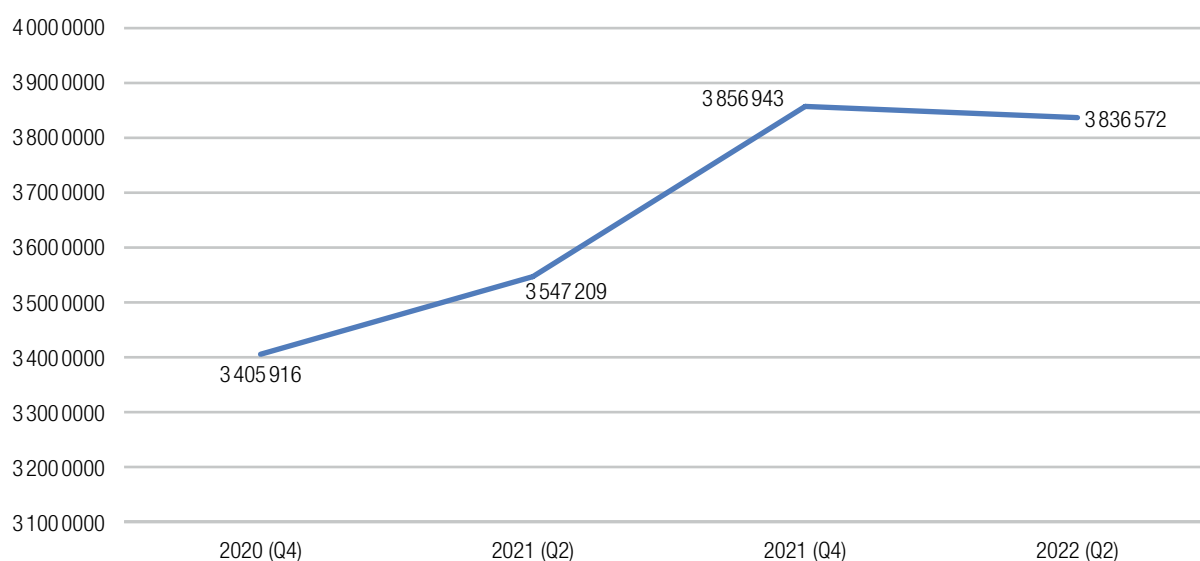
However, barely one-third of the population (33.3 per cent) has access to computers, according to the ITU. Despite a particularly beneficial de minimis regime applicable to personal computer imports by individuals for private use, the share of computers in the country remains low (Table 3). Although a computer is not a precondition for accessing the Internet or shopping online, limited access directly affects the share of purchases made with this type of device, especially in rural Mongolia, not to mention the development of certain ICT skills.

Table 3: Percentage of households with access to digital devices (percentage of population)

Device	2018	2021
Mobile phone	94.4	94.3
Computer	29.8	33.3

Source: ITU

Figure 16: Number of smart devices used



Source: CRC



3.4 Mobile cellular and broadband penetration

According to the CRC, the ICT networks in Mongolia cover 47,983 km as of the second quarter of 2022. They are operated by six providers: National Communications Network LLC (NETCO) (41 per cent); Mobicom Networks LLC (27 per cent); Skynetworks LLC (26 per cent); Zhemnet LLC (5 per cent); MT Networks (1.5 per cent); Iron Tower LLC (0.3 per cent); and STBS LLC (0.3 per cent). In addition, a 1,400-kilometer fibre network along the country's primary north-south railway is owned by Railcom, a subsidiary of Mongolian Railway. This network is jointly operated by Railcom and NETCO.⁵¹

Mongolia is interconnected with the world through the overland terrestrial cable system ERMIC (Europe-Russia-Mongolia-China) Eurasian terrestrial cable. Multiple Russian and Chinese operators have partnered with the Mongolian operators to provide Europe-to-Asia connectivity. There are international fibre connections at Sukhbaatar on the northern border with the Russian Federation, and Zamiin-Uud on the southern border with China.⁵²

In terms of support infrastructure, power generation could be made more efficient, reliable and sustainable.

Due to Mongolia's traditional nomadic lifestyle, severe weather conditions, and sparsely distributed population in its vast territory, Ulaanbaatar and other provinces still experience occasional power outages.⁵³ Over 80 per cent of the total population is connected to a centralized electricity system. The remaining 20 per cent, usually herders in remote locations, have limited electrical access, often relying on self-generated electricity, for example, using solar panels.

The State Policy on Energy (2015-2030) aims to increase consumers' access to reliable power sources, including renewable energy, which could help reduce reliance on imported electricity.

Mobile telephony use in Mongolia reached 140.0 subscriptions per 100 inhabitants in 2021, considerably above the world average of 115.1 subscriptions per 100 inhabitants (Table 4). However, there are significant differences between Ulaanbaatar and the rest of the country (Figure 17). According to the CRC, 71 per cent of the current Mongolian mobile-cellular telephone subscriptions are prepaid, 20 per cent are post-paid and nine per cent are blended (containing both pre- and post-pay elements). There is a trend towards an increase in post-paid and blended options, possibly due to the use of dual (or multiple) SIM cards.

Table 4: Headline market statistics

Indicator	Mongolia			World Average
	2010	2016	2021	2021
Population (millions)	2.7	3.0	3.3	...
Mobile-cellular subscriptions per 100 inhabitants	92.9	111.2	140.0	115.1
Fixed broadband penetration per 100 inhabitants	2.8	7.5	11.3	18.2
Active mobile-broadband subscriptions per 100 inhabitants	7.5	80.2	116.2	86.2
Internet usage (% of population)	10.2	22.3	84.3	84.1

Source: ITU, *World Telecommunication/ICT Indicators Database*

⁵¹ CRC, 'Key performance indicators of communications licensed service providers for the first half of 2022', Communications Regulatory Commission of Mongolia, 22 September 2022, <https://crc.gov.mn/articles/2022-ony-ehnij-hagas-zhlijin-ndsen-z-lelt-d/mn>.

⁵² ESCAP, 'Research Report on ICT Infrastructure Co-Deployment with Transport and Energy Infrastructures in Mongolia', 13 April 2020, 15, <https://www.unescap.org/resources/research-report-ict-infrastructure-co-deployment-transport-and-energy-infrastructures>. ESCAP, 15

⁵³ ESCAP, 'Research Report on ICT Infrastructure Co-Deployment with Transport and Energy Infrastructures in Mongolia', 18. Mongolia's energy infrastructure system consists of four unconnected energy systems. The power generation includes a combined heat and power plant at Dalanzadgad, as well as diesel generators and renewable energy sources.



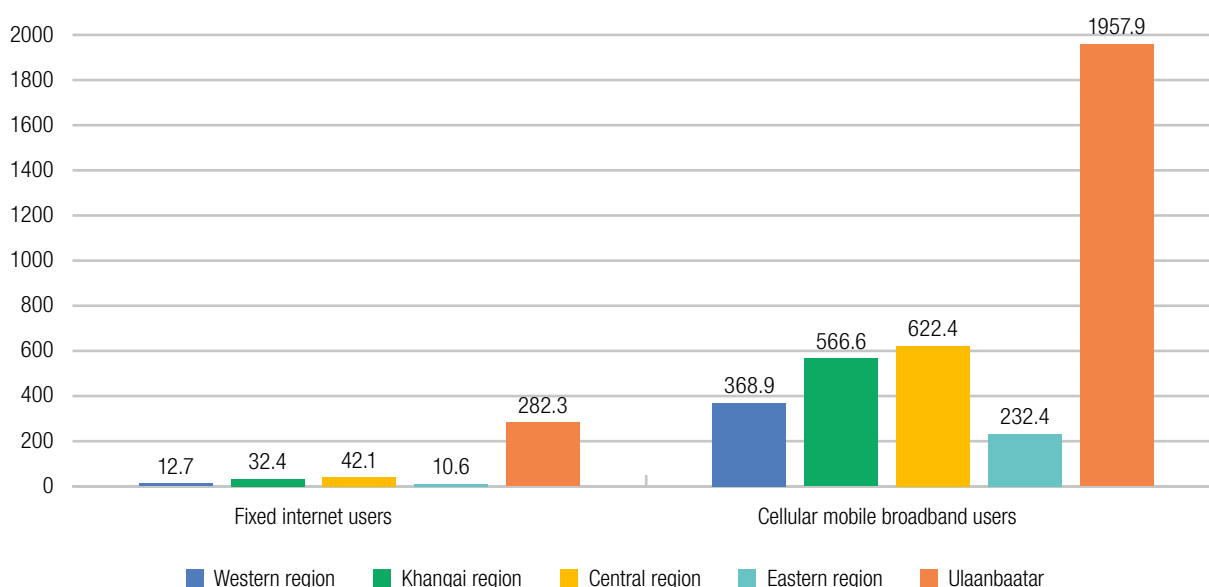
At the end of the second quarter of 2022, the number of Internet users increased by 3.4 per cent or 136.6 thousand users compared with the same period of the previous year, accounting for 4.1 million SIM cards or subscriptions, surpassing the total ownership of mobile telephony in general and certainly the population of Mongolia, as some consumers may have more than one subscription (double counting).⁵⁴

Mongolia's mobile broadband subscribers outnumber fixed broadband subscribers by about 10 times, reaching 3,860,500 users in the second half of 2022. Nonetheless, the prevalence of mobile broadband is also concentrated in Ulaanbaatar (Figure 17). Since 2017, broadband mobile subscribers have increased

by slightly less than a million. Ninety-one per cent of subscribers have access to 3G, whereas 73 per cent have access to 4G/LTE technology. Mobile data usage grew by 36 per cent between June 2021 and June 2022, largely owing to 4G/LTE subscribers.

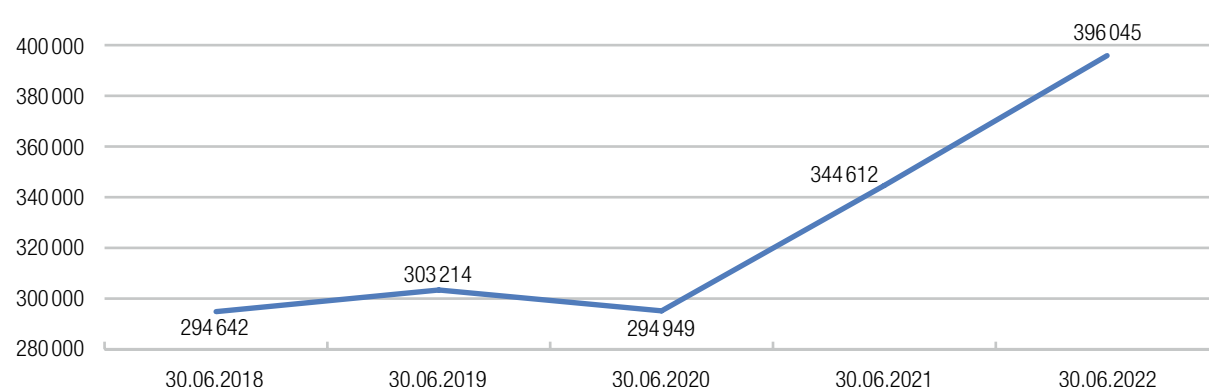
The number of fixed broadband subscriptions is still below the world average and accounts for 11.3 per cent. The use of fixed broadband grows however, particularly among households that represent 94 per cent of fixed broadband users. Seventy-three per cent of active fixed broadband users are concentrated in Ulaanbaatar. The CRC reported that, as of the second quarter of 2022, the number of active contractual fixed Internet users reached 396,045 (Figure 18).

Figure 17: Number of internet users, by region and capital city, 2nd quarter 2022



Source: NSO

Figure 18: Active contractual internet users, 2nd quarter 2022



Source: CRC

⁵⁴ NSO, 'News Release', 11 August 2022, https://www2.1212.mn/BookLibraryDownload.aspx?url=Communication_2022_I-VI_en.pdf&In=En



Fibre optic cable, with 94 per cent of broadband users, is the most popular technology for establishing a fixed internet connection, followed by xDSL (three per cent); Wi-Fi (two per cent) and Wi-Max (one per cent) (CRC). Sixty-six per cent of users benefit from the speed of 10 Mbits or more, 4.2 per cent from the speed of 5-10 Mbits, 25.7 per cent from the speed of 2-5 Mbits, while the remaining three per cent from the speed of 256-1024 Kbits.

Both national and sectoral strategies include objectives addressing further deployment of broadband in Mongolia. The preparation to the 5G deployment, which appears to be strongly prioritized by the Government, included approval of CRC Radio frequency band allocation, regulation, and technical requirements. The 5G deployment is expected to proceed on a competitive basis, commencing in Ulaanbaatar, where the providers would need to start operation within one year from licensing, and then proceeding to the other provinces, within the three years from the licensing. Tax/duty breaks, and

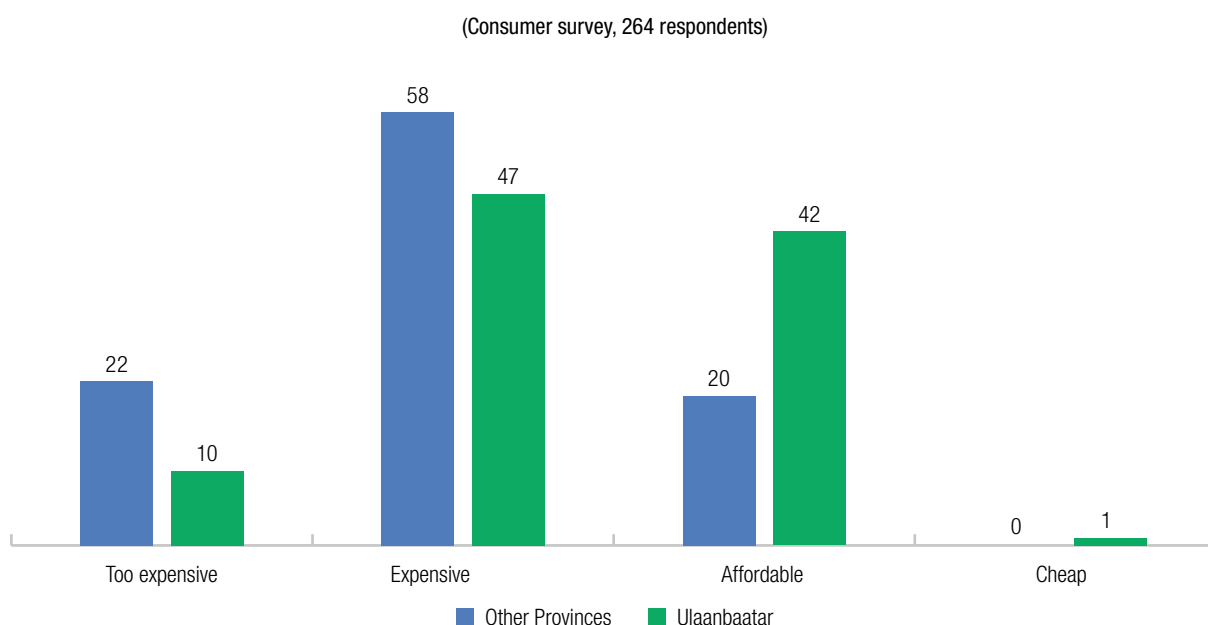
other incentives might be offered, but are yet to be determined.⁵⁵

Quality of the connection and data (reliability, affordability, latency, speed)

The 2022 Digital Quality of Life index (DQL) ranks Mongolia 90 out of 117 (27 out of 34 in Asia)⁵⁶. According to the index, Internet in the country is rather affordable, nevertheless the connection speed and stability are insufficient. According to SpeedTest, both download and upload speed and latency differences between fixed and mobile broadband in Mongolia remain significant, in favor of the fixed broadband connection⁵⁷.

The majority of consumers who participated in the consumer survey (74.62 per cent) reported spending more than 30,000 Mongolian Tugrik (MNT) on Internet fees monthly, and a similar share (69.32 per cent) found the cost of connecting to the Internet expensive. This was particularly true for stakeholders outside of Ulaanbaatar (Figure 19).

Figure 19: How do you rate the Internet connection fees (ADSL, mobile)? (%)



Source: UNCTAD

⁵⁵ CRC, 'Allocation and regulation of radio frequency bands for use in 5th generation telecommunications technology', Communications Regulatory Commission of Mongolia, 6 July 2022, <https://crc.gov.mn/articles/h-d-ig-nt-holboony-5-dah-eijn-tehnologid-ashiglah-radio-davtamzhijn-zurvasyn-huvaarilalt-zohicuulalt/en>. CRC

⁵⁶ Surfshark. 2022 Digital Quality of Life index. Accessed on 5 March 2023, <https://surfshark.com/dql2022>

⁵⁷ SpeedTest. Speedtest Global Index, Mongolia. Accessed on 5 March 2023, <https://www.speedtest.net/global-index/mongolia#mobile>



Competition between telecommunications services providers

Survey participants have not highlighted competition as a major concern. Indeed, retail markets appear to be competitive and private companies are allowed to make commercial investment decisions. However, there might be certain competition concerns at the wholesale level.⁵⁸

The conditions for the sharing of active and passive infrastructure are set in the CRC Resolution No. 52 on Infrastructure sharing (2014)⁵⁹. The Resolution is applicable to network operators with a special Class A license to build information communication networks and infrastructure in the territory of Mongolia, including those owned by the state (i.e., NETCO and MT Networks). Nonetheless, according to the stakeholders (finance providers, telecommunications operators, service providers, analysts) surveyed by the EBRD, the infrastructure sharing is not fully implemented, because access prices for the wholesale rental of

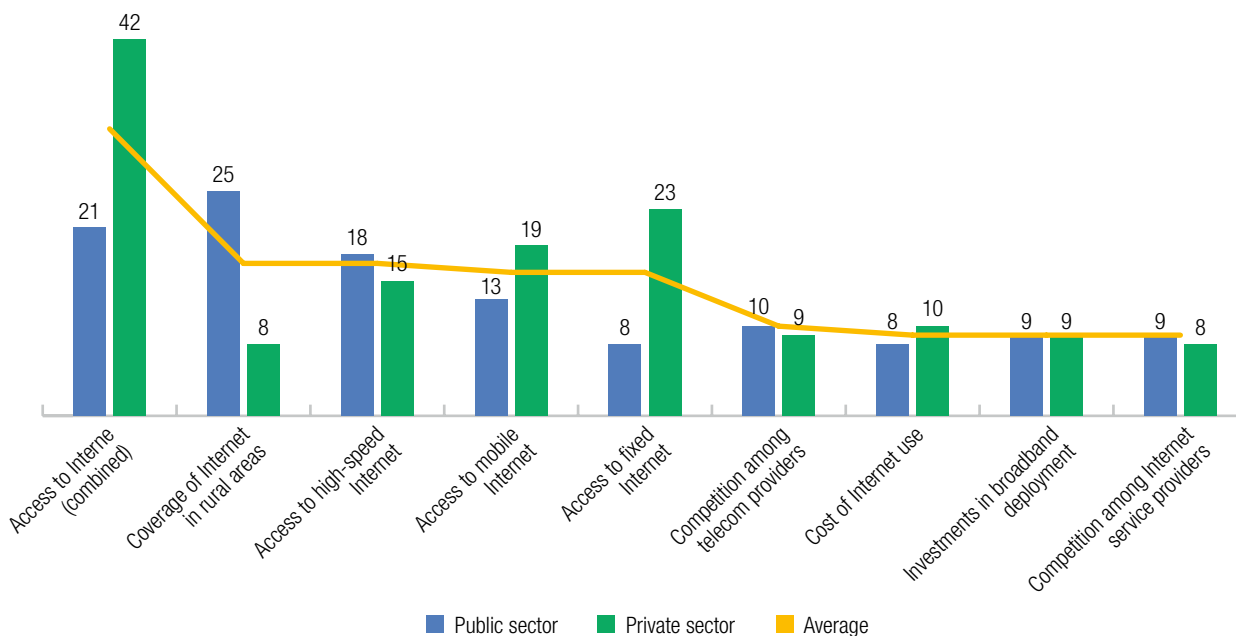
capacity are deemed too high. As an alternative, the new infrastructure needs to be “build around” the existing one along the sub-optimal routes. Either of the above solutions makes the resulting transmission network more expensive than it could otherwise have to be, discouraging private investments in the sector.

3.5 Priority actions

Public and private sector survey respondents identified the most pressing issues in ICT infrastructure. The private sector prioritizes ensuring access to the Internet (both mobile and fixed), while the public sector chose Internet coverage and speed in the rural areas (Figure 20). The data obtained through the NSO Mongolian Household Economic Survey in 2021 confirms the need to prioritize Internet access (and use). Some 65 per cent of survey respondent households indicated not having Internet access at home, while 40 per cent of respondents reported that no member of their household uses the Internet.

Figure 20: Priority actions in the ICT domain (%)

(Survey respondents: public sector, 94 respondents and private sector, 31)



Source: UNCTAD

⁵⁸ The remainder of this section is largely based on EBRD, 'Investor Perceptions and the Broadband Sector (Mongolia)', 2021, 7, <https://www.ebrd.com/documents/ogc/broadband-sector-mongolia.pdf>. EBRD, 7

⁵⁹ This instrument allows for the sharing of both passive and active infrastructure: engineering buildings, polls, wells and canalization, distribution cabinets and boxes, towers, sites, power sources, ventilation system, alarm protection system, stands, digital channels, user network, and transmission network equipment and its elements.



Financing of the ICT sector projects

The ICT Infrastructure projects in Mongolia are subject to varied funding solutions, which include budgetary outlays, universal service obligation funding (USOF),⁶⁰ investment funding (both foreign and domestic), as well as the PPP arrangements. However, a lack of PPP projects, coupled with limited sovereign borrowing capacity, insufficient coordination, inadequate planning and budgeting capacity, and regulatory complexity, have led to substantial investment gaps.⁶¹

The USOF⁶² subsidises operators who build broadband infrastructure in otherwise unprofitable areas (via a competitive bidding process). Investment projects and location are defined individually, using priorities set by the government. These priorities are influenced by the number of school age children in an unserved area. However, according to the EBRD, transparency regarding prioritization and allocation processes might be improved.

The USOF implemented 117 projects and programs between 2007 and 2020. Most of those projects were focused on the creation of a favourable environment to deliver ICT services to rural areas, establishing and expanding broadband networks, as well as improvement of the ICT skills for rural population.

Investment inflows into Mongolian ICT sector remain stable yet limited as compared to the investment in the other economic sectors.⁶³ The NSC reported that MNT 269,821.5 million were invested (internal, including the state budget, and external sources combined) in the sector in 2021 (1.7 per cent of the total amount of investment made in the same year). Out of this, \$US 7.34 million (slightly less than 0.3 per cent of the total inflows) were foreign direct investments. According to the EBRD, the main barriers to investment in the telecommunications sector include the regime

governing construction permits and high cost of infrastructure sharing or alternative arrangements.⁶⁴

ICT standardization / cross-border infrastructure interoperability

The Law on Standardization, Technical Regulation and Accreditation of Conformity Assessment of Mongolia (2018) provides that the proposed technical regulations shall use international and regional standards if those exist. A step towards transparency in elaboration of the ICT standards was made by the MDDC. The proposed standards are published on its website allowing interested stakeholders to submit their comments by e-mail during two-month period.⁶⁵ The list of standards published on the website (for which the consultation period has already ended) includes some ISO and BSI standards. Nevertheless, a more ample inquiry into the state of standards of relevance to e-commerce used in Mongolia is necessary.

Satellite telecommunications

Satellites play an important role in connecting Mongolia to global networks and serving the unserved areas, for instance, the northwestern and southeastern parts of Mongolia, where there is a lack of terrestrial network given the geographical conditions. Current satellite services include satellite broadband Internet and VPN, which are of particular relevance to e-commerce development. The CRC issued the Regulation of Space Mobile Communications Services, which defines licensing procedures, relevant frequencies, technical requirements for the equipment to be used, customer service obligations, among others.⁶⁶ In 2022, the MDDC has also adopted "Guidelines for the Use of Low-Orbit Satellites". The document established the conditions for the use of low-orbit satellite networks in the transmission network for emergency and universal service purposes.

⁶⁰ According to Art. 3.1.8 of the Law on Telecommunications (2001), "universal service obligation" means delivery of essential postal and telecommunication services to remote areas and underserved populations at a reasonable price within the framework of public policy. The Law on Special Governmental Funds (2019), expanded the above definition, adding to it establishing new networks, and introducing, expanding, and modernizing advanced telecommunication technologies.

⁶¹ EBRD, 'Mongolia Country Strategy 2022-2027'; UNDP, 'Development Finance Assessment for Mongolia', 13 June 2018, <https://www.undp.org/mongolia/publications/development-finance-assessment>

⁶² The USOF has been established by the Regulation "On Composition and Spending of Universal Service Obligation Fund" (2006, revised in 2009). Sources contributing to the USOF are donations, loans, and grants, two per cent charge levied on the income of telecommunication services companies, as well as other assets. Procedures for Establishment and Expenditure of Public Service Obligation Fund were elaborated in 2020 mandating to finance the projects and measures approved by the MDDC. USOF, 'Regulation No. 151 of the Government of Mongolia Regarding Approval of Procedures (Universal Service Obligation Fund)', 20 May 2009, <http://www.usof.gov.mn/wp-content/uploads/2018/03/law3.pdf>

⁶³ To note, these inflows might range beyond the investments into infrastructure, touching upon the other ICT-related activities / businesses.

⁶⁴ EBRD, 'Investor Perceptions and the Broadband Sector (Mongolia)', 2021, 7, <https://www.ebrd.com/documents/ogc/broadband-sector-mongolia.pdf>. EBRD, 7

⁶⁵ CRC, 'Communications Regulatory Commission of Mongolia', Communications Regulatory Commission of Mongolia, accessed 1 December 2022, https://www.crc.gov.mn/pages/show/standart_new/mn. CRC

⁶⁶ CRC, 'Space Mobile Communication Radio Frequency Regulation', 4 January 2016, <https://www.crc.gov.mn/storage/PDF/2014/2014-31.pdf>. CRC



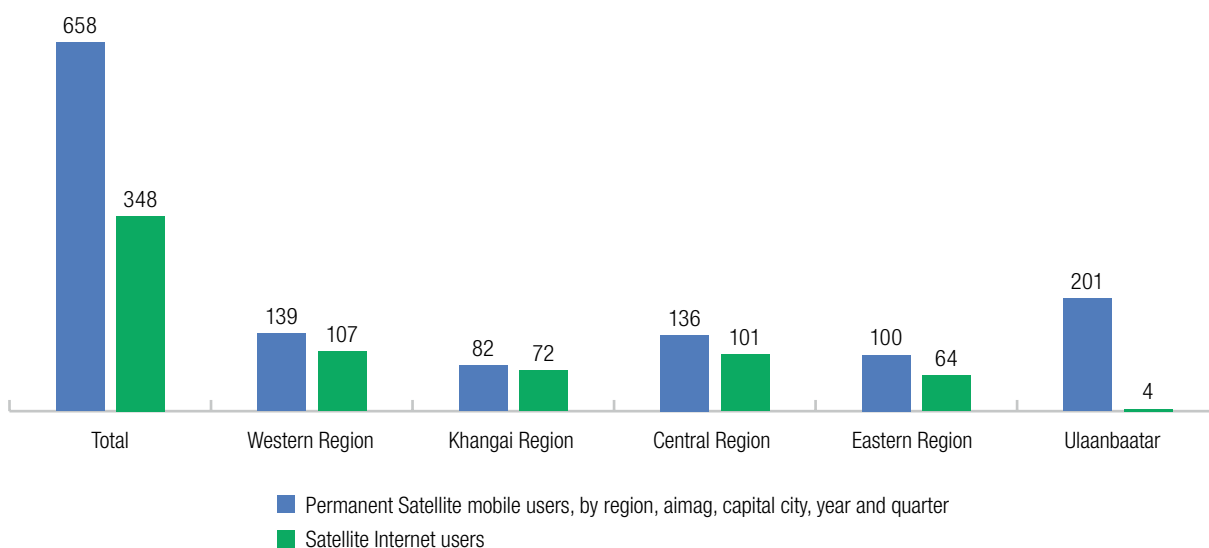
A total of six Mongolian telecommunication companies use a 444 Mhz frequency band for the provision of satellite mobile services. The following satellites are being used by Mongolia: Intelsat 906 I; Intelsat 20 (Ku); and Apstar 5 (Ku). Moreover, the Mongolia mobile operator Unitel Group secured an option to be the first in the nation to employ satellite connectivity services from Lynk Global.⁶⁷ Lynk's technology allows standard mobile phones, without any changes in hardware or software, to be connected virtually anywhere on the globe using low-earth-orbit satellites.

The launch of a Mongolian communication satellite is also being considered and is noted among the

ICT policy objectives. Mongolian National Satellite Project was approved in 2012 and the National Satellite Council created in 2013 to oversee the implementation of this project.⁶⁸ National capacity in space satellite technologies is being built, notably relying on the assistance of Japan's Kyushu Institute of Technology.⁶⁹

Relevant statistics suggest that, in the provinces, satellite connection is widely used for Internet access (Figure 21). In contrast, in Ulaanbaatar, such use is almost inexistent, given the other existing means to ensure Internet connectivity.

Figure 21: Permanent satellite mobile users and satellite internet users, by the region, 2021



Source: NSO

⁶⁷ Chris Donkin, 'Unitel Eyes Mongolia Coverage Boost with Satellite Deal', *Mobile World Live (blog)*, 3 November 2021, <https://www.mobileworldlive.com/featured-content/top-three/unitel-eyes-mongolia-coverage-boost-with-satellite-deal/>; James Barton, 'Unitel Signs Satellite Deal with Lynk for Coverage in Mongolia', *Developing Telecoms*, 4 November 2021, <https://developingtelecoms.com/telecom-technology/satellite-communications-networks/12246-unitel-signs-satellite-deal-with-lynk-for-coverage-in-mongolia.html>

⁶⁸ Space and Radiocommunication Division, 'Satellite Communication in Mongolia', https://www.itu.int/en/ITU-D/Regional-Presence/AsiaPacific/Documents/Events/2015/October-ISS-2015/Presentations/S4_Batbayar_Vandansambuu.pdf

⁶⁹ Kyushu Institute of Technology, 'BIRDS Project', 2017, <https://birds1.birds-project.com/>; Turtogtokh Tumenjargal et al., 'Development Status of a First Domestically-Built Satellite Project of Mongolia', *IAF Digital Library*, 2021, <https://dl.iafastro.directory/event/IAC-2021/paper/61881/>



4. TRADE LOGISTICS AND TRADE FACILITATION

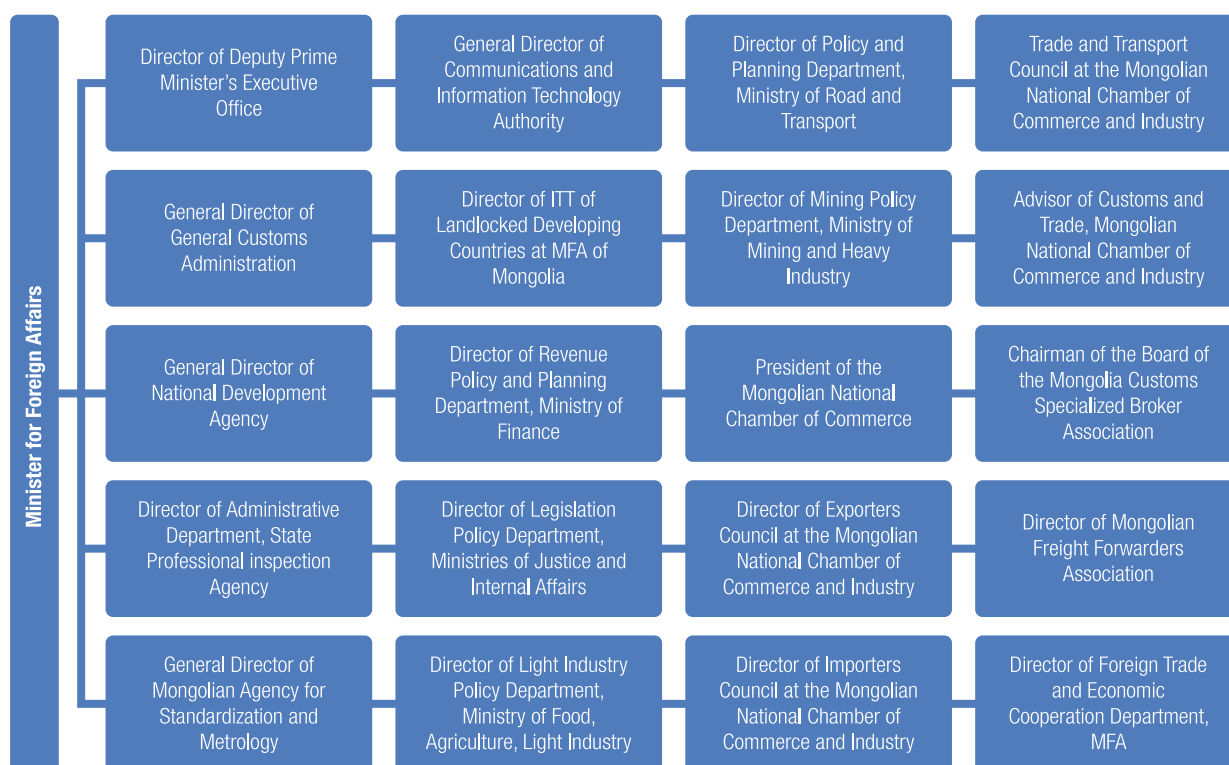
Trade logistics and trade facilitation remain among the major challenges in Mongolia despite the long history of measures aimed at improving the relevant infrastructure and processes, and the diversified technical assistance offer from the development partners. The current crisis aggravated by COVID-19 lockdown in China and restrictions derived from the sanctions applied to Russia are exacerbating the existing challenges. The competitiveness of the transport services sector of Mongolia’s economy, challenged by the large territory partially served by the ageing infrastructure, is further undermined by the absence of international competition. Awaiting gradual overall progress in the area, the Government of Mongolia might consider resorting to narrower, targeted measures facilitating transport and customs clearance of small packages.

4.1 Trade facilitation governance and strategies

Recognizing the importance of trade facilitation measures, Mongolia has formed the National Trade Facilitation Committee (NTFC) chaired by the MFA in 2017 (Figure 22). The NTFC developed a Strategic

Plan and the National Road Map on Trade Facilitation for the period 2018-2022, designed to support the implementation of the relevant provisions of the WTO TFA and other commitments and best practices in the area of trade facilitation.

Figure 22: Composition of National Trade Facilitation Committee of Mongolia



Source: WTO⁷⁰

⁷⁰ WTO, 'Implementation of the TFA by Mongolia', <https://tfadatabase.org/uploads/thematicdiscussiondocument/Mongolia.pdf>. WTO



4.2 Trade facilitation performance of Mongolia

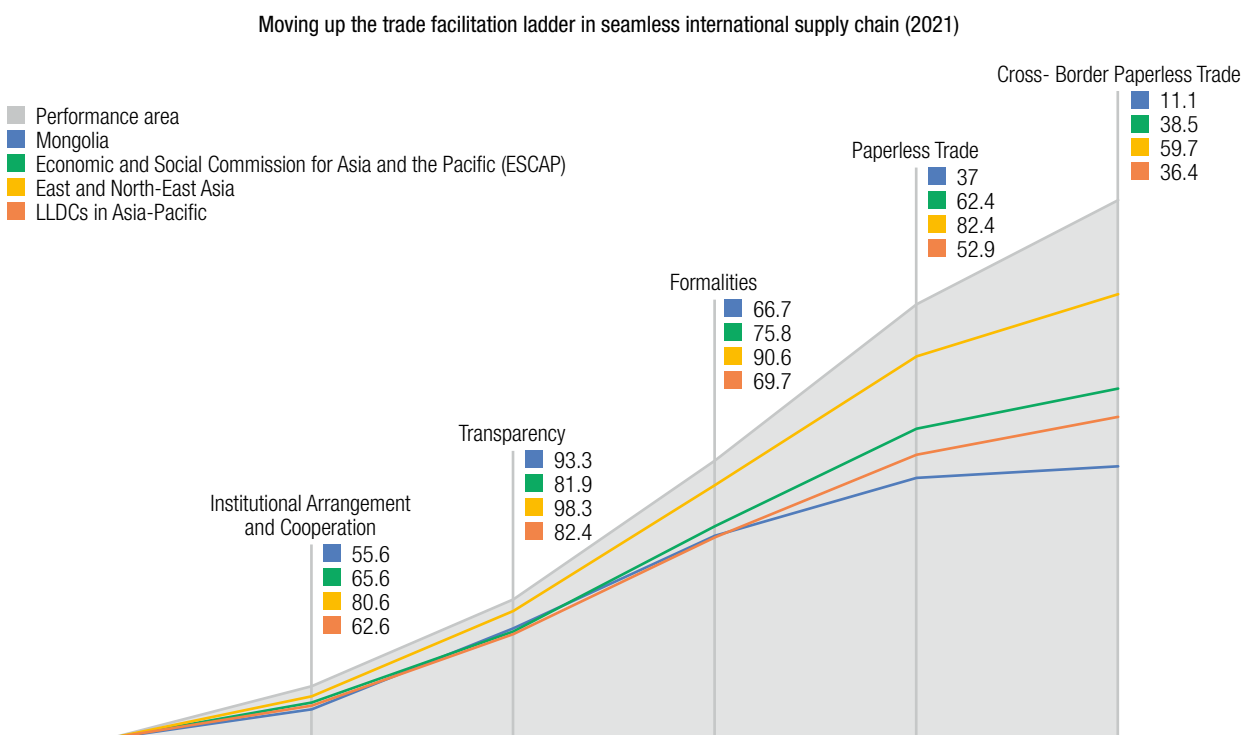
Due to its landlocked geographic situation, Mongolia attaches great significance to trade facilitation issues, including transit transportation and border cooperation with neighbouring countries, as well as streamlining and simplifying procedures and regulations at the border.⁷¹

Mongolia’s performance as measured by the latest 2021 UN Global Survey on Digital and Sustainable Trade Facilitation, resulted in the overall score of 50.54 per cent in 2021 compared 33.33 per cent in 2015, notably due to advancements in transparency, paperless trade, cross-border paperless trade, and

formalities (Figure 23).⁷² The scores appear to be somewhat lower than the regional and, occasionally, Asia and Pacific LLDCs group averages mostly due to no or insufficient implementation of the Authorized Economic Operator (AEO) scheme and paperless trade measures, both national and cross-border.⁷³

According to ESCAP, it was estimated that if Mongolia implements the WTO TFA together with cross-border paperless trade measures, it could achieve trade cost reductions of 30 per cent, instead of only about 10 per cent if it aims at basic compliance with the TFA. This would amount to additional trade cost savings of more than US\$ 133 million per year.⁷⁴

Figure 23: Mongolia’s trade facilitation performance according to the UN Global Survey on Digital and Sustainable Trade Facilitation



Source: UN Global Survey on Digital and Sustainable Trade Facilitation⁷⁵

⁷¹ WTO, 'Trade Policy Review - Mongolia 2021', 20 January 2021, sec. 2.2, https://www.wto.org/english/tratop_e/tpr_e/s406_e.pdf. Trade Policy Review Body, sec. 2.2
⁷² UN, 'Trade Facilitation and Paperless Trade (2021)', UN Global Survey on Digital and Sustainable Trade Facilitation, 2021, <https://www.untsurvey.org/economy?id=MNG>. UN
⁷³ UN, 'Trade Facilitation and Paperless Trade (2021)', loc. UN Global Survey on Digital and Sustainable Trade Facilitation, Mongolia, comparison across years. UN, loc. UN Global Survey on Digital and Sustainable Trade Facilitation, Mongolia, comparison across years.
⁷⁴ ESCAP, 'Digital Trade Facilitation in Asia and the Pacific, Studies in Trade, Investment and Innovation 87', 22 December 2017, <https://www.unescap.org/publications/digital-trade-facilitation-asia-and-pacific-studies-trade-investment-and-innovation-87>. ESCAP
⁷⁵ UN, 'Trade Facilitation and Paperless Trade (2021)'. UN



Progress on the implementation of the WTO Agreement on Trade Facilitation (WTO TFA)

Achieving full compliance with the TFA obligations is crucial for Mongolia's performance, including in e-commerce. Since the WTO TFA entered into force, Mongolia has made significant progress. As of December 2022, 79.8 per cent of the TFA measures were notified to the WTO as implemented.⁷⁶ However, according to the assessment made by the MGCA, some among the measures so notified feature implementation gaps. For example: Art. 1–4 – Notifications (A); Art. 4 – Procedures for Appeal or Review (A); Art. 10.1 – Formalities and Documentation Requirements (A); Art. 3 – Inquiry Points (B); Art. 5.3 – Test Procedures (B); Art. 6.3 – Penalty Disciplines (B); Art. 12 – Customs Cooperation (B); Art. 1.2 – Information Available through Internet (C); Art. 3 – Advanced Ruling (C); Art. 7.4 – Risk Management (C); 7.6 – Establishment and Publication of Average Release Times; and Art. 7.7 – Trade Facilitation Measures for Authorized Operators. To the contrary, expedited shipments – a category C measure provided in the TFA Art. 7.8 and not yet notified to the WTO as implemented, is already applied according to the referred assessment.

The five measures yet to be implemented or notified are: TFA Arts. 7.5 – Post-clearance A; 7.8 – Expedited Shipments; 8 – Border Agency Cooperation; 10.3 – Use of International Standards; and 10.4 – Single Window (all – Category C measures).

Several development partners are supporting the government to implement some of these measures:

- The ongoing Regional Improvement of Border Services (RIBS) project of ADB contributes to increasing the efficiency of the trade processes through rehabilitation and provision of modern equipment in select border crossing points, upgrading the Customs Automated Information System (CAIS) and the preparatory work for the establishment of a single window system.⁷⁷

- The implementation of the Post Clearance Audit (PCA) in accordance with WCO standards and with Article 7.5 of the TFA is supported by the WCO with the financial support of the Customs Cooperation Fund of Japan (CCF/Japan).⁷⁸
- A cooperation aimed at strengthening the application of risk management in customs control was recently established with SECO-WCO Global Trade Facilitation Programme (GTFP), which will run an LTI (Light Touch Intervention) focused on aiding the review of the current risk management framework and Customs control strategy, developing a risk-based control strategy that is aligned with the WCO instruments and tools and international best practices in risk management in the country.⁷⁹

In 2017-2021, trade facilitation activities were also supported by the EU-TRAM project, which was successfully concluded.⁸⁰ A request for the second phase of the project has been submitted by Mongolia.

4.3 Paperless trade readiness of Mongolia

Different government entities in charge of cross-border processes in Mongolia require the same data, but traders need to submit such information to every government agency anew. Adding to the gaps in physical infrastructure, these also reduce the competitiveness of Mongolia from the perspective of the international transit. Aimed at streamlining this aspect of customs clearance procedures, the National Single Window project has been under development since 2005 with the dedicated interagency steering committee first formed in 2011. While the conceptualization of the single window appears to be advanced, its actual implementation is still in preparatory phases and is expected to be finalized by 2025.

In 2019, Mongolia underwent the ESCAP Readiness Assessment for Cross-border Paperless Trade, which highlighted the progress in the area of paperless trade

⁷⁶ WTO, 'Trade Facilitation Agreement Database (TFAD)', sec. Mongolia, accessed 1 December 2022, <https://tfadatabase.org/>. WTO, sec. Mongolia

⁷⁷ MGCA, 'Mongolian Customs' (19th Meeting of the CAREC Customs Cooperation Committee, Virtual Meeting, 9 August 2020), <https://www.carecprogram.org/uploads/CCC-04-Mongolia.pdf>

⁷⁸ WCO, 'PCA Diagnostics Mission conducted in Mongolia', 8 September 2022, available at: <https://www.wcoomd.org/ru-ru/media/newsroom/2022/september/pca-diagnostic-mission-conducted-in-mongolia.aspx>

⁷⁹ WCO, 'The SECO-WCO Global Trade Facilitation Programme (GTFP)', World Customs Organization, accessed 1 December 2022, https://www.wcoomd.org/en/topics/capacity-building/activities-and-programmes/cooperation-programmes/seco_wco-gtftp.aspx. WCO and SECO

⁸⁰ EU, 'Trade Related Assistance for Mongolia (TRAM)', EU TRAM project, accessed 1 December 2022, <http://tram-mn.eu/>. EU



and made recommendations. Some of them, such as joining the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific (CPTA) and the UN Convention on the Use of Electronic Communications in International Contracts, the elaboration of the new Customs Law and advancements in preparation to the introduction of the Single window, have been implemented.⁸¹

4.4 Participation of Mongolia in international treaties and arrangements of relevance to trade facilitation and paperless trade

Besides the TFA and CPTA, Mongolia has joined a considerable number of international treaties and arrangements tackling different aspects of border clearance, transport, transit and logistics.⁸² The Mongolia-Japan EPA also contains a short chapter devoted to customs procedures and trade facilitation, overall shaped in line with the common portfolio of the relevant disciplines.⁸³

Moreover, to date, the MCGA has signed intergovernmental agreements and Memoranda of Understanding regarding cooperation on customs matters and mutual assistance with the Russian Federation, China, Hungary, the Republic of Korea, USA, UK, Kazakhstan, Bulgaria, Czechia, Türkiye, Ukraine, Kyrgyzstan, India, Vietnam, Nepal and Belarus. The MCGA is continuously working to strengthen the bilateral cooperation with the customs organizations of other countries in order to learn from their best practices, build human capacity and jointly organize training and seminars for border control officers.⁸⁴

E-trade facilitation measures of customs clearance

Since 2010, the Customs Automated Information System (CAIS) has been used as the main system for the electronic clearance of goods. The system allows customs clearance 24/7 and is accessible through an application. In 2016, a project was launched to build a new CAIS and integrate it into a single window. Nevertheless, the return to ASYCUDA is planned soon, at least for the traffic in transit. Paperless exchange of the customs documents with Russian and Chinese customs is being implemented.⁸⁵ The new UNCTAD-EBRD project for Mongolia Customs digitalization, signed in October 2022, is aimed at identifying gaps in customs automation through a feasibility study, as well as at delivering innovative customs ICT tools for e-borders and e-commerce operators.

A new draft Customs Law of Mongolia, accommodating multiple changes driven by the new technological developments and trade facilitation efforts in line with the international obligations undertaken by Mongolia, is expected to be approved in the near future.

Trade facilitation measures of key interest to Mongolian stakeholders

Mongolian stakeholders have indicated a pronounced interest in prioritizing a de minimis customs regime, lowering shipping costs, and enhancing transparency over taxes and charges applicable to exports and imports, among others (Figure 24), all of which are among the measures addressed by the Framework of Standards on Cross-Border E-Commerce recently developed by the WCO.⁸⁶ Introduction of retail import facilitation zones could also be considered.

⁸¹ ESCAP, 'Readiness Assessment for Cross-Border Paperless Trade: MONGOLIA' (ESCAP, 2019), <https://www.unescap.org/resources/readiness-assessment-cross-border-paperless-trade-mongolia>. ESCAP

⁸² WCO International Convention on the Harmonized Commodity Description and Coding System (1988), www.wcoomd.org/-/media/wco/public/global/pdf/topics/nomenclature/instruments-and-tools/hs-convention/hs-convention_en.pdf?la=en; Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES) (1973), <https://sites.org/sites/default/files/eng/disc/CITES-Convention-EN.pdf>; WCO Revised Kyoto Convention (2006), https://www.wcoomd.org/en/topics/facilitation/instrument-and-tools/conventions/pf_revised_kyoto_conv.aspx; Berne Convention for the Protection of Literary and Artistic Works (1886), <https://wipolex.wipo.int/en/treaties/textdetails/12214>; Intergovernmental Agreement on the Trans-Asian Railway Network (2006), <https://www.unescap.org/resources/intergovernmental-agreement-trans-asian-railway-network>; Madrid Agreement Concerning the International Registration of Marks (1979), <https://www.wipo.int/treaties/en/registration/madrid/>; Convention on Temporary Admission (Istanbul Convention) (1990), <https://www.wcoomd.org/en/about-us/legal-instruments/-/media/2D53E23AA1A64EF68B9AC708C6281DC8.ashx>; UN Convention on the Harmonization of Frontier Controls of Goods (1982), <https://unece.org/DAM/trans/conventn/harmonie.pdf>; Customs Convention on the International Transport of Goods under Cover of TIR Carnets (1975), https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XI-A-16&chapter=11&clang=_en; and CMR Convention (1956), https://treaties.un.org/doc/Treaties/1961/07/19610702%2001-56%20AM/Ch_XI_B_11.pdf

⁸³ A, chap. 4

⁸⁴ Trade Policy Review Body, 'Trade Policy Review - Mongolia 2021 (Addendum)', 6 January 2021, 90, <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:WT/TPR/M406A1.pdf&Open=True>. Trade Policy Review Body, 90

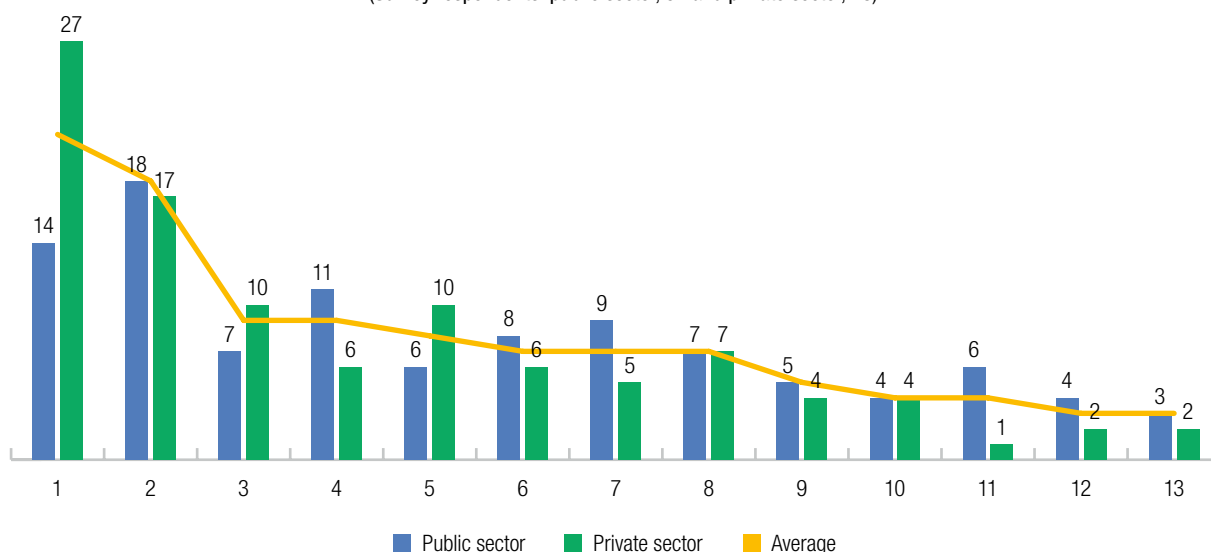
⁸⁵ MNCCI, 'The Implementation Status of Single Electronic Window in Mongolia', pts 11–12, https://www.unescap.org/sites/default/files/Session%202-2.%20Choidog%20Oyunjargal_MNCCI.pdf. MNCCI, pts 11–12

⁸⁶ WCO, 'Framework of Standards on Cross-Border E-Commerce', June 2022, [wcoomd.org/-/media/wco/public/global/pdf/topics/facilitation/activities-and-programmes/e-commerce/wco-framework-of-standards-on-crossborder-e-commerce_en.pdf?la=en](http://www.wcoomd.org/-/media/wco/public/global/pdf/topics/facilitation/activities-and-programmes/e-commerce/wco-framework-of-standards-on-crossborder-e-commerce_en.pdf?la=en). WCO



Figure 24: Priority areas in trade facilitation and logistics (%)

(Survey respondents: public sector, 92 and private sector, 28)



- | | |
|---|--|
| <ol style="list-style-type: none"> 1. De minimis customs regime (minimal clearance procedure and no duty/tax for imports of low value shipments) 2. Single Window (to enable cross-border traders to submit regulatory documents at a single location and/or single entity) 3. Shipping costs (including duties and taxes) 4. Coordination between Trade Support Institutions (between ministries, technical agencies, and business associations) 5. Information about VAT/GST/Sales tax and other applicable taxes 6. Electronic tracking of shipments | <ol style="list-style-type: none"> 7. Addressing system 8. No or minimal risk of online fraud 9. Electronic access to customs and postal information (including the possibility to complete forms) 10. Existence of efficient postal services 11. Efficient local transport network 12. Availability of online payment methods 13. Existence of parcel delivery companies |
|---|--|

Source: UNCTAD

Mongolia's transport and logistics performance

Mongolia could reinforce its logistics performance. Ageing infrastructure of railway transport and a gauge that is non-interoperable with that used by China on the main transit line reaching the Pacific ports, notably the port of Tianjin, coupled with low speed and non-competitive railway tariffs, meagre road conditions (including for domestic transportation), as well as insufficient reliance on air freight, make logistical arrangements complicated.

Mongolia's internal and cross-border deliveries mostly happen, respectively, by road and by rail, with an insignificant share of cargo (mostly across borders) being transported by air. The use of inland watercourses for delivery purposes is marginal.

They are navigable only when ice-free, from May to September.

Despite the population density and economic activity along the railway corridors, the railway is deemed ill-suited for, and has limited current use in, transporting small to medium shipments, for instance, goods traded via e-commerce. Such packages are more often delivered by road. According to CAREC, the main reasons for favouring road transport are better accessibility to destinations, lower overall costs, shorter delivery timeframes, easier organization of shipments, better punctuality and security, and availability of tracking and tracing solutions and review containers.

Despite gradual expansion in the length of improved and paved roads, the availability and condition of the roads remain insufficient, which impedes both usability



and speed. Mongolia has only about one kilometre of road for every 100 square kilometres of land.⁸⁷ Several provinces remain underserved. Further improvement of the road infrastructure, including through PPP projects and other investment promotion initiatives, appears to be of high importance for the development of e-commerce, since most of the small packages in Mongolia are delivered by road. Better road infrastructure could also allow further development of the transit of the goods transacted through e-commerce across borders and should be integrated in the development of international road transportation corridors, pursued by the Mongolian government in cooperation with development partners.

Although there are 23 airports in Mongolia, air transport potential also remains underexploited. The implementation of the Civil Aviation Policy of 2020, which aims to bring air services to isolated areas, should close the gaps. Meanwhile, the competition in the sector remains insufficient due to restrictions.

The competitiveness of the transport services sector of Mongolian economy is undermined by the absence of international competition. Mongolia has made no commitments therein when joining the WTO⁸⁸, thus discouraging foreign logistics providers from entering the market.⁸⁹

To better address the existing challenges, logistics was mainstreamed into Vision 2050. The strategy prioritizes the development of a national transportation and logistics system, civil aviation infrastructure, and general aviation. Building of a mixed transportation network in line with international standards is also provided for.

ESCAP has conducted a comprehensive assessment study of dry ports development in Mongolia and has provided recommendations to support dry ports development in Mongolia. It includes a draft action plan based on the technical assessment and

approaches for seamless interconnections between dry ports in Mongolia and seaports in China and the Russian Federation within the framework of the Intergovernmental Agreement on Dry Ports, and was presented to Mongolian stakeholders during the workshop in October 2022.⁹⁰ National Committee on Border Port Recovery was recently created to coordinate and streamline the work in this area.

Long and complicated customs clearance procedures applicable to parcels and packages arriving by air strongly affect the attractiveness of the service for e-commerce deliveries and their facilitation needs to be reviewed.

Domestic deliveries

According to Digital Nation strategy, 95 companies have licenses for domestic postal deliveries, however, most of them are active only in Ulaanbaatar. About 80 per cent of domestic deliveries in Mongolia, including most of the deliveries outside of Ulaanbaatar and in rural areas, are carried out by Mongol Post JSC, a company created as the result of the equitization of the state-owned national postal service in 2016. Delivery times for regular mail and parcels (up to 20 kg in weight) range from 2 days in Ulaanbaatar to 12 days outside of provincial cities.⁹¹ Delivery options include door-to-door delivery, delivery to an individual post box at the post office, delivery to the post office, where the item could then be collected, as well as smart box pick up. Shipments are traceable via dedicated electronic (on a computer) and mobile platforms via a unique tracing number. SMS notification service is also in place.⁹² Private delivery companies present on domestic delivery market offer a portfolio of services similar to that of Mongol Post. They are mostly active in Ulaanbaatar and the bigger cities. Such companies occasionally use the services of Mongol Post when carrying out last mile rural area deliveries. Some of them are partially (PickPack) or fully (Stora) affiliated with domestic e-commerce businesses.

⁸⁷ WB, 'Mongolia InfraSAP: Infrastructure for Connectivity and Economic Diversification' (Washington, DC: World Bank, 10 November 2020), 34, <https://doi.org/10.1596/34779.WB.34>

⁸⁸ Accession of Mongolia, Schedule CXXXIV - Mongolia, Part II - Schedule of Specific Commitments of Services'. World Trade Organization, 27 June 1996

⁸⁹ UNCTAD, ed., *Challenges, Policy Options, and the Way Forward: Economic Diversification in Selected Asian Landlocked Developing Countries (Bhutan, Kazakhstan, Mongolia, and Turkmenistan)* (Geneva/New York: United Nations Conference on Trade and Development, 2020)

⁹⁰ 'Intergovernmental Agreement on Dry Ports', 5 January 2013, <https://www.unescap.org/resources/intergovernmental-agreement-dry-ports>; ESCAP, 'Sustainable Connectivity in East and North-East Asia: Technical Consultation Workshop on Dry Ports Development', ESCAP, 18 October 2022, <https://www.unescap.org/events/2022/sustainable-connectivity-east-and-north-east-asia-technical-consultation-workshop-dry>. 'Intergovernmental Agreement on Dry Ports'; ESCAP, 'Sustainable Connectivity in East and North-East Asia'

⁹¹ 'Mongol Post', Mongol Post, accessed 1 December 2022, <https://mongolpost.mn:8088/dotood-shuudari/>. 'Mongol Post'

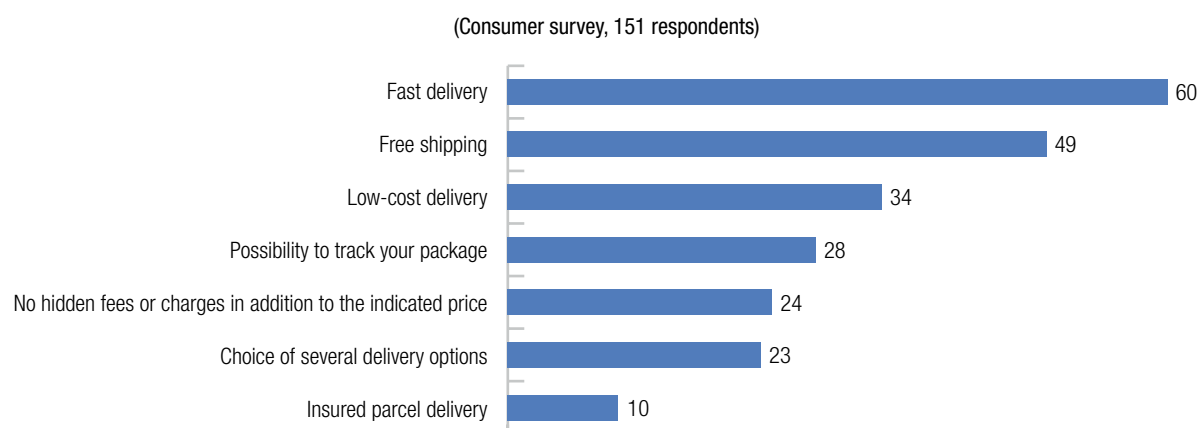
⁹² Ship24, 'MONGOL POST Tracking | Track Mongol Post Parcel & Shipment Delivery', Ship24, accessed 1 December 2022, <https://www.ship24.com/couriers/mongol-post-tracking>. Ship24



When asked about their preferences with respect to e-commerce deliveries, consumers participating in the study survey clearly prioritized the speed of delivery (Figure 25), having also articulated a wish to receive their purchases at home, i.e., “to shop without going anywhere” (Figure 26 and Figure 27). Convenient delivery, thus, is an important factor, which might contribute to further growth of domestic e-commerce.

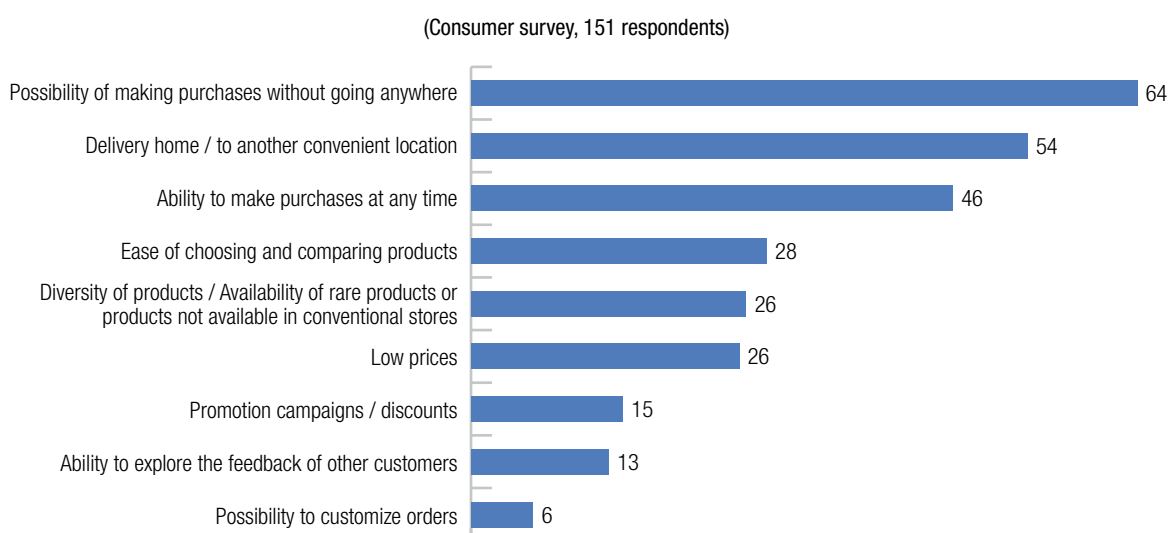
While the current conditions of the logistics infrastructure make quick and convenient deliveries difficult, in particular to the provinces, alternative solutions facilitating them, such as creation of the regional warehouse hubs maintaining supply of the goods transacted via e-commerce and making them more quickly and readily available to the customers, could be considered.

Figure 25: What are the most important considerations for the delivery of your online purchases? (%)



Source: UNCTAD

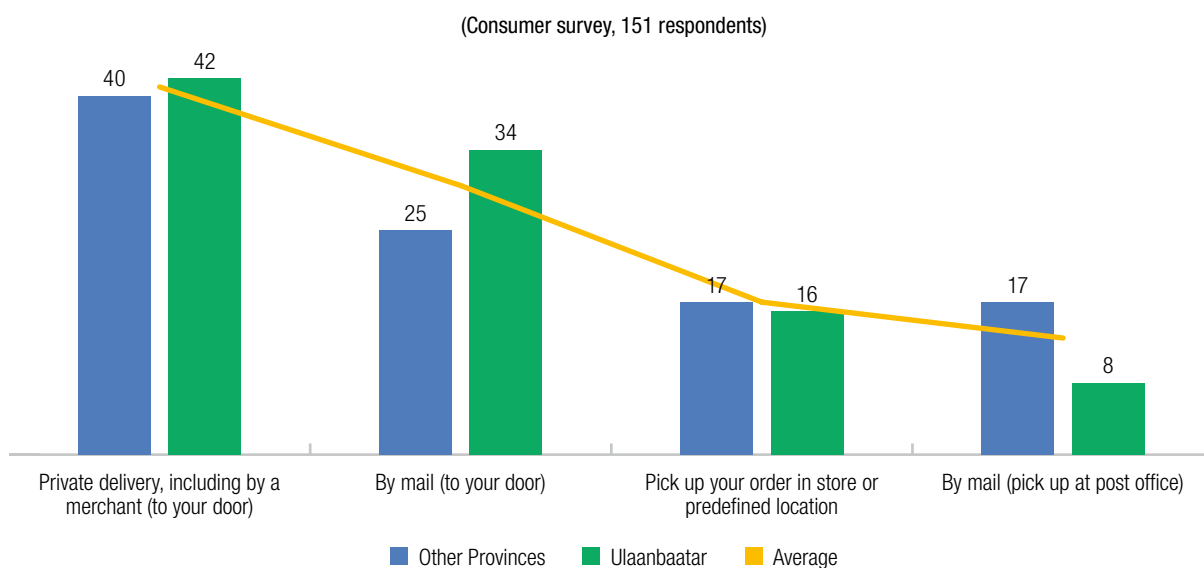
Figure 26: According to you, what are the most important reasons for buying online? (%)



Source: UNCTAD



Figure 27: What are your preferred delivery methods? (%)



Source: UNCTAD

Addressing systems

The basics and principles of addressing system are laid down in the Law on Addressing (2013), according to which the address of immovable property includes “information such as names and numbers of streets/roads, squares, neighbourhoods, townships, fences, building names or numbers, and door numbers [...]”. There are two databases, not interlinked – the central civil database which informs about the permanent address of inhabitants and an addressing database maintained by the Mongol Post used for deliveries. It includes the recipient’s phone number, other descriptive details that might assist the postman in localization or a three-word-long address generated via Mongol Post’s partner, What3Words, to facilitate deliveries in rural areas and ger districts of Ulaanbaatar and speed up deliveries in cities.⁹³ Deliveries in rural areas and ger districts might need on-the-spot searches that take time, thus are overall inefficient.

Cross-border deliveries

The Mongolian market of cross-border postal services is represented by 13 licensed providers, 4 of which (Mongol Post and its subsidiary company, DHL and

UPS (through a local subsidiary Selenge) provide global services, while the other 9 international postal services serve selected countries only (Australia, China, Republic of Korea, and the US).⁹⁴ In total, 192 foreign countries are served. Mongol Post holds a large share of the foreign mail and packages delivery market. Registered and express mail is delivered to / from select countries within four to eight days by air. Regular mail delivery times are longer and range to 14-21 days. Longer processing times for the international mail handling are caused by the customs clearance procedure run by the International Mail Center (IMC) of Mongolian Customs, which might benefit from further streamlining and is not automated. The UPost system, used by the IMC is not interoperable with the systems used by the delivery services providers (Mongol Post, UPC, DHL, etc.) and requires manual entry of information. Meanwhile, the process of payment of fees and taxes appears to be partially streamlined, with invoices communicated via QR code to some customers and by allowing electronic payment.

In terms of de minimis, the Procedures for Customs Clearance of Interstate Postal Parcels (2014), set the rules and taxes to be applied to imported goods.⁹⁵

⁹³ what3words, ‘Delivering Progress with What3words and Mongol Post’, 24 May 2016, <https://what3words.com/news/government/mongol-post. what3words>

⁹⁴ CRC, ‘The vehicles of postal license holders have been exempted from number restrictions’, Communications Regulatory Commission of Mongolia, accessed 1 December 2022, <https://www.crc.gov.mn/articles/shuudangijn-tusgaj-z-vsh-r-l-ezemshigch-azh-ahuj-negzh-dijn-teevijin-heregl-dijg-dugaaryn-hyazgaarltaas-ch-l-ll/mn. CRC>

⁹⁵ MOF, ‘Procedure for entering international postal parcel through the customs border’, No. 269/264 § (2014), <https://legalinfo.mn/mn/detail?lawId=206713&showType=1. MOF>



5. PAYMENT SOLUTIONS

High level of bancarisation of the Mongolian population is conducive to the development of electronic financial services and payments, which are widely used nationally, with e-banking and multiple e-wallets solutions dominating the picture. QR code payments are also gaining popularity. Besides focusing on electronic payments, the new National Payment Strategy aims at bridging the gaps in banking supervision and capital adequacy issues. These steps might pave way to deblocking cross-border payments, which multiple stakeholders perceive as problematic due to being much less seamless compared to the domestic ones and subject to high transaction fees. Currently, most of them are built around the SWIFT remittances transfer mechanism, with few other solutions present in the market.

5.1 Legal and policy frameworks underpinning the payment system of Mongolia

Sectoral strategies

The National Payment System Strategy is based on the holistic approach to ensuring the interaction between the 9 core elements of the system, some of which – legal and regulatory framework (I), retail payments (III), government payments (IV), interbank money market and foreign exchange market (V), cross-border payments, including international remittances services (VII) oversight framework (VIII) and cooperative framework (IX) are of particular relevance to e-commerce. The Strategy emphasizes effective cooperation between the stakeholders involved; choosing appropriate business and governance models; risk management; and clear ownership and responsibilities between the BOM, the FRC, the MOF and other appropriate ministries, payment system providers and payment system operators (supporting the implementation of the system by committing to interoperability, managing risks, transparency, sound governance, etc.).

High level objectives of the Strategy, as well as targets and indicators, are presented in Table 5. They appear to be largely consistent with the modern principles of electronic payments, reflected in the digital economy agreements (SADEA, DEPA, and UKSDEA) concluded by Singapore and its trade partners, which represent the most detailed “codification” of the relevant rules to date. The e-payment provisions of the above agreements also feature regulatory transparency, streamlined domestic regulation in the payments sector, non-discrimination between financial and non-financial institutions involved in e-payments, promotion of open platform solutions, Open-Source Software (OSS) and the use of APIs, cross-border authentication and electronic KYC services (for instance, through GLEIF Legal Entity Identifier Services)⁹⁶ and favour risk-based regulatory approach. Among the international standards, the use of International Organization for Standardization Standard ISO 20022 Universal Financial Industry Message Scheme is recommended by the Singapore-Australia Digital Economy Agreement (SADEA) for electronic data exchange between financial institutions and services suppliers to enable greater interoperability between electronic payment systems.

⁹⁶ Global Legal Entity Identifier Foundation (GLEIF), “Legal Entity Identifier Services by GLEIF”, GLEIF, accessed 1 December 2022, <https://www.gleif.org/en/>. Global Legal Entity Identifier Foundation (GLEIF)



Table 5: Mongolia National Payment Strategy 2022-2026: High Level Objectives, Targets and Indicators⁹⁷

High Level Objectives	Targets and Indicators
All economic agents enjoy fast, safe, and reliable payment services	Promote increased efficiency and reduction of fees for cross-border retail payments, including international remittances.
Mongolia migrates to a cash-light society by spreading the usage of digital payment instruments and fintech	<ul style="list-style-type: none"> - Reduce ratios of cash to M2 - Increase outreach of digital payment services (in remote areas) through increasing access points. - Government Payments are digital and are fully and efficiently integrated with the NPS - Achieve universal access to and increase usage of digital payment services for the population of Mongolia
Payment and settlement infrastructure is efficient, safe, interoperable, meets users' needs and is operationally resilient	<ul style="list-style-type: none"> - Adopt international standards for managing cyber risk - Assess regularly all systemically important infrastructures in the country for observance of international standards - Achieve Payment vs. Payment (PvP) for all foreign exchange transactions, where possible, to reduce FX settlement risk - Achieve interoperability across the existing and any new payment platforms / schemes and instruments
The legislation and regulations are balanced, promote competition and innovation in payment services while safeguarding payment system and protecting users	
Payment systems, services and instruments are effectively overseen by the authorities	
All stakeholders in the payment ecosystem cooperate to drive reforms	

Source: BOM

⁹⁷ National Payment System Strategy 2022-2026



5.2 Regulatory Framework of Mongolian Payment Sector

All groups of stakeholders seek further facilitation of domestic and cross-border electronic payments (Figure 28).

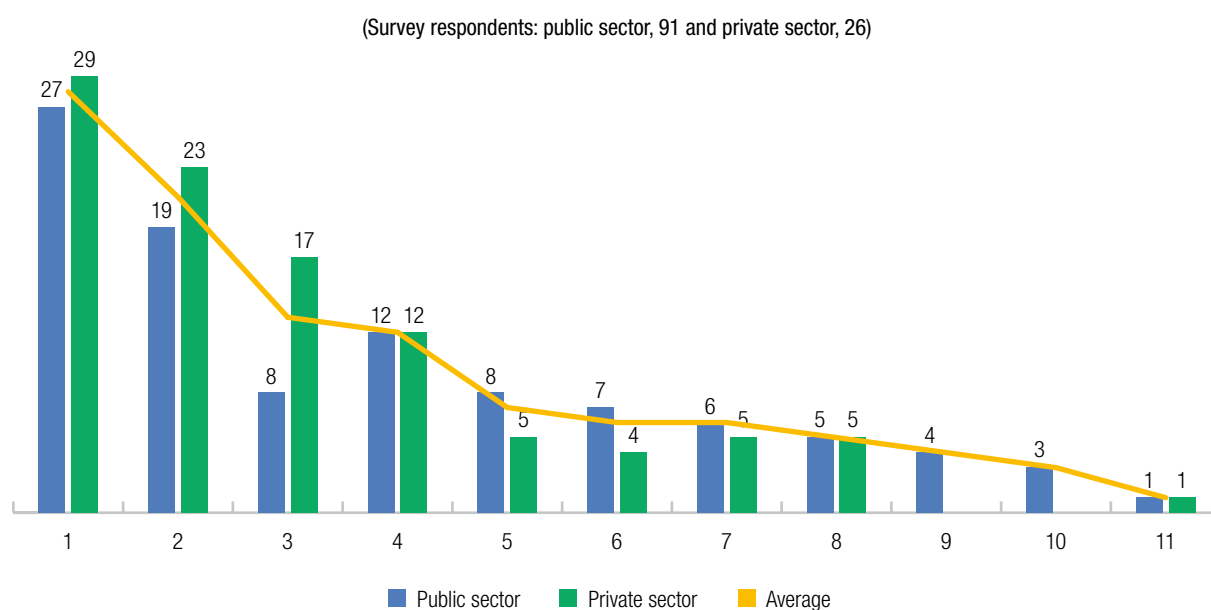
National laws regulating the financial sector

The payment system of Mongolia is underpinned by several laws, including the Law on National Payment System (2017), the Law on Central Bank (1996), the Law on Banking (2010), the Laws on Non-Banking Financial Activities (2002), the Law about Payments in Local Currency (2009), the Law on Money Deposits, Money Transfer and Loan Activities of Banks and

Sovereign Legal Trusts (2020), the Law on Combating money laundering and terrorism financing (2013), as well as the Law on and on Ensuring the Stability of the Banking Sector (2018). Some of these contain subsequent amendments and multiple implementing by-laws. A new law to simplify the licensing regime for NBFIs is expected to be adopted during the course of 2023.⁹⁸ Several more legal acts, aimed at regulating consumer protection and privacy in the financial sector are reportedly being drafted.

Stakeholder awareness of the legal framework related to e-payments remains low; only 29 per cent of public sector stakeholders and 36 per cent of private sector stakeholders participating in eT ready survey manifested their awareness of the relevant

Figure 28: Priority actions in payment solutions (%)



1. Regulations that allow for electronic (incl. mobile) payments internationally
2. Regulations that allow for electronic (incl. mobile) payments domestically
3. Interoperability of different electronic payment modes
4. Educational initiatives on security and trust building e.g., for policymakers, banks, merchants and consumers
5. Understanding of anti-money laundering and counter-terrorism financing legislation
6. Reliable cyber protection and trust services
7. Regulations that protect consumers engaged in financial services online
8. Awareness of international good practices in electronic and mobile payments
9. Regulation of non-banking institutions engaged in payment services (fintechs)
10. Encouraging innovation in e-payments, for instance through regulatory sandboxes
11. Ease of opening bank accounts

Source: UNCTAD

⁹⁸ The law would allow NBFIs licensed for a primary activity (i.e. lending, trust services etc.), to carry out secondary activities (e.g., remittances, financial leasing, issuing, purchasing and selling financial instruments and providing investment advice) without a need to obtain a full-license. This simplifies the procedures for NBFIs but also for the Financial Regulatory Commission. Project supported by the EBRD and funded by the EU Asian Investment Facility DCFTA Programme.



laws. However, most of these participants could not mention any particular relevant legal act.

5.3 Institutional framework and cooperation between stakeholders

The National Payment Strategy 2022-2026 emphasizes cooperation between all the stakeholders subject to the leadership of the BOM and building consensus between them. The following agencies have regulatory competencies in the payment area: the BOM; the Financial Regulatory Commission (FRC); the Communications Regulatory Commission (CRC); and the Authority for Fair Competition and Consumer Protection (AFCCP). While the AFCCP is occasionally contacted by consumers with respect to problems related to the exercise of e-payments, its specific role in the e-payment institutional infrastructure is not clear and does not appear to be recognized by the BOM, which believes that the payment rules include particular consumer protection safeguards.

The overlaps in the spheres of regulation of the other agencies arise a) with respect to non-banking financial institutions (BOM and FRC) and b) mobile payments providers (BOM, FRC and CRC). One such provider, MobiFinance NBF, forming a part of the Mobicom Corporation, confirmed being subject to the “triple” licensing requirement during the consultations. These overlaps, both of which are of high relevance to electronic payments in the e-commerce domain, were recently, at least in part, cleared through the MOUs concluded between the relevant entities (BOM and FRC MOU and BOM, FRC and CRC MOU), specifying the functions of each of the entities, still subject to the overall leadership of the BOM. However, the MOUs appear to be internal documents and normative regulation in this area is still absent, affecting transparency and predictability.

Meanwhile, cooperation between the payment system regulators and other participants of the same, such as payment system providers and operators, remains limited and takes place through annual National Payment System Council, established in 2018 by the resolution of the Governor of the Bank of Mongolia, in accordance with Article 9 of the Law on National Payment System of Mongolia (2017). The Council's

participants are the BOM, commercial banks, the Treasury department of the MOF, the FRC, the CRC, the MDDC, Mongolian Stock Exchange, Mongolian Central Securities Depository, Mongolian Securities Clearing Center Co Ltd., Mongolian Bankers Association, Association of Mongolian Non-Banking Financial Institutions, as well as representatives of payment system participants and operators⁹⁹. No other consultations / experience-sharing mechanism, such as user groups, appear to be put in place.

5.4 Payment and settlement infrastructure for e-commerce payments

The BOM has implemented several measures to ensure that electronic payments are fast, efficient, and safe. In particular, a new modern Automated Clearing House (ACH+) system was implemented by the National Electronic Transactions Center (NETC) at the BOM. This system processes and clears low value electronic payments either individually in real time and continuously (24/7), or in batches. As a result of the real-time processing, funds are immediately available in the account of the receiving customer, with the final settlement taking place through RTGS shortly thereafter. Two interbank payment card switches are available, being operated by NETC and the Trade and Development Bank of Mongolia (TDB), for itself and five smaller affiliated banks. In both systems, the transactions are cleared on the net basis, with final settlement through RTGS on the following day. Introduction of token-based processing is also being considered by the BOM. Steps to enhance resilience and business continuity of the payment system in the face of cyber and other threats, as well as its modernization, are also reported to being taken. The FX market is liberalized with trading of foreign currencies by the commercial banks between themselves and with the BOM taking place on the PvP basis through FX online trading system developed by the BOM. An update to the system is being developed.

5.5 Characteristics of the Mongolian financial sector

The level of bancarisation of the Mongolian population is very high – 99 per cent of females and 98 per cent of males (over the age of 15) have a bank account.¹⁰⁰

⁹⁹ BOM, 'Payment System', MongolBank, accessed 1 December 2022, <https://www.mongolbank.mn/eng/>

¹⁰⁰ WBG, 'The Global Findex Database 2021', Text/HTML, World Bank, accessed 1 December 2022, <https://www.worldbank.org/en/publication/globalindex/Data>; ADB, Mongolia's Economic Prospects: Resource-Rich and Landlocked between Two Giants (Asian Development Bank, 2020), <https://www.adb.org/publications/mongolia-economic-prospects>. WBG, 'The Global Findex Database 2021'; ADB, Mongolia's Economic Prospects



Mongolian banking sector counts 11 banks of different systemic importance. Five of these banks are affiliated with the TDB, in particular in management of credit card transactions. All Mongolian banks maintain separate websites, and offer Internet banking facilities, mobile banking applications and QR (QPay) payment options. Some of the banks have also introduced select payment facilitation mechanisms, such as MostMoney of TDB or WeChat merchant registration, enabling the receipt of payments from registered users (Capitron Bank and Transbank). At least five foreign banks have representative offices in Mongolia: ING, Sumitomo Mitsui bank, Tokyo Mitsubishi bank, Bank of China and Industrial and Commercial Bank of China.¹⁰¹ According to the NSO, as of August 2022, 527 NBFIs were active on the Mongolian market – 83 per cent of them in Ulaanbaatar. Thirty-six NBFIs were involved in payment services.

5.6 Payment methods used

Both cash and non-cash payment methods are used in Mongolia, with the latter group predominating subsequent to the COVID-19 pandemic. The relevant practice of the commercial banks has also evolved respectively. According to Art. 445.3 of the Civil Code of Mongolia (2002), non-cash payments may be made

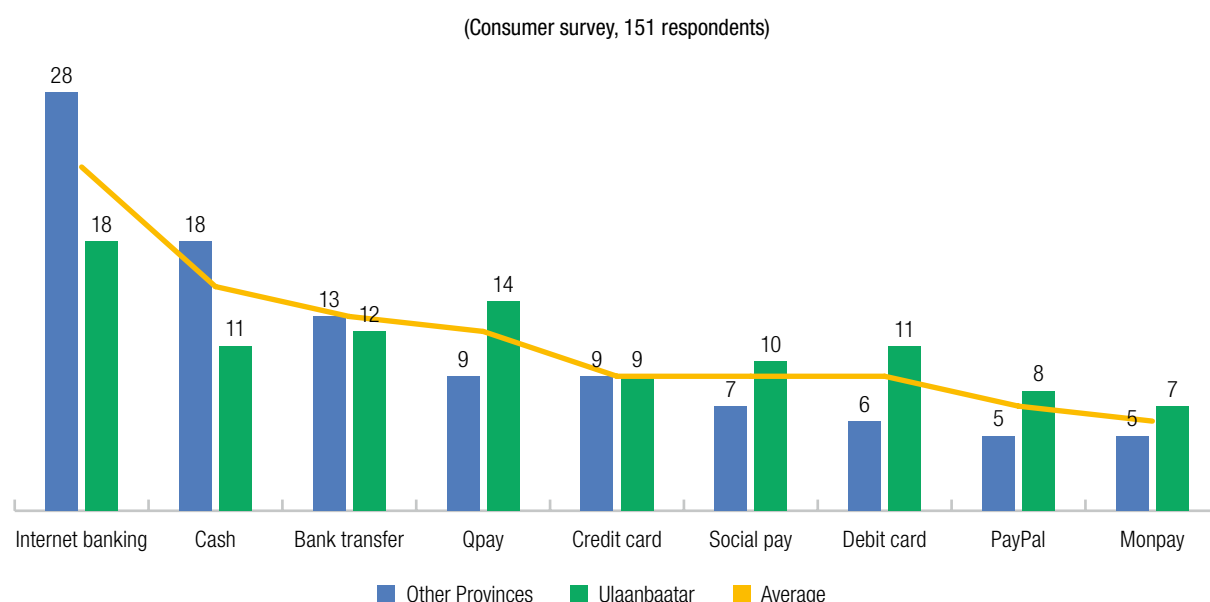
by a payment order, a letter of credit, the collection, a check, a bill of exchange, a debit card, the electronic transaction, the account credit, loan, and other means of financial payments.

According to the Procedures for providing payment services, granting permissions to operate systems, and supervising the activities of authorized persons (2021), the following payment operations are subject to licensing in Mongolia: electronic funds transfer; issuing a payment card / writing the name assigned to the card / accepting payment cards (17 providers as of September 2022); issuing electronic money (seven providers); system operation (one provider); settlement agent; getting outsourcing services; and provision of payment services through contracted agents.¹⁰²

5.7 Domestic payments

When paying domestically, consumers and businesses benefit from a variety of methods available to them. While cash is still used, more in the other provinces than in Ulaanbaatar, it was designated as a preferred payment method only by the modest share of 15 per cent of consumers having participated in the eT Ready (Figure 29). Extra fees charged are occasionally mentioned among the barriers to even more ample

Figure 29: Preferred payment methods: consumers (%)



Source: UNCTAD

¹⁰¹ Your Guide to Invest in Mongolia 2020', 2020, <https://investmongolia.gov.mn/wp-content/uploads/2021/03/investment-guide-2020.pdf>

¹⁰² BOM, 'Procedures for providing payment services, granting permissions to operate systems, and supervising the activities of authorized banks' (2021), <https://www.mongolbank.mn/documents/regulation/2021/payment-service.pdf>. BOM



use of electronic payments. Sixty-eight per cent of the consumers that have participated in eT Ready survey prefer to post-pay their online purchases, rather than pre-paying them, especially outside of Ulaanbaatar

Internet banking and mobile banking

All commercial banks in Mongolia offer e-banking services, as well as mobile banking applications that are progressively gaining popularity. According to the BOM, 90.2 per cent of users access these services via mobile phone, and only 9.8 per cent via a computer. In March 2020, new account number standards in line with IBAN were approved to facilitate the transactions. Migration towards them is expected to be completed in 2024. A number of companies and institutions have established contractual partnerships with banks to be specifically featured within the mobile banking applications to streamline their transactions with customers. According to BOM, 926 partnerships of this kind have been established in Ulaanbaatar, as compared to 97 in the other provinces.

E-wallets

Of particular relevance to e-commerce is the availability of e-wallets, which have a larger share of users in Ulaanbaatar than in the other provinces. Among those are SocialPay of Golomt Bank, MonPay of Mobicom Corporation, MostMoney of the TDB, QPay, HiPay, Pass of Databank payment card processing solutions developer, LendMN of AND Global, and SuperUp. Providing several extra services as compared to mobile banking applications, such as the possibility of integrating several payment cards within and a somewhat more seamless payment experience, these applications are working in Mongolia in different legal embeddings as follows:¹⁰³

- E-money license: MonPay; LendMN, SuperUp, and HiPay
- Payment card service provider license: QPay, Pass
- Transfer of electronic funds license: QPay, MostMoney
- Payment cards (debit, credit, prepaid; T-card, co-branded cards)

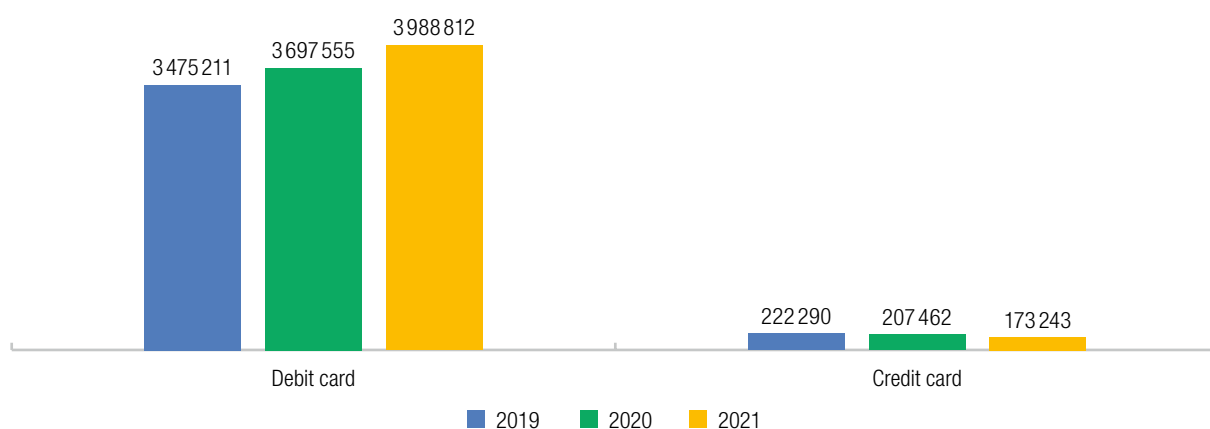
The BOM reports 4.4 million payment cards in circulation as of the second quarter of 2022. Debit cards are the most common payment instrument in Mongolia according to the BOM (Figure 30). UnionPay (22.6 per cent), Visa (17.3 per cent), Master Card (3.2 per cent), Amex (0.1 per cent), JCB (0.2 per cent), and the national T-cards (56.6 per cent, progressively brought to international standards through integration of EMV chips therein), are available, with the latter type dominating the market (according to BOM, their usage in 2020 reached 63.6 per cent of the total card usage). Co-branded credit cards (international + local provider) are also available. Other particular types of cards include payment-loyalty cards combinations (e.g. TDB and Mint club co-brand loyalty card), multiple currency cards (e.g., TDB's triple currency accounts in one card), special cards for children, gift cards, and cards with QR codes (enabled for simplified receipt of payments). Online payments without a pin code, which are instead secured by CVV, are enabled. Contactless payments were also introduced during the COVID-19 pandemic.

Payment cards are used to initiate payments through POS terminals (growing in number), mobile phone applications, e-banking, and ATM-facilitated transfers (notably, to pay utility bills). The number of payment card transactions made in e-commerce continues to grow (Figure 31).

¹⁰³ BOM, 'Payment Systems', Bank of Mongolia, 19 October 2022, <https://www.mongolbank.mn/documents/paymentssystem/zuvshuurul.pdf>. BOM

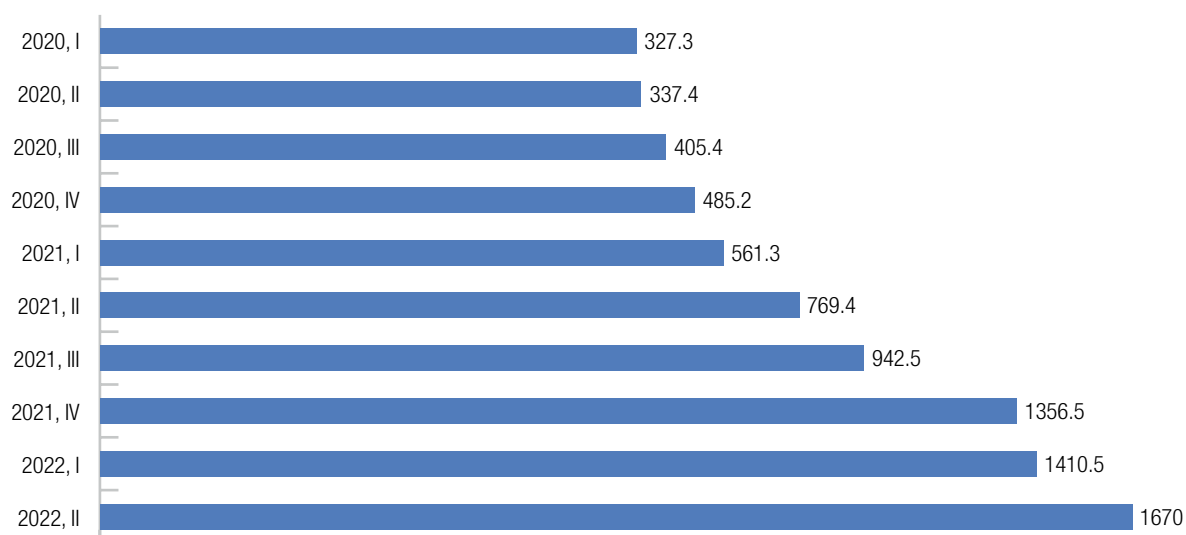


Figure 30: National debit card and credit card circulation, 2019-2021



Source: NSO

Figure 31: Payment card transactions made in e-commerce, thousands



Source: BOM

QR-pay

QR code payments in Mongolia witnessed a surge in volume from 3.8 million transactions in 2019 to 21.3 million in 2021 according to BOM.

The QR code-based electronic payment solution developed by the private company QPay is used by all commercial banks and has been progressively adopted by merchants. Several banks also enable merchants to receive payments through WeChatPay. According to BOM, the QR codes used are currently

not standardized and not interoperable; however, a national standard to solve these issues is being developed.

5.8 Cross-border payments

Access of Mongolians to cross-border payment services is more complicated, less seamless and costly.

Outbound payments are, reportedly, often carried out via credit cards. Such transactions are subject to



rather high fees. Visa B2B Connect is also enabled for TDB cardholders. PayPal and several other e-wallets are also enabled for monetary transfers from the country, this way allowing Mongolian to make purchases on foreign e-commerce platforms. Remittance mechanisms of the commercial banks could also be used to transfer the money abroad.

Inbound payments are dominated by remittances. The service, available from all banks, is mostly carried out via the SWIFT network with corresponding banks located in 18 countries. Several banks also offer alternative remittance mechanisms, such as Contact or Pay Easy for the remittances from Korea. Several foreign remittance services are also available to Mongolians, such as Wise, MoneyGram, Western Union, Remitly for remittances from the EU and Singapore, and XE for remittances from select countries. According to the BOM, negotiations with respect to the entry of Stripe and/or PayPal to Mongolian incoming cross-border payments market are ongoing.

5.9 Use of electronic transactions and advanced technologies in Mongolia's financial sector

Electronic authentication / signatures appear to be of somewhat limited use in the Mongolian banking sector. Art. 7 of the recently adopted Law on Money Deposits, Money Transfer and Loan Activities of Banks and Sovereign Legal Trusts (2020) states that

banks may provide the relevant financial services only to customers who have signed a [paper-based] written agreement and opened an account and are prohibited from opening any accounts electronically to persons who do not have an account or have not established stable financial relations with a bank. After the account is opened on the basis of a written agreement, "passwords, secret codes, and electronic signatures that meet confidentiality requirements may be used to provide services in electronic form, and these shall be considered equivalent to signatures drawn in electronic transfers, loan agreements, and other transactions". The same practice appears to be adopted by the NBFIs.

According to BOM, APIs are increasingly used in Mongolia's financial services, by both banks and NBFIs but are not yet subject to formal regulation or standardization. Open banking is not yet considered either. As recently noted by the Bank for International Settlements "an interlinking arrangement allows banks and other payment service providers to transact with each other without requiring them to participate in the same payment system or use intermediaries (i.e., correspondent banks)."¹⁰⁴ Besides facilitating e-payments and resolving interoperability issues on the domestic market, APIs might leapfrog to more cost effective and efficient cross-border payments solutions, which Mongolian stakeholders are craving.

¹⁰⁴ BIS, 'Interlinking Payment Systems and the Role of Application Programming Interfaces: A Framework for Cross-Border Payments', Report to the G20, July 2022, 1, <https://www.bis.org/cpmi/publ/d205.pdf>. BIS, 1



6. LEGAL AND REGULATORY FRAMEWORKS

The legal framework of Mongolia of relevance to e-commerce has benefited from the recent update through the accession of the country to the UN Convention on the Use of Electronic Communication in International Contracts, adoption of the new laws on Access to information, featuring open data rules, and on Cybersecurity, as well as the revision of the E-signatures and Privacy Laws. The solutions reflected therein are partially based on international best practices. Having gained effect in May 2022, the new laws, as well as some other legal acts of relevance to e-commerce, are not yet fully implemented. Both public and private sector stakeholders manifestly lack awareness of the existing legislative framework. Implementation of the electronic signatures is highly prioritized by the stakeholders from all relevant sectors.

6.1 Elaboration of e-commerce rules in Mongolia

A standing committee on innovation and digital policy was established at the Mongolian parliament on 9 July 2020 and succeeds the ad-hoc parliamentary committee on digital policy in place since 2016. The committee is responsible for formalizing digital governance policy and processes through creating laws conducive to their development. Five new and updated digital laws – the laws on Digital Signatures (updated), on Public Information Sharing (new), on Protection of Personal Information (updated), on Cybersecurity (new), and on Virtual Assets (new), were passed in December 2021. From the time of

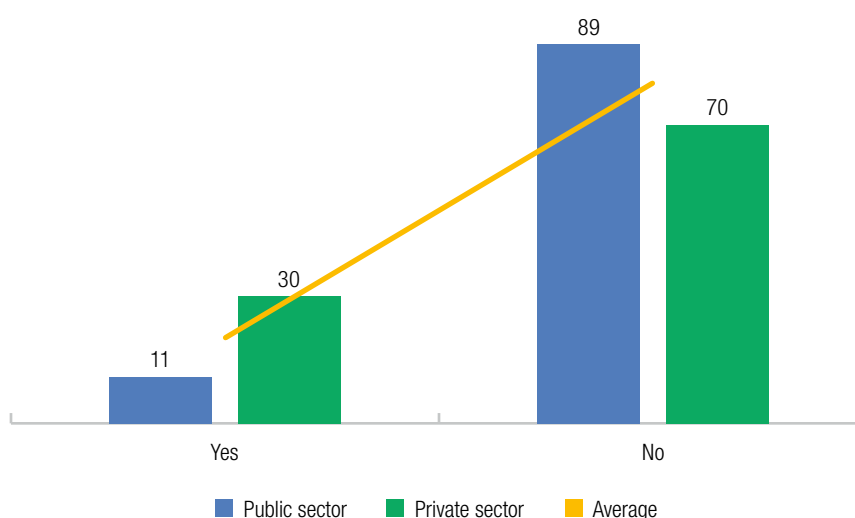
its establishment, the committee has maintained transparency of its work with minutes of its meetings being regularly published online.

The stakeholder survey results indicate that awareness of e-commerce laws and regulations remains low, particularly among public sector stakeholders, where it is only about 10 per cent (Figure 32).

To foster better awareness, Mongolia has made some progress setting up the LegallInfo.mn website as a centralized platform for disseminating laws and (in the future) soliciting public comment on proposed regulations and legislation.

Figure 32: Awareness of the public and private sector stakeholders of the laws regulating e-commerce (%)

(Survey respondents: public sector, 91 and private sector, 24)



Source: UNCTAD



6.2 Adoption by Mongolia of regional and international e-commerce rules

According to Art. 10(3) of Mongolia's Constitution (1992, last amended in 2019), international treaties to which Mongolia is a party, shall become effective as domestic legislation upon the entry into force of the laws on their ratification or accession. Mongolia has adopted several international treaties conducive to the development of e-commerce – some of those recently. This solid international law embedding is, however, not fully utilized and occasionally is more generous compared to the rules contained in the other, national, legal acts.

In addition, Mongolia adopted the Law on International Arbitration (2017) aligned with the UNCITRAL model, as well as the Law on Conciliation (2012). In the area of dispute resolution, Mongolia could also consider joining the UN Convention on International Settlement Agreements Resulting from Mediation (2018), which could provide its enterprises with an additional efficient option for resolution of cross-border e-commerce (B2B) disputes.

To date, Mongolia has concluded a sole FTA containing an e-commerce chapter with Japan (2015). This FTA (EPA) contains rules on non-imposition of customs

duties on electronic transmissions, non-discriminatory treatment of digital products, electronic signatures, e-consumer protection, spam, e-transactions, paperless trading, cross-border data flows and data localization, as well as source code.

Together with 87 other WTO Members, Mongolia participates in the JSI on E-commerce at the WTO, which aims at establishing legal rules in over 30 areas of relevance to e-commerce.

6.3 Stakeholder priorities in legal regulation of e-commerce and the relevant work of development partners

Both public and private sector participants of the eT Ready survey prioritized legal regulation of electronic signatures among the measures improving legal framework of Mongolia of relevance to e-commerce. Both groups of stakeholders also agreed on the importance of strong cybercrime legislation and data regulation. For the latter, while the private sector stakeholders also pay high attention to settling cross-border data flow concerns, the public sector was more focused on privacy. Liability of intermediaries, trade facilitation and paperless trade, and e-consumer protection were also featured among the topics of measurable interest (Figure 33).

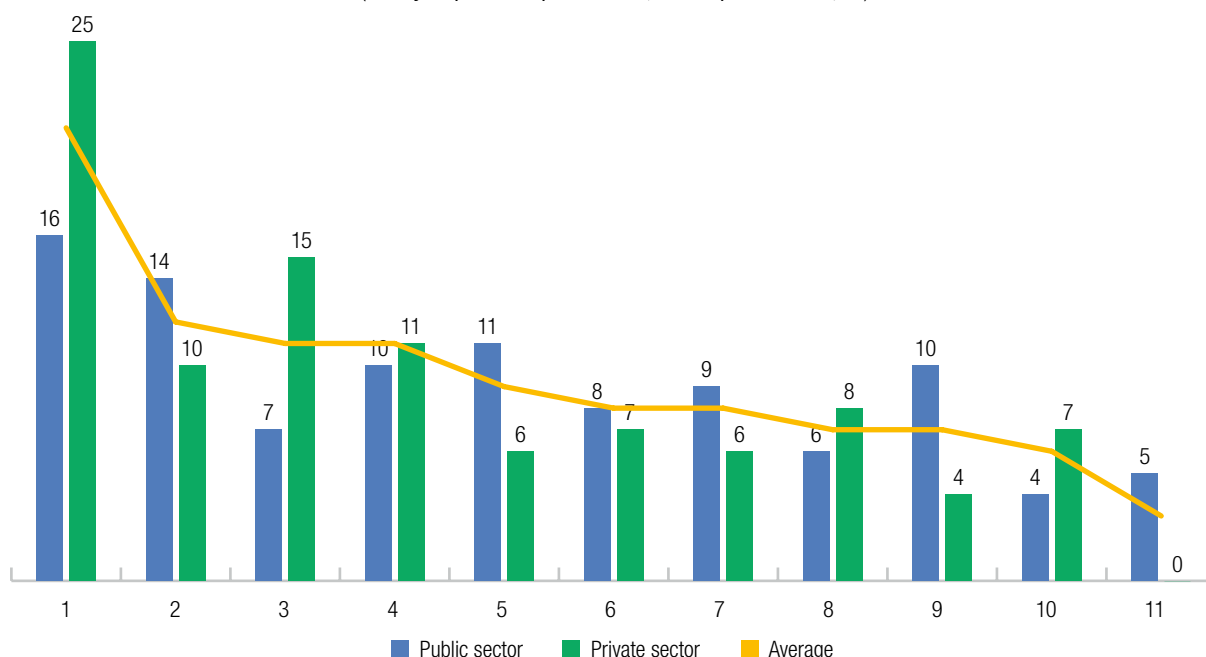
Table 6: International treaties of relevance to e-commerce concluded by Mongolia as of September 2022

Name of the treaty	Substantive area	Entry into force for Mongolia
New York Convention on Recognition and Enforcement of Foreign Arbitral Awards (1958)	Recognition and enforcement of foreign arbitral awards arising out of commercial disputes and rendered in the other Contracting State only.	22 January 1995
United Nations Convention on Contracts for the International Sale of Goods (1980)	Certain aspects of international sales of goods (B2B)	1 January 1999
WTO Agreement (1994)	International trade rules in the areas of trade in goods, trade in services, and intellectual property regulation	29 January 1997
WTO Trade Facilitation Agreement (2013)	International Trade Facilitation	28 November 2016
United Nations Convention on the Use of Electronic Communications in International Contracts (2005)	International electronic transactions	1 July 2021
United Nations Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific (2021)	International trade facilitation and cross-border paperless trade	27 July 2022



Figure 33: Priority issues in legal regulation of e-commerce (%)

(Survey respondents: public sector, 91 and private sector, 24)



- | | |
|--|--|
| <ol style="list-style-type: none"> 1. e-Signatures and e-Authentication 2. Privacy 3. Rules regulating cross-border data flows and data localization 4. Cybercrime legislation 5. Liability of intermediaries (for instance, electronic platforms, marketplaces, etc.) 6. Taxation for e-commerce activities | <ol style="list-style-type: none"> 7. Legislation to protect consumers online, including from spam 8. Dispute resolution 9. Facilitation of customs formalities for trade in the context of e-commerce and paperless trading 10. Electronic transactions 11. Protection of sellers and producers online |
|--|--|

Source: UNCTAD

In 2022-2023 the study assessing the framework of Mongolia of relevance to e-commerce was commissioned by the MDDC and supported by the ADB. The report reflecting the findings and recommendations of the study was validated by the stakeholders in January 2023¹⁰⁵. The report recommends further coordination between different legal acts of relevance to e-commerce, already in effect in Mongolia, without their consolidation. Particular recommendations aimed at aligning Mongolia's e-commerce rules with international standards, notably, in the areas of the regulation of electronic transactions, electronic signatures, electronic platforms, protection of personal information, data

protection, cybercrimes and cybersecurity, civil liability, as well as membership in international and regional instruments, were also made. Both the findings and recommendations made are overall aligned with the outcomes of the present assessment.

6.4 The state of adoption and implementation of Mongolian laws regulating the core areas relevant to e-commerce

Electronic transactions

The regulation of electronic transactions in Mongolia, contractual and not, is partial, being scattered between several acts (Civil Code (2002), the Law on

¹⁰⁵ ADB, *Enabling a conducive environment for e-commerce, Draft Report, 1 January 2023*, available at <https://pr.adb.org/sites/default/files/event/1768/DRAFT-Report-on-Mongolia-revisions-January%202023-EN.pdf>



the Notary (2011), the Law on Archives and Document Management (2020), the Law on Electronic Signatures (2021), the Law on Access to Public Information (2021), etc.), with no single dedicated act codifying the respective provisions being put in place or considered. Rules allowing for easier acceptance of electronic instruments appear to apply in public sector, where the digital signature / PKI requirement is relaxed, and alternative authentication methods are provided for as needed.

The rules as they stand are not based on the relevant UNCITRAL model instruments (UNCITRAL Model Law on Electronic Commerce (1996), UNCITRAL Model Law on Electronic Signatures (2001)) and only partially reflect the core principles underlying these instruments. While the principle of non-discrimination in the use of electronic documents appears to be reflected in the Civil Code (2002), functional equivalence is afforded only to electronically signed documents, while technological neutrality does not seem to be observed, since authentication of the document with a sole type of an electronic signature – a digital signature meeting standards pre-set in the dedicated law, is legally recognized.

The present legal framework lacks several common rules enabling electronic communications, elaborating on authentication (covered only sporadically - for the documents originated from the government), effectiveness (times of dispatch and receipt), automated transactions and mistakes therein, among others.

Electronic authentication and electronic signatures

Mongolian laws establish several ways in which documents could be authenticated. These are reflected in the Laws on Access to Public Information (2021) (Arts. 19 – 21 and 24) and on Archives and Document Management (2020) (Art. 38) and comprise the identification and login system used when providing state services, the electronic (de facto - digital (PKI)) signature, the use of official state email, the transmission of information through shared system of official letter exchange, and the attribution to a document a unique number issued by the unified system of state services. The approach adopted appears to be practical and overall business-friendly, with the level of security offered by each of these solutions to be assessed on a case-by-case basis in light of cybersecurity considerations. It should be

noted that it applies only at the national level and to documents generated by public authorities. The electronic signature remains the only option to confer legal validity to an electronic document within B2B, B2C, and C2C transactions.

The legal foundation for electronic signatures in Mongolia was revised in December 2021, and the amended law entered into force on 1 May 2022. Containing a brief mention of electronic signature, albeit without defining it, at the start, the Law focuses on digital signatures (for individuals aged 16 or older) and digital seals (for legal entities), as well as digital signatures certification. The Electronic Signatures Law (Art. 6) requires a digital signature to: a) encrypt and convert information using the private key of digital signature; b) enable identification and verification of the digital signature certificate holder using the digital signature public key; and c) enable verification of completeness of the information to which digital signature was attached and lack of changes in such information after the attachment of the signature. These requirements are consistent with electronic signature reliability parameters, set in Art. 6 of the UNCITRAL Model Law on Electronic Signatures, subject to one exception – no proof that the signature creation data was, at the time of signing, under the control of the signatory and of no other person appears to be required (consequently, such control is presumed). Presumption of control might be justified by the inclusion into the law of the requirement of ownership of signature creation device (rather than control over it).

Foreign digital signatures (or rather, certificates) could be recognized by the MDDC or on the basis of international agreement. Neither of these is in place now, accordingly, foreign electronic signatures are not recognized.

The lack of technological neutrality with respect to electronic signatures, reflected in Mongolian national legal acts that appear to only allow digital PKI signatures, joined by the lack of explicit language allowing interested parties to resort to party autonomy or to prove the validity of their electronic signature before the court, appears to run contrary to the obligations of Mongolia under the Art. 9.3 of the UN Convention on Electronic Communications (with respect to B2B transactions), Art. 9.5 of the Mongolia-Japan FTA, as well as to the content of the



rules negotiated in the other fora, including the WTO JSI on e-commerce. Even though, according to Art. 10(3) of Mongolia’s Constitution (2019), international treaties to which Mongolia is a party are effective as domestic legislation upon the entry into force of the laws on their ratification or accession, according to the stakeholders, their actual direct application, including by the courts, is limited.

Consumer protection and spam

The Civil Code of Mongolia (2002), in Arts. 200 – 202 ensures detailed regulation of the general conditions of sales, including their validity in consumer contracts and the interpretation against the drafter.

The omnibus Law of Mongolia on Consumer Protection (2003), considerably relying on the provisions of the Civil Code (2002) related to sales, contains general rules aimed at protecting consumers from deceptive commercial activities and ensuring redress.

The law is based on the following principles: the goods, works, and services [...] must meet the appropriate requirements of consumer safety, quantity, quality, time, and purpose; the user should be provided with the opportunity to obtain accurate information about goods, work, and services, and to acquire consumer culture; [a possibility to] remedy the harm caused to the user’s health, life, property, non-property interests, and an environment to restore the violated rights and to compensate for the damage should be ensured. Consumer rights include: a right to receive quality and safe goods and services; a right to a remedy / compensation for damage shown to be the provider’s fault; a right to information about goods; a right to

resort to court; a right to receive consumer education, and the like. In their turn, the providers of goods and services are subject to certain obligations with respect to warranties / ensuring repair.

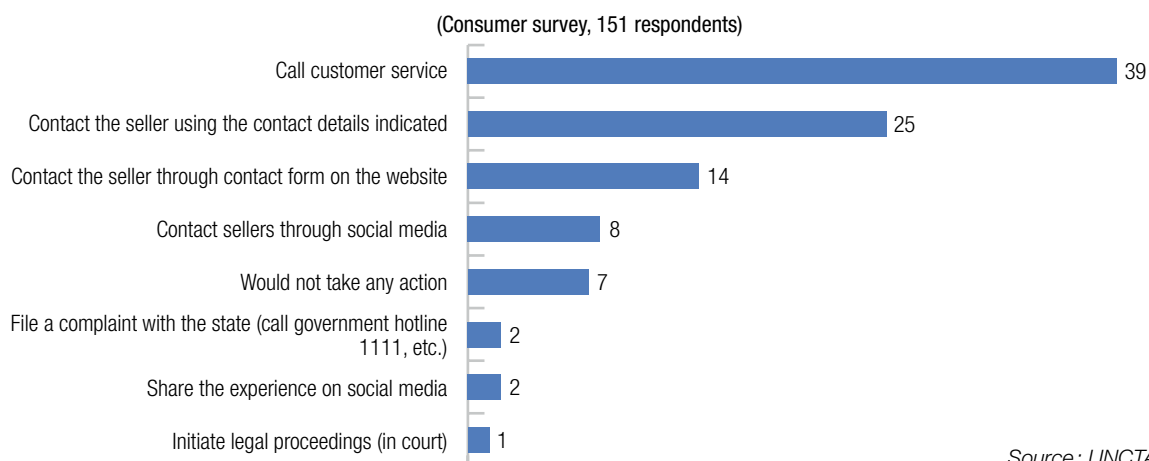
Art. 11.2 of the Law is a mandatory provision, according to which contractually agreed consumer protection threshold could not be inferior to that established by the Mongolian law. This rule would likely also be applicable as a “minimum standard” in the cross-border / international private law context.

The law is mostly enforced by the Department of Consumer Protection of Authority for Fair Competition and Consumer Protection (AFCCP). Consumers could also directly refer to the courts or revert to consumer protection NGOs, for guidance/ support. There are no mechanisms in place for Alternative Dispute Resolution, including Online Dispute Resolution, however.

No specific provisions regulating spam telecommunication messages were identified. However, Regulatory Strategy of the Telecommunications Sector of Mongolia: 2019-2024 includes the following activity “5.2.1.4 Stop illegal telemarketing services (SMS, advertising, robocalling) and implement spam protection projects”.

The results of the consumer survey demonstrated that e-consumers tend to rely on the informal conflict management methods in case of a problem, attempting to reach out to the provider and negotiate. The resort to administrative remedies remains rare (Figure 34).

Figure 34: How would you proceed in case of a problem (making a return, requesting a refund, etc.)? (%)



Source: UNCTAD



A good relevant practice is reflected in the new Law on Access to Public information (2021) (applicable to public sector data controllers). The law mandates that such entities keep contact information public, including social network address, for communicating with the public and delivering information, and to reports and news on the resolution of applications and complaints.

Both stakeholders and prior reports note the gaps in practical implementation of the law, for instance, with respect to setting of and compliance with quality/safety standards.¹⁰⁶ A similar issue (divergence between the promised and actual quality of the products purchased) was noted by the participants of the consumer survey (Figure 35). The problem particularly persists in social media C2C sales.

The drafting of the new Consumer Protection Law is in progress. Among other content, the new instrument will contain a chapter with rules specifically devoted to “Remote and Electronic Business Activities”, of clear relevance to e-commerce.

Privacy and protection of personal data

The privacy protection framework of Mongolia was recently revised through the adoption of the new Law on Protection of Personal Information (2021). The law deals with collection, processing, and use of personal information, defined as “sensitive information of a person and the name of a person’s parents, name, date of birth, place of birth, address of residence, location, civil registration number, assets, education, membership, electronic identifiers, and other information that directly or indirectly identifies or can identify a person”.

The law establishes different regimes for the collection and processing of personal information by the government and other stakeholders and catalogues data owners’ and data controllers’ / processors’ rights and obligations. Somewhat more restrictive rules might be established for the collection of personal information deemed particularly “sensitive”, which includes private keys of digital signatures.

The law also designates the National Human Rights Commission as a Data Regulator. Nevertheless, the Law on the National Human Rights Commission (2020) does not explicitly provide for any functions or procedures related to data regulation. The technical side of the implementation of the law is entrusted to the MDDC.

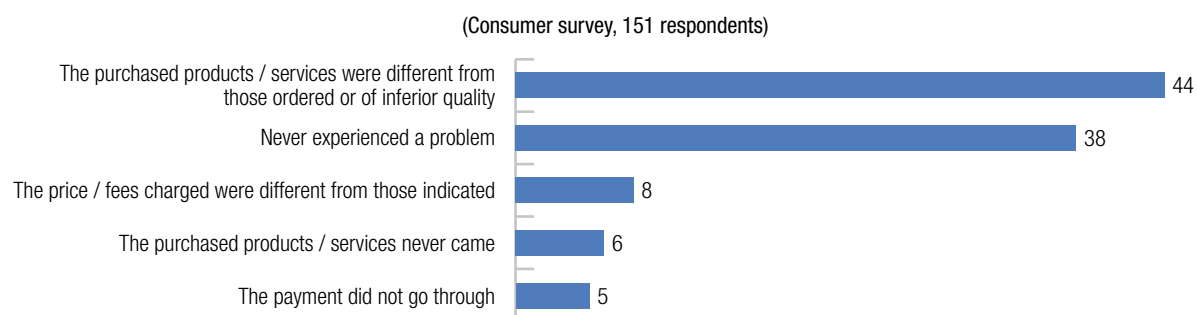
Cybercrime

Provisions of relevance to cybercrime are incorporated into the three articles of Chapter 26 of the Criminal Code of Mongolia (2015), entitled “Crimes against security of electronic information”.

The Code punishes certain offences against confidentiality, integrity, and availability of computer data and systems: illegal invasion of electronic information (Art. 26.1); developing and selling programs and devices for illegal invasion of electronic information network (Art. 26.2); and creating, using, spreading the destructive programs (Art. 26.3).

These provisions contain several, albeit not all, model substantive rules in the area, as reflected in the ETS 185 (Budapest) Convention on Cybercrime: illegal access (Art. 26.1.1 – Art. 2 of Budapest Convention,

Figure 35: Problems experienced when purchasing online (%)



Source: UNCTAD

¹⁰⁶ Seo Young Lee et al., ‘A Comparative Study on Consumer Protection Legislation in Mongolia and South Korea’ (Korea Legislation Research Institute, 31 August 2013), <https://www.klri.re.kr/kor/publication/1390/view.do>. Lee et al



data interference (Art. 26.1.2 – Art. 4 of Budapest Convention), system interference (Arts. 26.1.2 and 26.1.3 – Art. 5 of the Budapest Convention), and misuse of devices (Arts. 26.2 and 26.3 – Art. 6 of Budapest Convention).

The crime of fraud (Art. 17.3) among other things, refers to “electronic tools”, as well as other more specific crimes, for instance making, using counterfeited money, securities or payment instruments (Article 18.7) and/or technology – neutral crimes, involving fraudulent actions, which might be facilitated electronically or might seem to reflect the content-related offence of computer-related forgery and computer-related fraud, at least in part. (Arts. 7 and 8 of the Budapest Convention). Child pornography crimes reflected in the Mongolian Criminal code (Arts. 16.8 and 16.9) are also technology neutral, making a parallel with Art. 9 of Budapest Convention. The same is true for Art. 18.7 of the Code, addressing copyright infringements (Art. 10 of Budapest Convention). The only notable substantive omission from the scope of the Code appears to be a crime of illegal interception of data (Art. 3 of Budapest Convention), dealing with interference with the data in transmission.

Meanwhile, no detailed provisions related to searches, seizures, real time collection of traffic data, particularly instances of extended jurisdiction over computer crimes, and the like are yet in place.¹⁰⁷

Cybercrimes, especially those under Chapter 26 of the Criminal Code (2015), are enforced by a dedicated criminal police department for fighting cybercrime with a website, hotline, Facebook and Twitter accounts.¹⁰⁸ Cybercrime awareness seems to be actively raised among the general public.

6.5 The state of implementation and enforcement of other laws relevant to e-commerce

Electronic evidence

Procedural law of Mongolia lacks clarity on admission of electronic evidence, domestic and foreign, which creates uncertainty for the stakeholders, who

have expressed confusion in this regard during the consultations leading to drafting of the Paperless Trade Readiness Assessment of the country in 2019.¹⁰⁹ While such evidence appears to be recognized in criminal procedure, procedural actions related to their collection are not fully enabled. Meanwhile, other procedural legal acts are silent on the matter.

Electronic identification

Despite increasing digitalization in many services areas, including e-government, initial identification is still physical. The Law on Money Deposits, Money Transfers, and Loan Activities of Banks and Sovereign Legal Trusts (2020) (Art. 7) allows banks and authorized legal entities to offer deposit, transfer, and credit services related to their accounts only to customers who have signed a written agreement and created an account. Nevertheless, a move towards electronic identification might be expected with the implementation of the Law on Electronic Signatures (2021), which states that such signatures might serve to identify a person or legal entity. The recently adopted UNCITRAL Model Law on the Use and Cross-border Recognition of Identity Management and Trust Services (2022)¹¹⁰ may assist the creation of these standards. Mandatory or voluntary integration with GLEIF/LEI and using the LEI information list might be considered as a part of the design of the e-identification process for legal entities. This approach, already used by several countries, could ease private sector onboarding in cross-border trade.

Liability of platforms/intermediaries

Mongolian law has taken a more proactive position with respect to the liability of intermediaries than existent international practices.

Liability of intermediaries for the unlawful third-party content that they publish is detailed in the General Regulatory Conditions and Requirements of the Digital Content Service (2011), issued by the CRC in implementing Arts. 8.1 and 9.1.2 of Telecommunications Law (2001), mandating it to develop effective and fair competition environment for market participants such as business entities of

¹⁰⁷ 'Mongolia - Octopus Cybercrime Community', Council of Europe Portal, accessed 6 December 2022, <https://www.coe.int/en/web/octopus/-/mongolia>. 'Mongolia - Octopus Cybercrime Community'

¹⁰⁸ 'Criminal Police Department for Fighting Cybercrime', accessed 6 December 2022, <http://www.cyber.police.gov.mn/>. 'Criminal Police Department for Fighting Cybercrime'

¹⁰⁹ ESCAP, 'Readiness Assessment for Cross-Border Paperless Trade', 2019

¹¹⁰ At the moment, the text is available in the draft version only. <chrome-extension://oemmdcbldboiebfmladdacbfmadadm/https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/en/acn9-1112-e.pdf>



all property types and citizens, to issue licenses, as well as to make professional analyses and decisions. The conditions apply to communications services providers (Mobile communications service providers, Internet service providers, IP Television service providers, Mobile Television service providers, and other service providers that enable the transmission of digital content), Content Aggregators, Content Hosting Service Providers, and Web-site Service Providers. Prohibited content is identified on an exhaustive list, which includes pornography, advertisement enticing to commit a crime, terrorism, religion-based cruelty, public disorder, use of prohibited drugs or substances, alcohol, content that infringes the rights of minors, copyright, or has negative influence on children's behaviour.

The General Regulatory Conditions further refer in detail to the actions to be taken by an intermediary (by the type) with respect to the illegal content. In case of inaction or non-responsiveness, the intermediary might be subject to a suspension of a license. Moreover, the Conditions obligate a website to register with CRC should it have more than 300 visitors a day.

In addition, CRC has translated the key Facebook Community standards to Mongolian, introduced Tips for reporting on Facebook Social Network on its website, and established cooperation with Meta in a form of the "Government Case Work Channel", working to remove content from the Facebook platform that is illegal and violates Facebook's Community standards. From May 2021, the CRC, in cooperation with the YouTube platform, started reporting illegal content using the "trusted partner" mode. The CRC receives complaints related to electronic environment and reports them in its statistics.

Cross-border transfer of data by electronic means and data localization

Art. 14 of the Law on Protection of Personal Information (2021) allows transfer of personal information abroad only should the consent of the owner of such information be obtained, except as provided by law and international agreements of Mongolia. Not yet addressed by the implementing rules, this requirement might have far-reaching consequences for the private sector, for instance, complicating the inter-group cross-border corporate transfers of data.

The only FTA containing e-commerce provisions concluded by Mongolia this far, with Japan, provides, in Art.9.12.5, that "the Parties recognize the importance of working to maintain cross-border flows of information as an essential element for a vibrant electronic commerce environment". Somewhat atypically, further rules on data flows are contained in Annex Five of the FTA – Communication Services. This provision explicitly refers to unrestricted use of "public telecommunications transport networks and services for the movement of information within and across borders, including for intra-corporate communications of such service suppliers, and for access to information contained in databases or otherwise stored in machine-readable form in either Party or in any other member of the WTO". More detailed / binding rules in the area are discussed in the WTO JSI on e-commerce.

Chapter 7 of the Mongolia-Japan FTA contains further provisions prohibiting restrictions on the cross-border transfer of financial data. According to the BOM, financial data is currently stored locally, on the storage servers physically located at the BOM. No restrictions appear to be set on cross-border transfer of other, for instance, commercial data.

The Mongolia-Japan FTA prohibits a data localization requirement as a condition for doing business, subject to an exception permitting the localization necessary to achieve a legitimate public policy objective, if not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on trade.

Cloud data storage solutions are not new to Mongolian private sector. For instance, one of the Mongolian e-commerce vendors, Shopyy.mn, indicates to its consumers, that their data are stored on Amazon EC2 (where regional data localization is not enabled).¹¹¹ Azura Stack cloud data storage solution ensured through the data center located in Mongolia, was recently launched by Mobinet, a company associated with one of the Mongolian telecommunications service providers, Mobicom LLC. Azure Stack is an extension of Microsoft Azure cloud integrated system with IaaS and PaaS, enabled to ensure localized data storage.

¹¹¹ Shopyy, 'Shopyy.Mn', *shopyy.mn* - Дэлхийн Брэндүүд нэг дор, accessed 1 December 2022, <https://shopyy.mn/>



Open governmental data

The recent Law on Access to Public Information (2021) established a framework of open data disciplines, driven by the aim to support the economy and business, develop research and analysis work, and increase the transparency and availability of information. An interested person is allowed to ask the data controller to make certain data open.

The open data is subject to a “double” publication – both on the data controller’s web page and on the state’s integrated open data system (<https://opendata.gov.mn>), which was established in 2020; however, is still largely empty. The data shall be regularly updated by the data subject that has developed it. The Law prohibits publication of the open data in the following cases: if it is possible to identify public and official secrets, persons and legal entities through the open data; if the open data violates intellectual property rights; and if publishing the open data violates the rights and legal interests of people and legal entities. Disputes with respect to publication of the open data shall be resolved by the data controller, with the possibility of further complaint to the court.

Meanwhile, the law reserves a number of issues to be determined in the implementing legislation. Such issues are the conditions and procedures for creating, publishing, and using open data from the data subject, the requirements for open data, and the operation procedures of the integrated state open data system; the types of data that shall be published for free; and the payment calculation method for a fee for provision of data not published for free or in advance. Some of these relevant rules were already adopted by the MDDC.

Best practices in regulation of the open data, which have not yet been reflected in the text of the law, such as machine-readable format, searchability, inclusion of metadata, use of APIs, could be included into the implementation rules. To ensure the relevance of the data shared, regular consultations with the public sector with respect to the deserved content is advised.

Confidentiality/protection of commercial secrets

The Law on Confidentiality of Organization (1995) establishes a basic framework for protection of the secrets of legal entities, defined as “information, documents, and physical objects designated as

confidential by the relevant law for the purpose of protecting the legal interests of the organization in respect of human rights, dignity, and reputation”. The above might include technological solutions, projects, research and analysis, which are related to the specifics of the organization’s official activities, or which the organization has kept confidential for the purpose of protecting its market and advantages in fair competition, and which, if disclosed, may harm its legal interests’. The onus of protection of the organizational data, through establishment of the relevant policies, among others, is put on the organization itself. Certain types of organizational data might be subject to copyright (computer programmes, databases), patent, trade secret, and other types of IP protection.

Cybersecurity

According to the National Security Concept of Mongolia approved by the National Assembly (Resolution No. 48) in 2010, information security is declared as a component of national security. Enhancement of information security has further been made part of the Vision 2050. Mongolia updated its legal regulation of cybersecurity in December 2021 by adopting the Law on Cybersecurity, which gained legal force in May 2022, yet still needs to be implemented. The Law is not fully aligned with the best international practices in the area, in particular, with respect to the procedural aspects.

The Law aims to establish the operational system, principles, and legal basis for ensuring cybersecurity, and to regulate relations linked to ensuring the integrity, confidentiality, and accessibility of information in cyber space and cyber environment and extends its application beyond the territory of Mongolia, also being applicable to foreign citizens, stateless persons, foreign and foreign-invested legal entities operating through information systems and information networks of Mongolia. Among the core principles of the law are unified management, reliance on science, advanced techniques, technology, and innovation, support to national products, services, and human resource capabilities, risk-based approach, reliance on private and public partnership, and development of international cooperation.

The Law provides for a diversified structure of state cybersecurity organizations carrying out varied tasks under overall guidance of a part-time cybersecurity



council, yet to be created. Three different centers to combat security attacks (national, public, and armed forces center) are to be created.

The Law also establishes obligations for different groups of legal entities, including organizations with critical information infrastructure (such as banking and financial institutions with integrated payment, settlement and transaction electronic systems, ICT service provider with legal monopoly or dominance information and operational management centers, organization responsible for basic and supporting information systems and basic databases, data centers, their branches and the organization responsible for the operation of the resource centers, and organizations responsible for the control and management system of border ports), legal entities providing ICT services in the field of information processing, storage, distribution, and electronic computing, and other legal entities.

Customs duties on electronic transmission and digital products

The goods tariffs schedule of Mongolia, based on HS 2017¹¹², does not contain tariff lines for electronic

transmissions within, thus, according to the law of Mongolia on Customs Tariff (1996), as well as according to the Customs Law (2020), customs duties on such transmissions cannot be imposed. Mongolia has not yet conducted a feasibility study related to the introduction of the respective customs duties, nor has taken a firm position thereon in the discussions within the WTO Work Programme or JSI negotiations. The Mongolia-Japan FTA prohibits the imposition of customs duties on Electronic Transmissions in its Art. 9.3. Presently, Mongolia is compliant with this commitment.

While digital products (computer programs, text, video, images, sound recordings and other products that are digitally encoded, regardless of whether they are fixed on a carrier medium or transmitted electronically) are now widely used in Mongolia, no regulation affecting National or MFN treatment is granted to such products, which might contradict the obligations reflected in Art. 9.2 of the Mongolia- Japan FTA, were identified. While the Law on Innovation (2012), in its part, might be read as supporting domestic development of computer software, such subsidization, even if put in place, would fall under the exception under the respective rules.

¹¹² WTO, 'Mongolia, Schedule CXXXIV (134)', World Trade Organization | Goods Schedules eLibrary, accessed 1 December 2022, <https://goods-schedules.wto.org/member/mongolia>



7. E-COMMERCE SKILLS DEVELOPMENT

Development of the relevant skills, including ICT, e-consumer, and digital entrepreneurship and linguistic skills, is indispensable for further growth of e-commerce in Mongolia. The development of the ICT skills appears to attract sufficient attention and to benefit from clearer gap-filling perspectives. Nevertheless, a significant mismatch exists between the largely theoretical formal educational curriculum, and the skills necessary for e-commerce. Such skills are often built already during employment, prolonging on-the-job training phase. Most of the formal educational institutions lack both up-to-date equipment and qualified staff necessary to ensure the embedding of the ICT into the learning process. Sporadic initiatives contributing to development of different types of skills of relevance to e-commerce are run by start-up incubators and accelerators. Often delivered on a competitive basis, they benefit a rather small number of the relevant entities and individuals.

7.1 E-commerce skills

Digitalisation is shifting the factors determining location of international investments, with educational standards and skills gaining in importance. Modern skills of relevance to e-commerce and engagement in the digital economy are not limited to the ICT competencies, even if those remain important. Entrepreneurs and consumers engaged in the sector also need other skills: social, business and entrepreneurs' leadership skills, consumer digital competencies, and linguistic skills. The presence and development of these sets of skills in Mongolian stakeholders is analysed below.

ICT skills

Engagement in e-commerce requires certain level of mastery of ICT devices, such as a computer or a smartphone, i.e., ICT skills. ITU divides such skills into several groups, based on the difficulty of the tasks, which they are aimed at accomplishing (Table 7).

According to the ITU data, Mongolia scores moderately on the distribution of both basic and standard ICT skills, with, reportedly, 31 and 22 per cent of the population possessing those in 2021.¹¹³ Three per cent of the population is estimated to possess advanced ICT skills. The situation justifies further capacity-building efforts on all skills levels.

Consumer digital competences

ICT skills alone are not sufficient to enable confident and secure consumer interactions online. A number of competences allowing consumers to understand different elements of the interactions, evaluate pertinence and reliability of information, and, if necessary, defend their rights and seek remedies, are also useful. Mongolian consumers appear to prioritize the choice, outlook, price of products and delivery terms, devoting considerably less attention to the sales conditions, data protection, security, information about the website and the seller (which might be crucial in case of the redress), reviews made by the other

Table 7: Types of ICT skills and skills development, 2021

Basic ICT Skills	Standard ICT Skills	Advanced ICT Skills
<ul style="list-style-type: none"> - Copying or moving a file or folder. - Using copy and paste tools to duplicate or move information within a document. - Sending e-mails with attached files. - Transferring files between a computer and other devices. 	<ul style="list-style-type: none"> - Using basic arithmetic formulas in a spreadsheet. - Connecting and installing new devices. - Creating electronic presentations with presentation software. - Finding, downloading, installing and configuring software. 	<ul style="list-style-type: none"> - Writing a computer programme using a specialized programming language.

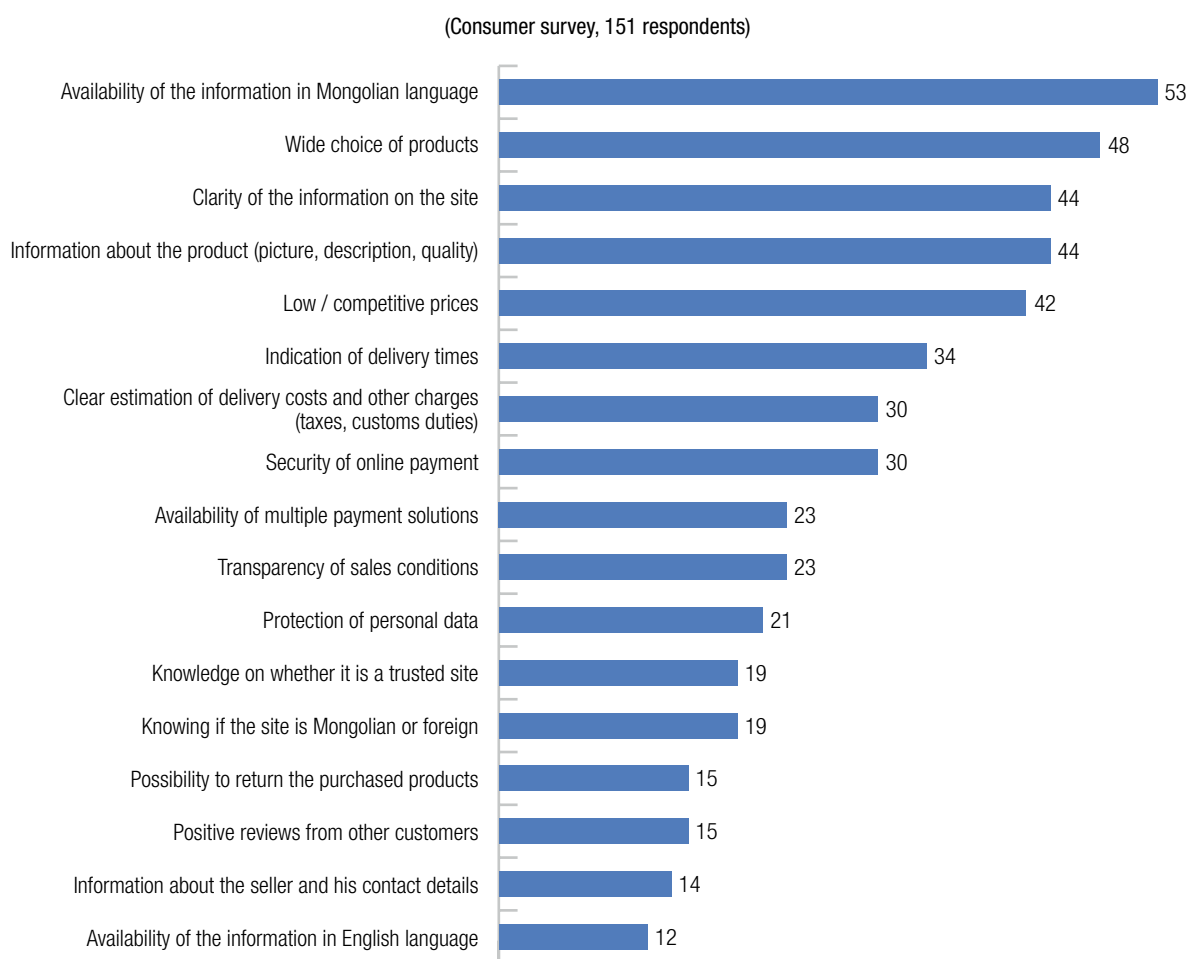
Source: ITU

¹¹³ 'Digital Development Dashboard', ITU, accessed 1 December 2022, <https://www.itu.int:443/en/ITU-D/Statistics/Dashboards/Pages/Digital-Development.aspx>



consumers and other issues. (Figure 36 and Figure 37). This is confirmed by the ITU data, according to which only 18 per cent of individuals in Mongolia are able to verify the reliability of the information found online and 13 per cent can set up effective security measures to protect devices and computers.¹¹⁴

Figure 36: When you buy online, what criteria are important for choosing a site? (%)

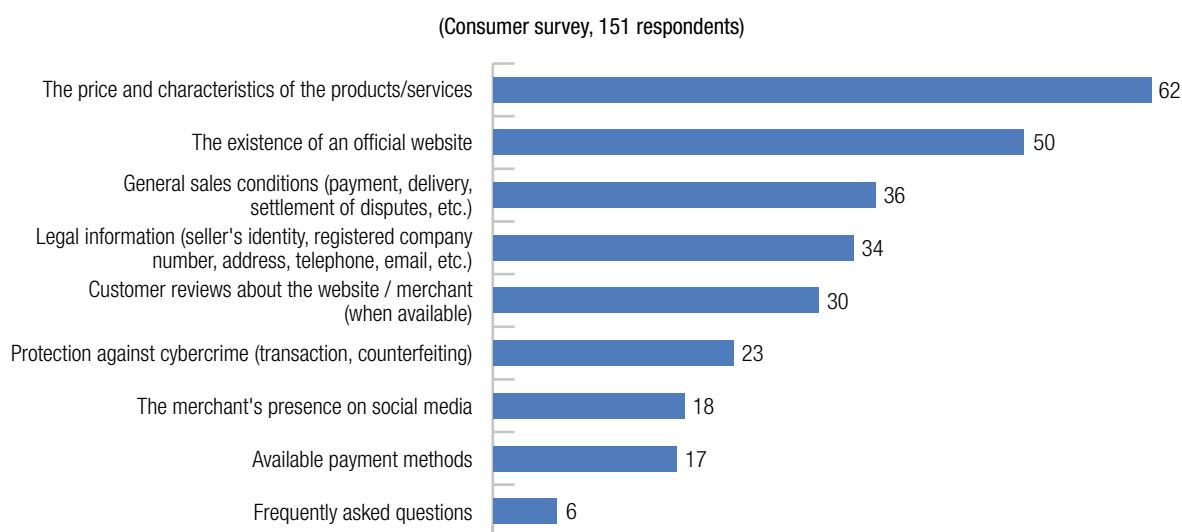


Source: UNCTAD

¹¹⁴ 'Individuals with ICT Skills, by Type of Skills', ITU DataHub, accessed 4 December 2022, <https://datahub.itu.int/data/?i=100082&e=MNG&c=1892>



Figure 37: When you go to make a purchase online, what information do you check the most before placing the order? (%)



Source: UNCTAD

Social, business, leadership, and entrepreneurial skills

Several groups of the ICT+ skills and entrepreneurial competences are believed to becoming increasingly essential for the success of e-commerce business. According to UNESCO, employers are looking for ICT skills as well as socio-behavioural skills, such as communication skills, problem-solving ability, creativity, and leadership.¹¹⁵ Such skills are often reported to be lacking in the ICT graduates from the Mongolian Universities, even if their theoretical preparation for engagement in the ICT sector is sufficient. While an interest in business development skills is not lacking among Mongolian students and even considerably outranks that in pursuing studies in engineering, computer science, or mathematics, it is a combination of different skills that matters, whether in an individual or in a project team.

Linguistic skills

The knowledge of foreign languages, both by Mongolian consumers and businesses engaged in the online trade, is also an important factor, since the majority of electronic content is presented in languages other than Mongolian. While availability of information in Mongolian is highly valued by Mongolian

consumers and shapes their e-purchasing decisions (Figure 36: When you buy online, what criteria are important for choosing a site?), English and regional languages – Chinese and Russian – also facilitate engagement with certain platforms and customer groups. Acknowledging this trend, the startups surveyed by JICA reported that a significant share of their employees is bilingual. Awaiting the development of more ample relevant linguistic skills, gaps are being filled by the artificial intelligence– for instance through online electronic translation.

7.2 Ways of developing e-commerce skills and bridging the skills gaps

Individual e-commerce and digital skills of Mongolian citizens are expected to be developed through formal education, including its mandatory and non-mandatory (tertiary) components. Formal education is sometimes supplemented by workplace training or special courses and training, including those organized by the development partners. E-commerce skills in startups are nurtured by incubators and accelerators, which, nevertheless, are in short offer and, thus, are selective. These same structures also conduct training activities of benefit to the general public.

¹¹⁵ 'ICT in Education Policy Review Report: Mongolia' (UNESCO, 2021), <https://unesdoc.unesco.org/ark:/48223/pf0000379606>



ICT skills development through the national educational system

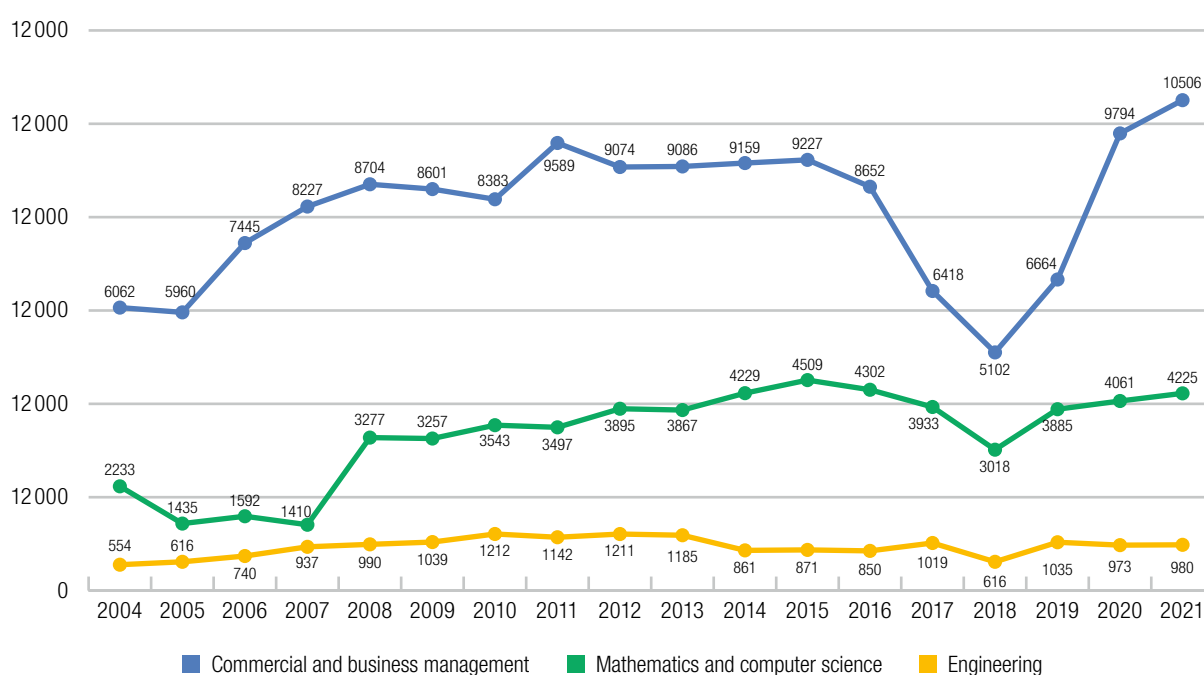
Adapting the national educational system to the needs of emerging digital society is particularly important in the face of a significant growth in Mongolian population, estimated by the NSO to reach 3.76 million by 2030, 4.33 million by 2040, and five million by 2050. The ICT education is somewhat integrated into Mongolian formal education curriculum starting in middle school through graduation. Information Technology courses also make part of the first-year university curriculum. According to the NSO, the number of the university graduates that have acquired a technical profession, which might be of relevance to the ICT, has remained stable over recent years, while business management education, saw an increase in the number of graduates, after having dropped in 2016-2019 (Figure 38).

A comprehensive assessment of the ICT educational policy of Mongolia, conducted by UNESCO in 2021, provided detailed recommendations related to the improvement of the ICT embedding therein, which are also important to the development of e-commerce in the country. The assessment noted among its conclusions that the access of the students to up-

to-date ICT devices in school and at home remains insufficient, that the ICT culture in education is yet to be developed, and that the ICT competences standards for teachers in higher education need to be elaborated and mainstreamed with the related training activities put in place. While e-learning is developing well in TVET, additional training for teachers to help them to operate better in the digital setting is needed, TVET education in Tourism and hospitality, High-tech agriculture, Urban farming with using new technologies of hydroponics, aquaponics and aeroponics, High-tech livestock production, and FAB-LABS / STEM Light Additive Manufacturing might particularly benefit from reinforcement of the ICT elements within and could become more attractive to youth.

According to the Mongolian Software Industry Association (MOSA), there are qualitative and quantitative shortages of mid-career professionals such as programmers and designers on the Mongolian ICT development market. Since many assignments are outsourced, it is crucial that, in addition to programming skills, employees have the necessary linguistic capacity. In addition, many smaller businesses in Mongolia lack good human resource practices, including clear job descriptions,

Figure 38: Graduates of universities and colleges, by professional field



Source: NSO



Box 1: Kosen Technical Colleges

To bridge certain gaps in technical, notably engineering, education in Mongolia, three colleges were opened with the support of JICA and Japanese partners, notably the Japanese Kosen National Institute of Technology and National Institute of Technology and Sasebo College. The colleges competitively enroll 9th school year (15 y.o.) students for a 5-year-long course, which, upon successful completion, results in students obtaining a professional mid-level engineer diploma. The diploma permits its holder to continue the educational track at the university (starting from the 3rd year of the 4-year long dedicated bachelor programme). The curriculum and teaching methodology of Kosen Colleges combine the long-standing Japanese approach to technical education with the current needs of Mongolian industries in engineers, combining theoretical, practical, communication, leadership skills and creativity in their profiles.

Source: *Kosen Technical Colleges Mongolia*

responsibilities and expectations on both sides, and an organizational culture.¹¹⁶

Apprenticeship, traineeship, and other forms of workplace training

Training initiatives relevant to e-commerce are also offered outside of the formal educational setting, for instance, through learning-by-doing training provided at the workplace. They are often intended to bridge the skills gap left after formal education.

The Law on Supporting Employment (2011) establishes an obligation of the employer to provide employees with the opportunity to improve their skills and benefit from learning in the fields related to the functions of the workplace in accordance with the laws. Such upskilling might include ICT training. The same Law also sets forth the rules for apprenticeship arrangements during try-out periods or up to three years, which might be used to develop digital skills among others. Some private sector companies active in ICT rely on the “long-term internships” for senior university students to get their new employees ready to undertake full responsibility. Among such companies – Mobicom, which suggests that the training of an employee takes about three years and, thus, requires creative organizational solutions to prevent losses.¹¹⁷ Despite a clear mismatch between the university curriculum and the skills required at the workplace, collaboration between academia and private sector

stakeholders aimed at its revision still appears to be lacking.

Social groups subject to specific treatment with respect to the development of e-commerce skills

There are specific concerns in relation to the e-commerce skills of particular social groups, such as youth, people with disabilities, rural population, and women. The skill gaps characteristic of each of these groups and specific measures needed in order to bridge them, are discussed below.

Educational and training measures specifically targeting youth, provided for in the Law on the Youth Development (2017) include training according to lifelong education programme, implementation of an electronic library programme, a national scholarship program in the fields of science, high technology, innovation, analysis, and research financed by the Youth Development Support Fund. A special framework supporting youth employment includes encouraging young people who have acquired high-tech, specialized professions and skills, including unemployed young people in training to improve their professional skills.

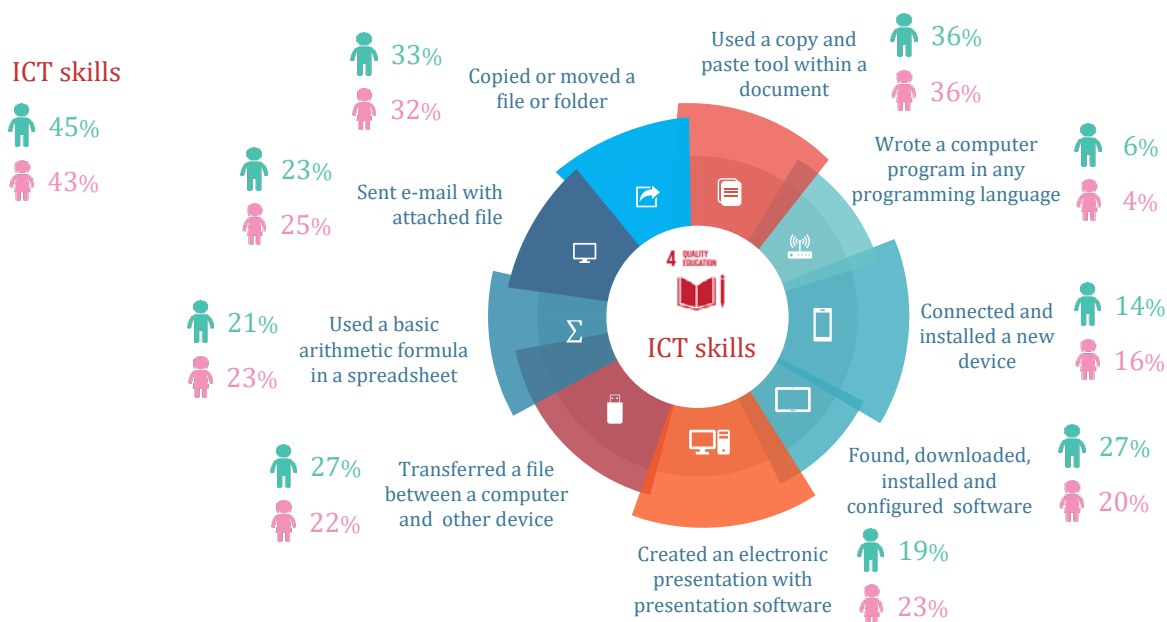
The assessment recently conducted by the UNICEF evidenced a rather limited overall level of development of ICT skills in Mongolian youth aged 15-24, with the copy-paste skill for texts and files/ folders being featured as most frequently used functions (Figure 39).

¹¹⁶ ADB, *Mongolia's Economic Prospects*, 139

¹¹⁷ 'The Digital Readiness Assessment: Mongolia in the Digital Age' (CITA, n.d.), 28, <https://artnet.unescap.org/sites/default/files/file-2019-11/Digital%20Readiness%20Assessment%20Final%20Draft%202009.09.pdf>



Figure 39: ICT skills for adolescents and youth age 15-24 years, by sex



Source: UNICEF¹¹⁸

The ICT skills were found to be better developed in the youth not having functional difficulties (44 per cent, national average), as compared to disabled youth (31 per cent). As far as the level of education is concerned, the highest level of ICT skills was demonstrated by University and Upper Middle School graduates (54 per cent each), while those having pursued vocational training scored at 18 per cent only. Finally, geographically, ICT skills were best developed in the youth from Ulaanbaatar (55 per cent), with the respondents originating from the wealthiest apartment districts scoring as high as 64 per cent. The lowest average score of 20 per cent was attributed to the representatives of rural areas.¹¹⁹

Accessibility of Internet and computer applications in Mongolia is still not fully meeting the needs of its population of persons with disabilities, estimated to be about 129,979 (4.1 per cent, 2019). Mongolia has scored 42/100 on the Digital Accessibility Rights

Evaluation (DARE) Index scale, which is designed to assist in-country advocates, governments and other stakeholders assess the progress of their countries in comparison to international benchmarks.¹²⁰ Having ratified the major international treaties devoted to protection of the rights of persons of disabilities, such as the Marrakesh Treaty to Facilitate Access to Published Works for Persons Who are Blind, Visually Impaired or Otherwise Print Disabled (2013) and the Convention on the Rights of Persons with Disabilities (CRPD) (2006), and having adopted dedicated Law on the Rights of Persons with Disabilities (2016), as well as having established an implementing agency, Mongolia has not yet implemented an ICT accessibility strategy based on the international standards.¹²¹ It is lagging behind on involving DPOs in elaboration of such a strategy and raising public awareness about ICT accessibility, through integrating it in the higher education curriculum, among others. Mobile telephony, Internet availability and usage, e-government, ICT in education and employment

¹¹⁸ The 2021 MICS-EAGLE Mongolia Education Fact Sheet, n.d., 31, https://data.unicef.org/wp-content/uploads/2021/11/MICS-EAGLE_Education_Fact-sheets_2020_Mongolia.pdf

¹¹⁹ The 2021 MICS-EAGLE Mongolia Education Fact Sheet, 32

¹²⁰ G3ICT, 'Digital Accessibility Rights Evaluation Index (DARE Index): Mongolia, Country Dashboard', G3ict: The Global Initiative for Inclusive ICTs, accessed 3 December 2022, <https://g3ict.org/country-profile/mongolia>

¹²¹ 'Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled', accessed 12 December 2022, <https://www.wipo.int/treaties/en/ip/marrakesh/index.html>; 'Convention on the Rights of Persons with Disabilities (CRPD)', accessed 12 December 2022, <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html>



are among the areas not sufficiently touched by the accessibility projects. Meanwhile, the Regulatory Strategy of the Telecommunications Sector of Mongolia: 2019-2024 refers to cooperation between the state and organizations in the field of increasing access to communication services for people with disabilities.

Development of digital skills in rural population might facilitate their access to online training resources, courses, and materials, for instance, those explaining the modern commercial standards used in agriculture, animal slaughtering, meat, leather, yarn processing, etc. One example is the training now translated into Mongolian by the UNIDO within the framework of the WB funded export development project: Strengthening Accreditation and Certification Services in Mongolia.¹²² Implementing these standards might positively affect export potential of Mongolia on international markets. Other development partners such as the UNDP are also rolling out programmes to facilitate accessibility to people with disabilities and the translation of IT programs content in Mongolian¹²³ on the basis of the Memorandum of Understanding signed with MDDC in April 2022¹²⁴.

Basic and general ICT skills of women in Mongolia are on parity with those of men.¹²⁵ However, while the number of women pursuing any ICT degree in higher education exceeds the number of their male classmates, actual employment of women in the ICT is about half the level compared to the employment of men (according to the NSO, in 2021, 10,327 males and 5,648 females were employed in the ICT sector). This is also consistent with overall lower participation of women in the Mongolian labour force, despite their superior education. In the Q&A during the WTO TPR of Mongolia process in 2021, it was recognized that although the education level of women is higher than men, as of 2020, the share of women (53.4 per cent) in the labor force participation rate is 16.1 points lower than men (69.4 per cent).¹²⁶

To encourage more women to engage in ICT, an acceleration programme targeting women-owned businesses, as well as female ICT university graduates, was established in 2014 and is still in existence. A short-term skill boosting programme for women pursuing university studies in STEM disciplines was also recently launched (Box 2).

Box 2: Select initiatives in support of women entrepreneurs

To support social development, involve women leadership with new ideas, increase the participation of women in the era of information technology, and create gender equality in the IT sector, the National IT Park State-owned incubator launched in 2014 a dedicated "Information technology incubator for Women entrepreneurs". The programme is open to Mongolian women-owned businesses operating in the IT sector for five years with no less than 80 per cent of full-time company employees being women specialized in IT and female executive management. Individual female IT graduates and women having acquired IT experience otherwise may also enrol and are subject to somewhat less stringent entry requirements.¹²⁷

In 2021, the Women Empowerment Foundation in Mongolia launched a STEM Scholarship Programme to support promising female students with demonstrated financial needs. It is a six-month programme open to sophomore students pursuing one of the STEM disciplines with concentration of Computer Science at the National University of Mongolia. The scholarship integrates activities leading to improvement in the key skills that are often reported to be lacking in Mongolian ICT graduates. It also tackles foreign language capacity and boosts leadership potential of the recipients. The scholarship benefits include partial tuition, an intensive English language course, a digital learning tool and personal development opportunities.¹²⁸

¹²² 'Strengthening Certification Services to Enhance Export Competitiveness of Small and Medium Agribusinesses', UNIDO Open Data Platform, accessed 4 December 2022, <https://open.unido.org/projects/MN/projects/200021>

¹²³ 'The Digital Readiness Assessment: Mongolia in the Digital Age'; UNDP, 'UNDP Mongolia Accelerator Lab Pushes for More Internet Inclusion for People with Disabilities', UNDP, accessed 15 December 2022, <https://www.undp.org/mongolia/blog/undp-mongolia-accelerator-lab-pushes-more-Internet-inclusion-people-disabilities>

¹²⁴ MDDC, 'The Ministry of Electronic Development and Communications Signed a Memorandum of Cooperation with the United Nations Development Program', 12 April 2022, <https://mddc.gov.mn/eng/4731/>

¹²⁵ 'Women and the Future of Work in Mongolia', September 2019, <https://library.fes.de/pdf-files/bueros/mongolei/15735.pdf>

¹²⁶ In the Q&A during the WTO TPR of Mongolia process in 2021, it was recognized that although the education level of women is higher than men, as of 2020, the share of women (53.4 per cent) in the labour force participation rate is 16.1 points lower than men (69.4 per cent). Trade Policy Review Body, 'Trade Policy Review - Mongolia 2021 (Addendum)'

¹²⁷ NITP, 'Activity Guideline of Target Sector of the Information Technology Incubator for Women Entrepreneurs' Project', 2014, https://itpark.mn/eng/wp-content/uploads/2014/12/guideline_women.pdf

¹²⁸ WE Mongolia, 'STEM Scholarship', WE Mongolia, accessed 15 December 2022, <https://www.wemongolia.org/stem-scholarship>



7.3 Incubation and acceleration of SME e-commerce skills

According to the Mongolian startup ecosystem study conducted by JICA, at least 10 incubators are active nationally. Incubation is taking place both through public entities (for instance, National IT Park) as well as private ones (i.e., Intelmind¹²⁹) and they tend to include both facilities and a training and mentoring offer.

While both the eligibility criteria and selection procedure of the National IT Park are formalized and transparent, a private Intelmind venture studio selects its startups following negotiations with them on the terms and conditions of anticipated cooperation. The acceleration phase appears to be approached on an ad hoc basis with focused support allocated to several competitively selected companies only.

Box 3: National IT Park, MonJa, and KITE Mongolia Startup Incubation and Acceleration Programmes

National IT Park is a State-run ITC incubator located in Ulaanbaatar that offers training and research services and serves as a testing center for several IT tests (Information Technology Engineers Examination /ITEE/, Test of Practical Competency in IT (TOPCIT), and ICDL /International Computer Driving License). Since its first intake in 2003, the incubator has enrolled 148 startups, 15 of which are still engaged in the programme. Enrollment of 295 startups is planned for 2023-2030. Startup services package includes incubator team, consulting services, working environment, Internet access, training, and top graduates' bonus. A post-Incubator service was introduced in 2021.¹³⁰ The National IT Park's Information, Training and Research Center is tasked with training for the implementation of the E-Mongolia programme. It is expected to contribute to the development of IT education of students, youth and public in the capital city and in rural areas and organize professional and other relative training in order to support personal development.¹³¹ According to its website, IT Park offers beginner and intermediate courses on CPanel, VmWare, IT Security, PHP, LINUX, Oracle, Network fundamentals, organization, and configuration, Firewall, Android and iOS on a commercial basis, among others.¹³² The Park is also running an introductory interactive programme on Coding, "Space Academy"¹³³ in cooperation with Mongolian Space Technology Association, with enrollment having reached 100.

The "MonJa Startup Accelerator Programme" was set up in 2020 by JICA in collaboration with MobiCom Corporation LLC, a subsidiary of KDDI Corporation, and the Mongolia-Japan Center for Human Resources Development. The six-month-long Programme aims at providing mentoring, networking with overseas investors, funding for supporting business expansion, as well as two pitch events for the development of IT solutions in the context of the COVID-19 pandemic. ASAP Care LLC, which develops the "Clinica" telemedicine mobile app emerged as a 2021 Best Pitch Award winner in terms of the degree of contribution to the COVID-19 pandemic issue and future growth potential. The company was established in June 2020 with six employees and currently has partnerships with 41 doctors and 19 medical institutions to offer telemedicine services through the app.¹³⁵

A startup accelerator established in 2020, KITE Mongolia LLC (KITE) is the first accelerator programme for startups that provide tech-based solutions to social and economic problems in Mongolia,¹³⁶ which also carries out a number of educational activities in the ITC domain. Among those, for instance, are KodUpNomads IT Coding programme for 105 high school students in rural areas, organized with the support of the Direct Aid Programme (DAP) and the Australian Embassy in Mongolia, Mongolian youth entrepreneurship series broadcasted nationwide on Education TV aimed at inspiring young people to take active role socially and economically through featuring 16 startup participants, a local phase of "She Loves Tech" ("SLT"), world's largest annual startup competition for women and technology including an acceleration program, resource matching and global pitch competitions,¹³⁷ Social Innovation Week (SIW), put together with the ADB Ventures and corporate sponsors to raise awareness of philanthropic capital in solving social problems, etc. KITE also assisted JICA in the Mongolian startup ecosystem survey, referred to in this Report.

¹²⁹ Intelmind, 'Intelmind Llc', intelmind.mn, accessed 15 December 2022, <https://intelmind.mn/>

¹³⁰ NITP, 'Chronology', National Information Technology Park, accessed 15 December 2022, <http://eng.itpark.mn/>

¹³¹ NITP, 'Information, Training, and Research Center', accessed 15 December 2022, https://itpark.mn/eng/?page_id=31

¹³² NITP, 'IT Trainings', accessed 15 December 2022, https://itpark.mn/eng/?page_id=71

¹³³ MOSTA, 'Space Academy', accessed 15 December 2022, <https://www.facebook.com/SpaceAcademyMongolia/>

¹³⁴ JICA, 'Inviting Startups to Apply for the MonJa Startup Accelerator Program in Response to COVID-19', 10 October 2020, <https://www.jica.go.jp/mongolia/english/office/topics/201010.html>

¹³⁵ JICA, 'Supporting Entrepreneurial Development in Mongolia, a Country Aiming to Become a Digital Nation', 20 December 2021, https://www.jica.go.jp/english/news/field/2021/20211220_01.html

¹³⁶ Kite, 'Kite Mongolia', Kite, accessed 15 December 2022, <https://kiteaccelerator.com/>

¹³⁷ She Loves Tech, 'She Loves Tech - Largest Startup Accelerator Platform for Women and Tech', She Loves Tech - World's Largest Accelerator Platform for Women & Technology, accessed 15 December 2022, <https://www.shelovestech.org>



Other educational and training activities in the ICT area run by incubators and accelerators

Incubator and accelerator programmes established in Mongolia, both public and private, also tend to provide training activities, ranging beyond the companies subject to incubation and acceleration.

It appears that the advice provided by the incubators in structuring of e-commerce business is overall highly trusted by the surveyed private sector participants, being second only to the consultancy firm’s guidance. Other entities, whom the private sector is quite eager to turn to for guidance are developing partners and banks (Figure 40).

Startups and consulting companies established by state-funded research institutions

Art. 27 of the Law of Innovation (2012) sets a basic framework of engagement of state-funded research institutions in innovation activities nationally, notably through establishing units responsible for technology transfer, startup companies, and consulting companies with the exclusive purpose of supporting startups producing innovative products or providing services within the country.

The Mongolian Government Action Plan (2020-2024) states that the government will centralize resources by establishing national centers in cooperation with the universities and academic research institutes for the purpose of developing scientific and technological innovations.¹³⁸

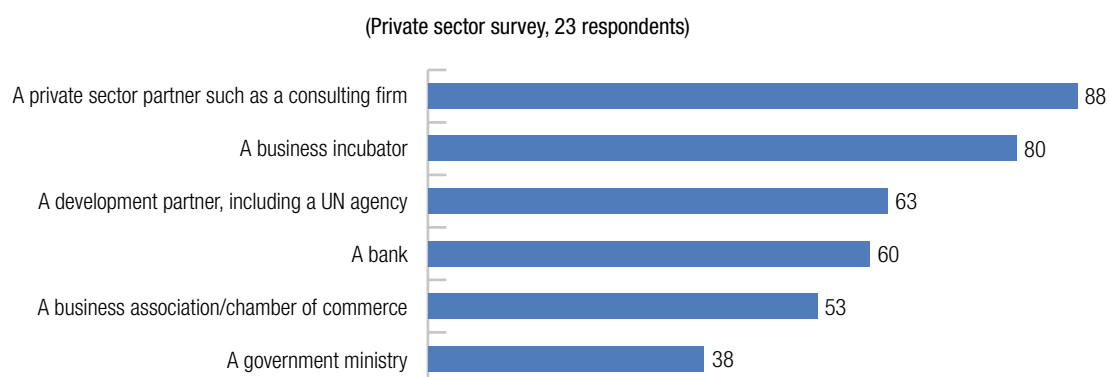
Several Mongolian academic institutions have established research units of relevance to the ICT. Among those are the Department of Academic Research and Innovation and the Technology Transfer Center of the Mongolian University of Science and Technology, as well as the Innovation and the Technology Transfer Center of the National University of Mongolia. Nevertheless, even within the framework of these collaborations, technology transfer from academia to business is reported to be slow due to administrative restrictions.

7.4 Support to e-commerce skills – building initiatives from development partners

Varied initiatives aimed at enhancing e-commerce skills of Mongolian population and businesses are carried out and/ or supported by the development partners. Among those:

- Atal Bihari Vajpayee Training Centre for Excellence in Information Technology, Communication, and Outsourcing – a project financed by India (Indian Development and Economic Assistance Scheme (IDEAS), launched in 2013, and expanded in 2022, which is expected to annually train 5,000 specialists in 16 fields.¹³⁹
- Support in connecting all secondary schools in the country to the Internet, ensured through China’s loan project “New Century Education”.

Figure 40: Financing options for e-commerce solutions (%)



Source: UNCTAD

¹³⁸ Government of Mongolia, ‘Action Plan of the Government of Mongolia for 2020-2024’, 2020, https://cabinet.gov.mn/wp-content/uploads/2020-2024_-ActionPlan_GOM_Eng_Edited_OE-2.pdf Objective 2.4

¹³⁹ UB Post, ‘IT Center to Train 5,000 Specialists’, 16 February 2022, <https://www.pressreader.com/mongolia/the-ub-post/20220216/281526524481449>



- Establishment of the Education Data Center and the “Erdemnet” network center, supported by the ADB.
- UNDP’s Accelerator Lab opened in 2021, which aspires to contribute to closing the digital divide of people in vulnerable situations and support inclusive and sustainable development of urban communities in Mongolia, and many others.¹⁴⁰

SME support

The SME Development Programme was approved by Decree 156 of the Government (2019). The key objectives of this programme are to expand the market of SMEs and to support their sales as follows: support research of domestic and international business opportunities, provide information, and develop e-commerce; provide information and knowledge about marketing of goods and services; support domestic and international exhibitions and fairs, support participation in international trade fairs and business meetings; organize human resource training for target SME groups; support SME clusters

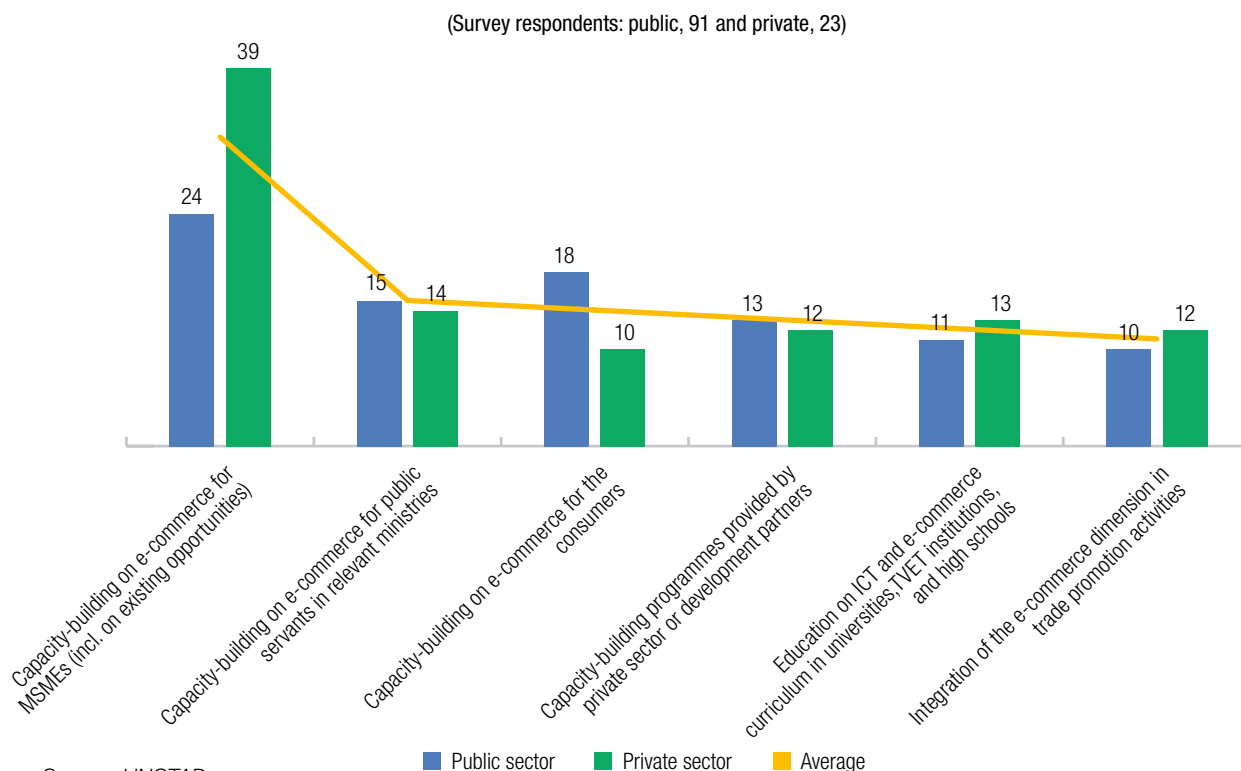
and initiatives to join and provide priority support to members of such clusters .

In addition, Article 8.1.5 of the Law on Promotion of Small and Medium Enterprises and Services (2019), states that the Government shall offer support to SMEs through its procurement. Accordingly, the Public Procurement Law of Mongolia (the Law on the Purchase of Goods, Works and Services with State and Local Property Assets) (2005), was amended to provide that SMEs receive 15 per cent of domestic preference over other participating bidders in a bid.

7.5 Priorities in e-commerce skills development

The findings presented above are consistent with stakeholders’ views on the factors of highest relevance to development of electronic commerce skills in Mongolia, which note the somewhat limited offer of incubation and acceleration services on the Mongolian market. Also, 87 per cent of private sector survey participants indicated lack of awareness of any programme implemented by development partners in the area of e-commerce (Figure 41).

Figure 41: Priority actions in e-commerce skills development (%)



¹⁴⁰ UNDP, 'UNDP Mongolia Accelerator Lab', UNDP, accessed 15 December 2022, <https://www.undp.org/acceleratorlabs/undp-mongolia-accelerator-lab>



8. ACCESS TO FINANCING

The lack of access to finance is a major entry barrier for the Mongolian MSME to engage in e-commerce, adding to their lack of capacity and awareness of the business opportunities. The MSME initiatives undertaken so far are mostly focused on the domestic market. Lack of regulation of the alternative forms of financing impedes trust therein and, consequently, their use in Mongolia. Because the performance of the Mongolian startups is not measured, the investors are not able to obtain information sufficient for enabling them to make informed investment decisions. As a result, the “growth strategy” of several Mongolian startups, aiming at diversification of funding solutions for their products, includes establishment of a subsidiary abroad.

8.1 Technological startup ecosystem of Mongolia: an estimation

The Law on Innovation (2012) defines a startup as “a company established for the purpose of producing new innovative products”. In their turn, innovative products are viewed as “results of innovative activities that [...] are better than similar products and services on the market in terms of technical and economic indicators, scientific capacity, value-added creation and competitiveness”. Innovation means “products, services, marketing, organizational methods and solutions created as a result of activities that transform new knowledge into wealth”. This terminology is conceptually consistent with the relevant definitions adopted globally. Nevertheless, the context of this study requires to somewhat narrow and focus it on the technology-based companies and their outputs. Interpreting “innovation” when setting eligibility requirements for the beneficiaries of its incubator and accelerator programmes, the National IT Park requires that “the products and services offered by the companies and individuals be in the information technology sector and be economically beneficial

innovative ideas likely to enter Mongolian and international markets.”¹⁴¹

The recent study of Mongolian technology-based startup ecosystem conducted by JICA¹⁴² was based on the Startup Genome’s Global Startup Ecosystem Report (GSER) and measured Mongolia’s startups’ performance; funding; market reach; experience, talent and knowledge; as well as connectedness (additional indicator). The study, which interviewed representatives from 80 startups, 10 incubators, accelerators, innovation hubs and meetup groups, and nine universities, technology colleges, and research institutions, noted the lack of third-party information on the Mongolian startup ecosystem, the possible reason for which is the young “age” of the latter (over 60 per cent of the startups were reported to be established less than 3 years ago), having relied on collection of data directly from the stakeholders of startup ecosystem.

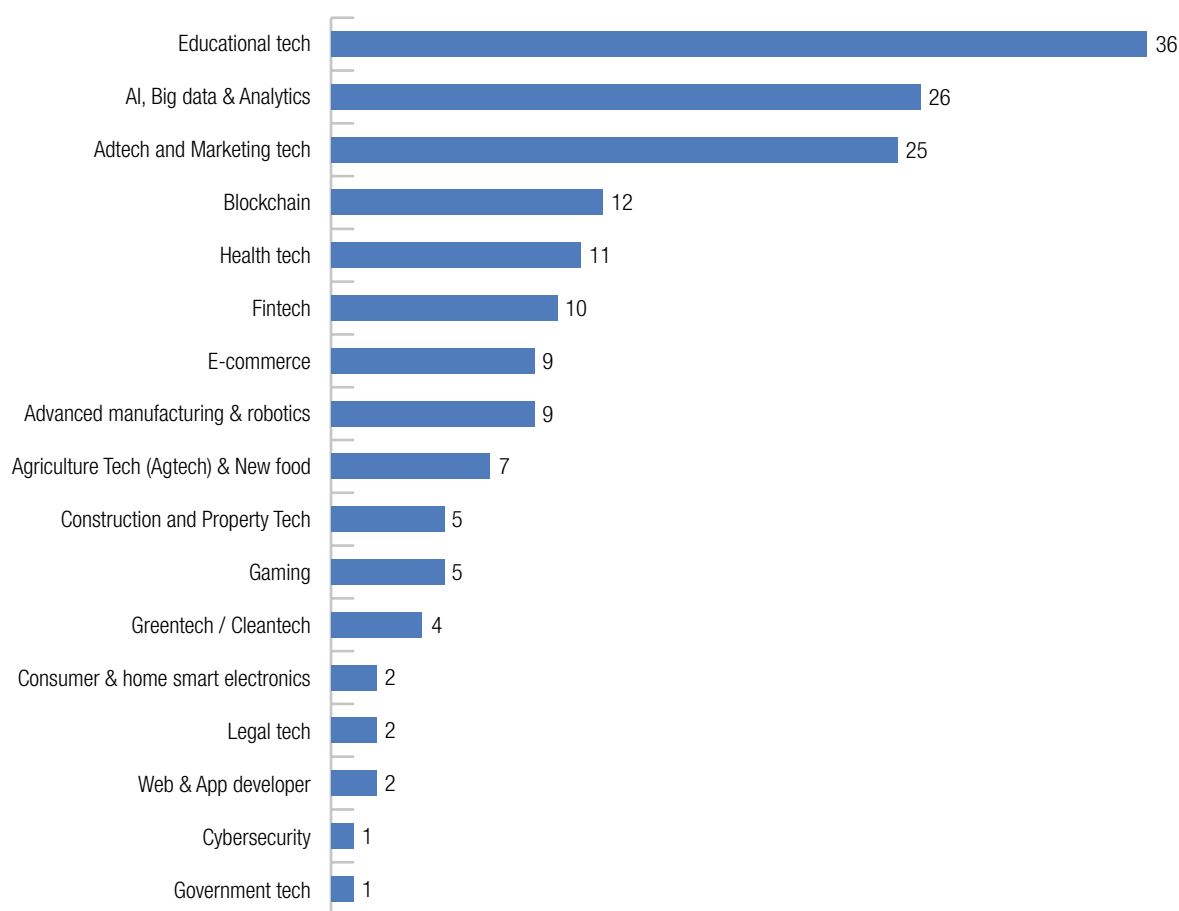
Despite being nascent, according to the study, the Mongolian startup ecosystem proves to be rather diverse (Figure 42), with FinTech, AdTech, Blockchain, EdTech and BigData startups leading by revenue.

¹⁴¹ NITP, ‘Activity Guideline of Target Sector of the Information Technology Incubator for Women Entrepreneurs’ Project’

¹⁴² JICA, Kite, and MMCG, ‘Baseline Survey of the Mongolian Start-up Ecosystem’ (Mongolia, 3 October 2022), https://www.jica.go.jp/mongolia/english/office/topics/gh13tc00000yef0-att/220413_02_en.pdf



Figure 42: Mongolian startups by sector (double counting), 2022 (%)



Source: JICA

Meanwhile, the statistics maintained by the National IT Park Incubator suggest that the startups engaged with it were involved in the following areas: Content Development – 58 per cent; Social Marketing – 23 per cent; Application Development – 10 per cent and System Development – 9 per cent.

Mongolian startups have reported to be (double counting) primarily engaged in business-to-consumer segment (B2C, 75 per cent), followed by business-to-business (B2B, 65 per cent) and business-to-government (B2G, 18 per cent). Some of them have already reached out to certain foreign markets (USA, Japan, Korea, Central Asia, Philippines) or plan on doing so. Meanwhile, it appears to be too early to accurately estimate performance of Mongolian startups, in particular, since only a small share of them (10 per cent) have yet undertaken a formal valuation.



Box 4: AND Global and SuperUp App

Mongolian AND Global is a cutting-edge tech-fin company, enabling clients to seamlessly integrate financial and alternative financial technology solutions into their businesses, as well as their daily lives through proprietary Fintech-as-a-Service software (using APIs and other means). Solutions currently offered by the company include e-wallet, e-KYC, e-commerce platform, lending and scoring solutions. The company started as the first mobile-based micro-lending platform in Mongolia in 2016. Currently, the company has subsidiaries in Mongolia, Japan, the Philippines, and Singapore. It inspires a further quick expansion across Asia. Among the successful clients of And Global are Mongolian LendMN, SuperUP, ShopyMN, Banana Mall, Mobicom, and others.¹⁴³

The SuperUp app was launched in the Mongolian market for delivering the all-in-one experience while benefiting from the partner network. This everyday app incorporates many functions and features in one place to provide access to everything that users need without having to download other apps. Since the app includes many different mini apps within itself, ranging from e-commerce and food delivery to insurance and other financial services, users tend to be loyal because it saves phone memory and facilitates a multifaceted experience. SuperUp app integrator was a good fit for a saturated market where the users have too many choices. Instead of competing with other existing single purpose apps, SuperUp decided to co-create with third-party businesses and benefit from the network effect while becoming the ecosystem designer and the facilitator. To handle its multiple high frequency transactions, SuperUp used AND Global's e-wallet, including its loyalty and gamification features. The AND wallet built with open APIs has integration capabilities with third-party systems such as bank accounts, other e-wallets, bank cards, and over-the-counter channels. As a result, users could top-up their wallets and transfer funds to any channel of their choice. Since the wallet is also integrated with bank payment gateways, users can quickly transfer money between e-wallets and bank accounts without any fee.¹⁴⁴

Source: AND Global and AND Solutions

8.2 Available and emerging startup financing options

The Law of Mongolia on Innovation (2012) in Art. 12 specifies, that the innovation activity might be supported by financing with repayment terms, non-refundable financing, and innovation grants. It further lists state and local budget funds, assets of Development Bank of Mongolia, assets of other special government funds, the capital of the investment company, the capital of the startup company from the primary capital market, equity capital of the organization participating in innovation activities, loans, aid and donations from foreign countries and international organizations, and other sources not prohibited by law among the sources of such funds.

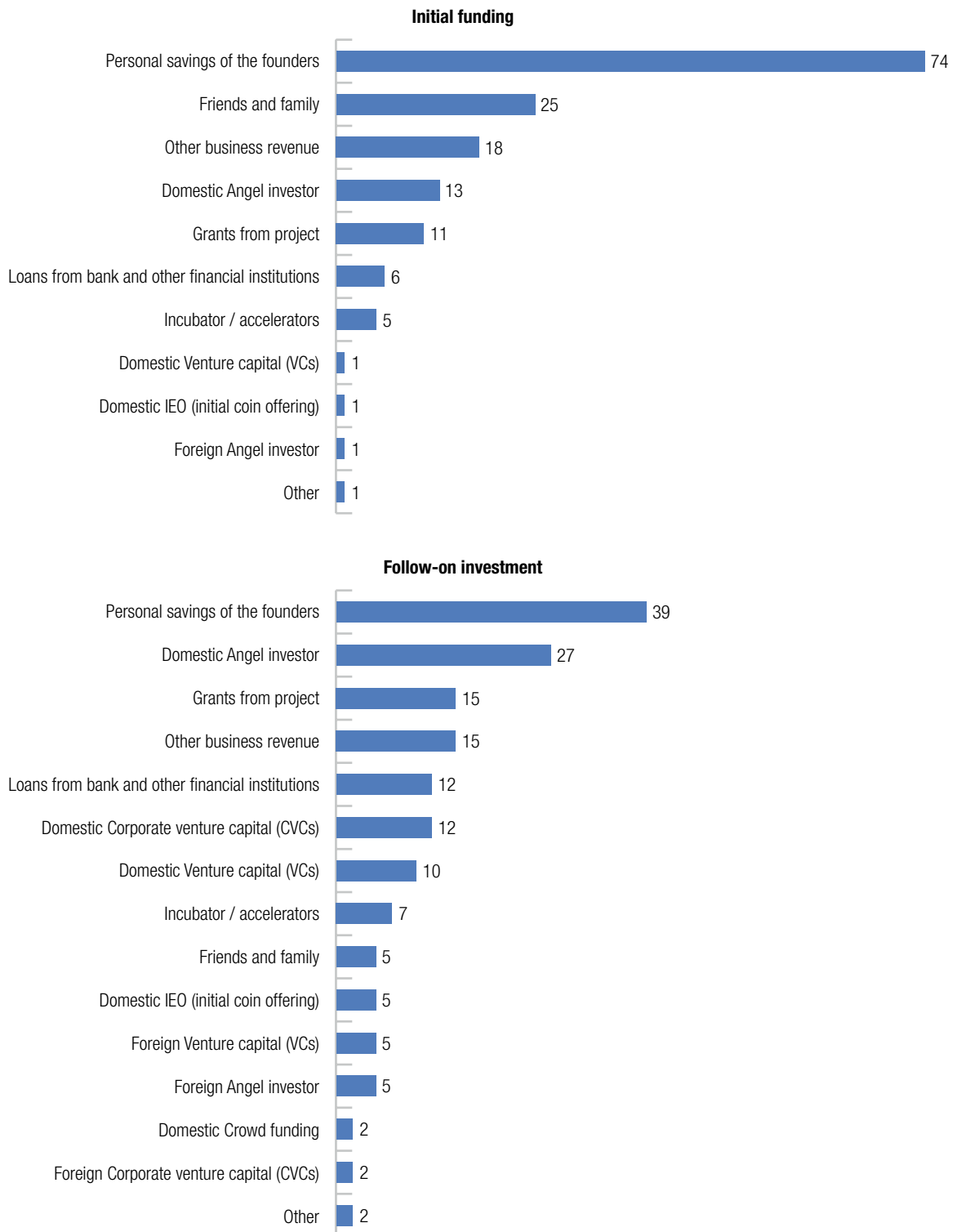
The study of Mongolian startup ecosystem, conducted by JICA, has reflected major difficulties with respect to access to funding, faced by startups, making self-finance (including contributions from family and friends) a lead source of funds in a rather diversified, yet fragmented portfolio, also including other business revenue, loans, as well as a limited contributions by angel investors and venture capital (mostly during the acceleration phase), among others (Figure 43).

¹⁴³ AND Global, 'AND Global. A True Fintech Company.', AND Global. A true fintech company., accessed 15 December 2022, <http://www.and.global/>; AND Solutions, 'AND Solutions', And Solutions Pte. Ltd., accessed 15 December 2022, <https://andsolutions.net/company/>

¹⁴⁴ AND Solutions, 'How a Super App Perfected a Digital Ecosystem', And Solutions Pte. Ltd., accessed 15 December 2022, <https://andsolutions.net/use-cases/how-a-super-app-perfected-a-digital-ecosystem/>



Figure 43: Initial and follow-on investments into Mongolian startups by funding sources, 2022 (%)



Source: JICA



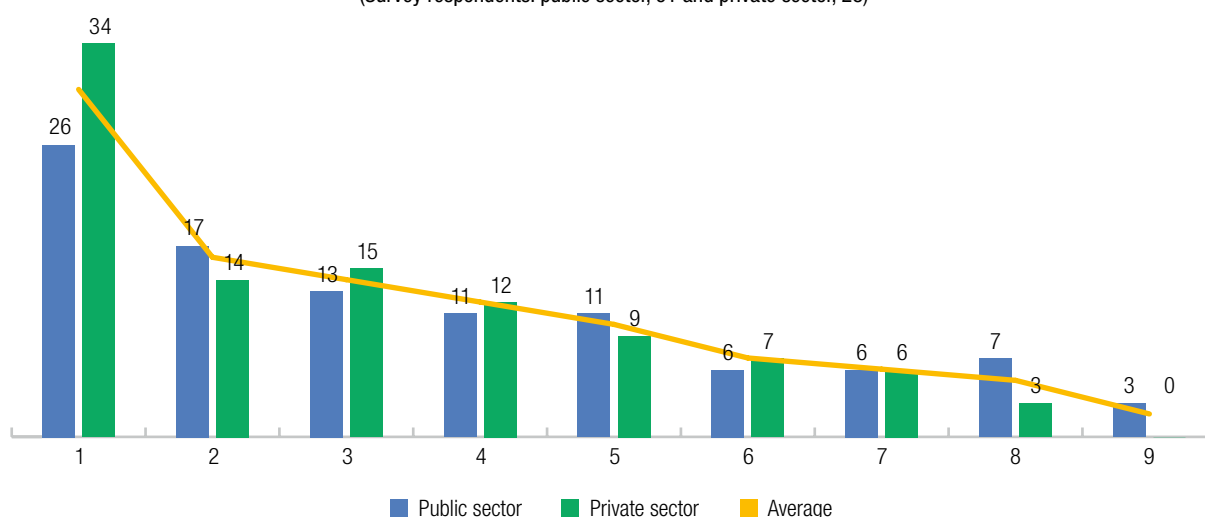
The findings of the study do not directly allude to the state funding (or do not distinguish between the governmental and private funding), which occupies an important place in the funding portfolio of certain startups, through monetary or in-kind contributions (office space, utilities, outreach funding, etc.), though indeed has a somewhat narrow actual reach due to limited amounts of the respective outlays.

In their turn, participants of the stakeholder survey conducted for the purposes of this study have identified

an unfavourable climate for investment e-commerce and other technological/digital ventures as the main bottleneck to the availability of startup funding. This was followed by the lack of awareness about different funding options and the necessity to have a closer look at particular barriers impeding startup funding. Availability of dedicated SME products was particularly noted by the private sector. Stakeholders also noted the ground-up mode of startup system development by the private sector, with minimal governmental support and regulation (Figure 44).

Figure 44: Priority actions in access to financing (%)

(Survey respondents: public sector, 91 and private sector, 23)



1. Favourable investment climate for e-commerce, incl. awareness of investment opportunities
2. Building awareness of the different types and blends of financing (e.g. investment finance, crowdfunding, loans, grants, overdrafts, invoice financing, leasing, asset financing)
3. Identification of barriers to financing of e-commerce ventures
4. Availability of finance instruments (loans, incentive schemes, etc) specifically designed for MSMEs
5. Suitable frameworks for partnerships between public and private sector that could facilitate the sharing of financial risk and reward
6. Awareness of bank loan managers on the particularities/challenges of MSMEs seeking to integrate e-commerce solutions in their operations
7. Peer-learning and experience sharing on issues related to access to financing for e-commerce
8. Availability of venture capital as equity-based financing to launch new e-commerce start-ups
9. Clear mechanisms for enforcement of non-performing loans

Source: UNCTAD



Survey participants, which have chosen not to seek funding from third party providers, have explained their decision relying on several factors, with high interest rates, lack of information about the available options, lack of collateral and difficulties with putting the relevant application together having been allocated equally high weight (Figure 45).

Most widely used financing options and some of the concerns raised are discussed in more detail below.

State funding of innovation in the field of software development and by startups created by academic institutions

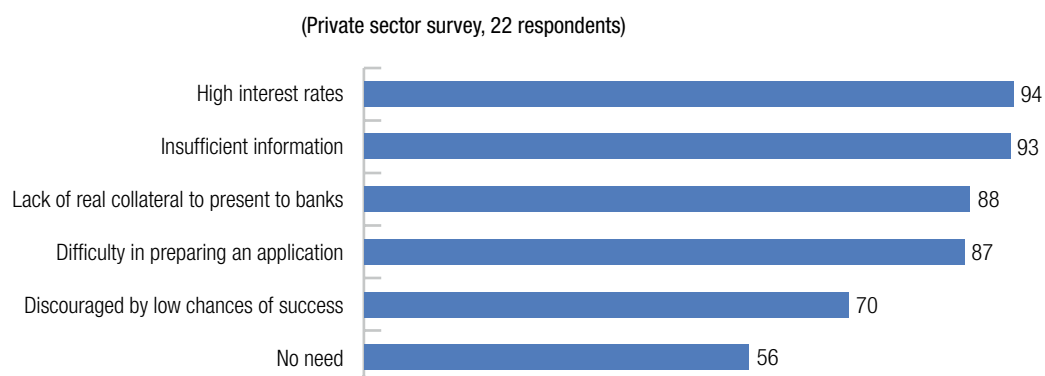
The Law on Innovation (2012) provides a detailed framework of possible state support to startup companies registered as members of technology transfer centers or enterprises operating in the field of software production and development, including preferential tax treatment as well as:

- Financing a certain percentage of the loan interest for the implementation of innovation projects
- Financing the cost of patenting innovative products
- Calculation of accelerated depreciation of property for a startup company engaged exclusively in innovation activities
- Provision of irrevocable financing from the innovation financing organization and the local budget in case 60 per cent or more of the total cost of the project is financed with own funds

- Support for the participation in international trade fairs and presentation events of innovative products embedded with high technology
- Full or partial financing of the cost of certification of international quality standards for export-oriented innovative products
- Support for domestic production of innovative products through government procurement
- Organization of exhibitions, conferences, seminars, organization, and financing of the measures to promote innovative knowledge and culture in cooperation with public organizations
- Awarding a national innovation award to innovative products and services that have made a significant contribution to social and economic development

Further fostering the link between innovation and academia, the government might consider providing services under favourable conditions to the company that exclusively engages in innovation activities with the laboratory equipment of the state-owned academic institution according to the procedures to be approved. In addition, Art. 27 of the Law of Innovation establishes a basic framework of engagement of state-funded research institutions in innovation activities nationally, notably through establishing units responsible for technology transfer, startup companies (to be sold within five years from the date of asset evaluation), and consulting companies with the exclusive purpose of supporting startups producing innovative products or providing services within the country. An academic research organization may contribute its intellectual property to the share capital of a startup. Meanwhile,

Figure 45: Reasons for not seeking third-party financing (%)



Source: UNCTAD



the income and expenses of the startup affiliated to the academic institution shall be recorded in a special account, and at least 75 per cent of the dividend per academic institution shall be used for training, research, technological testing and orientation.

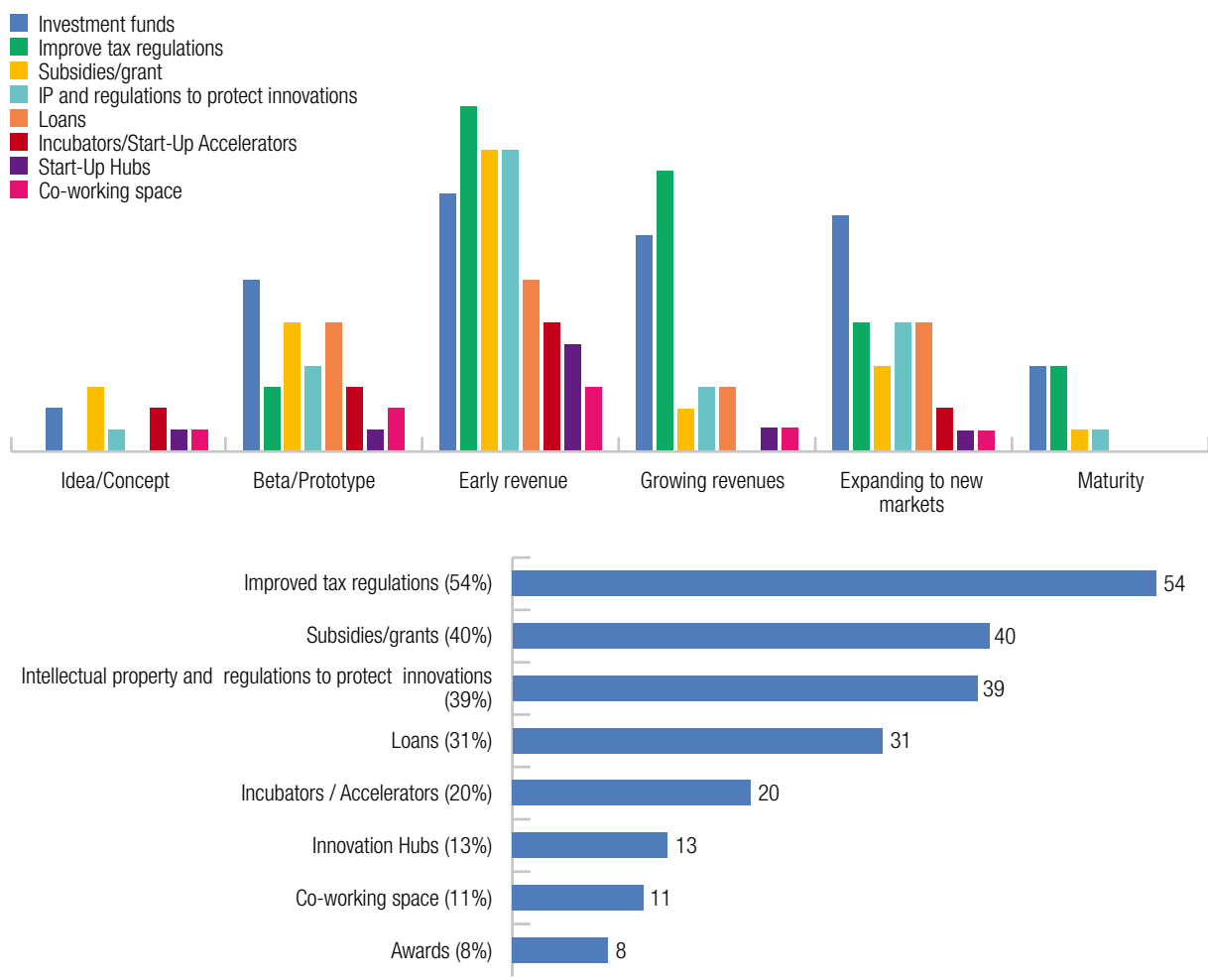
The support measures listed in the Law on Innovation appear to largely overlap the wish list shaped by the participants of JICA startup ecosystem study (Figure 46); however, the state of their implementation could not be ascertained. It is also not clear whether a software development enterprise needs to be integrated into the innovation infrastructure as outlined by the law (a science park, a production technology park, a technology transfer center, a technology incubator, a business incubator, a joint office, and a

management company) to benefit from the funding and other support measures listed above.

Self-funding

Reliance on self-funding remains a key solution for Mongolian technological startups, both at the inception and later. This might include personal and family savings, financial support from friends generated informally, personal loans received by individual founders from savings and credit cooperatives established in accordance with the dedicated law, or banks, financial support from other entities in the “mother” corporate group, and, subsequently, also the revenue from the business activities that are undertaken. The model of reliance on the funding received within the group was reportedly used by one

Figure 46: Funding measures most needed by technological startups (%)



Source: JICA



of the Mongolian e-commerce vendors, Ard Shop.¹⁴⁵ Also some of the startups established and incubated by Intelmind venture studio, such as an e-shopping B2C platform Shoppy,¹⁴⁶ mostly specialized in selling foreign branded products in Mongolia; an IT company Cody,¹⁴⁷ renting electronic platform solution, which it has developed, as well as related services to the companies in Mongolia and across its borders; a C2C online shopping platform Zary,¹⁴⁸ and AutoParts¹⁴⁹ e-shop, specialized in the supply of original auto-parts from Europe, Japan, and the US to Mongolia.

Bank Loans

Mongolian commercial banks issue several types of regular loans, which could potentially serve as technological startup financing: different types of investment loans aimed at acquisition of real property of equipment, including mortgages; work capital loans; credit lines; financial leasing arrangements; among others. Nevertheless, high lending interest, ranging, on average, to 15-20 per cent annually, processing fees, relatively short lending terms, collateral requirements and, often, a requirement to demonstrate a business history of at least six to 12 months make most startups unqualified for such financing, uninterested therein in the light of the feasibility concerns, or unlikely to receive it. Subject to the pledge of receivables instead of a regular collateral, POS Equipment Income Secured loans, offered by several banks, might be of more interest to startups, as explained below.

Several Mongolian banks offer advances on card transaction receivables / payment card factoring loans of short to mid-duration, using the POS equipment of the loan-granting bank for a certain period (six month or longer) and being able to demonstrate business experience. Despite continuing high annual interest rates of 13-20 per cent, this financing solution, intended to provide short-term working capital and cover operational expenses, offers higher approval

rates, more flexible payback terms, faster access to funding, and is often collateral-free. The extent of actual spread of its use is, however, unknown.

Financing options available to startups registered as SMEs appear to be more affordable. Aimed at providing working capital, such loans appear to be offered in three types: COVID-induced three-years-long SME job support loans, forming part of a stimulus package and issued in accordance to the dedicated BOM instruction with an annual interest rate capped at three per cent;¹⁵⁰ loans co-sponsored by the granting bank and a development partner (among such partners are EBRD,¹⁵¹ ADB¹⁵², GIZ) or a National Credit Guarantee Fund; other dedicated SME loans, mostly REPO-trade financed or allowing flexibilities with respect to collateral, such as pledging a car or other movable property. None of these loans, available on the market, most of which are explicitly intended to support the development of non-mining industries, are specifically targeted to e-commerce or technology companies. While most of the SME-specific loans still require a business history, they tend to feature lower interest rates and/ or relaxed collateral requirements, if any, making them more attractive for beginners. Some of the packages require the applicant to secure support from the local SME authority or to undergo a training (or become involved in the training programme) as a prerequisite.

Having assessed the access to financing of the SMEs in Mongolia (across different sectors) back in 2016, the OECD made several recommendations, the compliance with which was, thereafter, monitored in 2019.¹⁵³ Mongolia was asked to: develop and disseminate coherent data on SMEs; diversify the products offered by the SME Development Fund (SMEDF); ease collateral demands; streamline administrative procedures for loan applications; and improve data sharing across institutions. The above recommendations, still in the process of

¹⁴⁵ ArdShop, 'ArdShop', accessed 15 December 2022, <https://ardshop.mn/>

¹⁴⁶ Shoppy, 'Shoppy.Mn'

¹⁴⁷ Cody, 'CODY.MN', accessed 15 December 2022, <https://cody.mnundefined>

¹⁴⁸ Zary, 'Zary.Mn', [zary.mn - Дэлхийн Брэндүүд нэг дор](https://zary.mn/), accessed 15 December 2022, <https://zary.mn/>

¹⁴⁹ Autoparts, 'Autoparts', accessed 15 December 2022, <https://autoparts.mn/about-us>

¹⁵⁰ It appears that the issuance of the loans of this type was discontinued on at the end of 2021, nevertheless they still tend to appear on the lending portfolios of the banks, which disbursed them.

¹⁵¹ EBRD, 'Support to SME Development in Mongolia: Overview', accessed 15 December 2022, <https://www.ebrd.com/knowhow/mongolia/smedevelopment>

¹⁵² ADB, 'ADB, XacBank Sign Private Sector Loan to Support MSMEs in Mongolia', Asian Development Bank, 16 December 2019, Mongolia, <https://www.adb.org/news/adb-xacbank-sign-private-sector-loan-support-msmes-mongolia>

¹⁵³ OECD, 'Monitoring Competitiveness Reforms: Access to Finance for Firms in Mongolia' (Paris: OECD Publishing, 2020), <http://www.oecd.org/eurasia/competitiveness-programme/central-asia/Monitoring-Competitiveness-Reforms-Access-to-Finance-for-Firms-in-Mongolia-ENG.pdf>



implementation, are also relevant for Mongolian technological startups.

Several Mongolian banks grant loans specifically targeted to support women-owned and / or managed businesses. Some of these loans are co-sponsored by granting banks and foreign partners, for instance, Dutch Lendahand social crowdfunding foundation,¹⁵⁴ cooperating with Golomt Bank, or International Investment Bank (IIB),¹⁵⁵ which has joined forces with TDB.

Loans by non-banking financial institutions (NBFIs)

Aside from banks, loans are also granted by multiple NBFIs. In terms of the types of the available loans, the NBFIs offer appear to be similar to those of the banks. According to the FRC, in 2020, 93.5 per cent of loans with a term of up to one year (issued by NBFIs / FinTechs) were issued through mobile-based loan services.¹⁵⁶ While most of such loans are disbursed to individual (consumer) lenders, a certain share of them is, reportedly, also used as SME financing. According to Art. 6.1 of the Law on Non-Banking Financial Activities, the entity offering loans is subject to FRC license. Capital adequacy and certain other prudential rules apply.

Financing through initial public offering

Partial Initial Public Offering (IPO) financing is beginning to be integrated into the growth strategy of Mongolian startups. In September 2022, a NBFIs remittances

transfer service Sendly made an IPO of almost 30 per cent of its shares¹⁵⁷ (25 per cent of their shares are offered to the public, while 75 per cent to the strategic investors). This experience is expected to be followed by the other members of the MFG (Mongolia Fintech Group), to which Sendly belongs. Notably, by HiPay.

Competitively acquired financing

Besides contributing to their acceleration and providing important networking opportunities, startup competitions appear to become a supplementary financing source for the most promising Mongolian startups. Nevertheless, the competitions only take place occasionally, thus cannot yet be relied on as a predictable source of financing.

Crowdfunding

Having recognized the effectiveness of crowdfunding in developing MSMEs by financing them using low-cost sources, yet also acknowledging the high risk of fraud, in particular through emergence of fake companies and platforms, the FRC is studying the creation of a legal and regulatory environment for crowdfunding in Mongolia¹⁵⁹. Such regulation might require registration of the platforms, special licensing, a cap on single investment over time, transparency, and keeping funds in an escrow account.

Awaiting formalization of crowdfunding on the domestic market, sporadic crowdfunding activities (not necessarily for technological startup funding

Box 5: Startup World Cup Mongolia

Startup World Cup is one of the largest global annual startup competitions worldwide. Created by Pegasus Tech Ventures, the Startup World Cup team, together with local regional partners, looks for the most promising startups from 50+ regions worldwide. In 2021, a national stage of the competition was first held in Mongolia virtually and was open to Innovative Mongolian Early Stage to Round A legally registered Tech Startups, including those active in AI, blockchain, crypto, AR/VR, drones, e-commerce, fintech, martech, edtech, insurtech, among others. The committee composed of leading tech experts selected the 10 most promising startups that subsequently pitched in the Mongolian competition. The winner of Startup World Cup 2021 Mongolia Regional Finale, Startup Chimege, received a MNT 100,000,000 investment prize from MCS Investment. Tab Solution came in second and received MNT 60,000,000, while Erxes came in third and received MNT 40,000,000 in investment, both - from Premium Group & Socratus Startup Studio. OneFit received a special award from IT Park, a two-year incubator program.¹⁵⁸

Source: Exponential Partners

¹⁵⁴ 'Lendahand', accessed 15 December 2022, <https://www.lendahand.com/nl-NL>

¹⁵⁵ IIB, 'International Investment Bank (IIB)', accessed 15 December 2022, <https://iib.int/en>

¹⁵⁶ FRC, 'Financial Regulatory Commission', www.frc.mn, accessed 15 December 2022, <http://www.frc.mn>

¹⁵⁷ Sendly, 'Sendly IPO', accessed 15 December 2022, <https://ipo.sendly.mn/>

¹⁵⁸ Exponential Partners, 'Startup World Cup Mongolia 2021', Exponential Partners, 2022, <https://exponential.partners/swc2021/>

¹⁵⁹ FRC, 'Hedging the Risk of Co-Financing from the NCC', [Www.Frc.Mn](http://www.frc.mn/a/2797), 18 February 2019, <http://www.frc.mn/a/2797>



Box 6: Lendahand

The Dutch Social Crowdfunding foundation Lendahand is cooperating with local partners in Mongolia – Golomt Bank and Invescore NBF¹⁶⁰ to provide loans to entrepreneurs who “are too big to qualify for microfinance, but too small for a loan from the bank”. After the disbursement of the funds to the beneficiary is made, investors are paid back in equal parts every six months, also receiving an agreed interest, ranging to 3.5 per cent annually on average. The loans are provided to SMEs both in Ulaanbaatar and in the provinces. Women-owned businesses, SMEs founded by single parents or people with disabilities are targeted, among others, to maximize social impact.

Source: Lendahand

purposes) taking place in Mongolia are reported in the media, and foreign crowdfunding companies occasionally partner with Mongolian banks and NBF to assist entrepreneurs in raising the necessary business funds subject to some modest individual investment returns.

Establishing a foreign subsidiary

Mongolian technology companies appear also to raise investments through their foreign subsidiaries, notably those established in the US or Singapore. According to the CEO of World Plus, registering a company in the US allows technology platforms like “TechCrunch” and “Crunchbase” to process the data and provide reliable calculations necessary for investors, such as the company’s portfolio and future earnings. In addition, investing in a company established in the US could provide better legal guarantees, should a problem arise¹⁶¹, as compared to those currently available in Mongolia. Personal networking introducing the company in the foreign market was mentioned by stakeholders to be indispensable for its success.

PPP financing

PPP financing was not reportedly used as a means of startup financing in Mongolia (except for the cases where public academic institutions could make conditional equity contributions to the connected startups, which, under some lens, could be viewed as a mechanism similar to a PPP). Vision 2050, in its objective 3.3. entitled “Render employment support, develop business know-how and skills, and raise the competitiveness of MSMEs”, refers to the PPP

financing as a measure to be adopted during the implementation Stage II (2031-2040): “The period to raise the competitiveness of small and medium enterprises”. It provides the development of PPPs for financing the introduction of innovations, technologies and knowledge-sharing.

Foreign investment in digital companies

Multiple participants of stakeholder survey indicated a need to attract [foreign] investments to e-commerce / digital MSMEs in Mongolia. Investments might be of use for both the establishment and spread of the digital (e-commerce, ICT, etc.) ventures in Mongolia and their further expansion, capturing foreign markets. While the Law on Investment of Mongolia does not contain sectoral restrictions, its implementation, notably, a de-facto requirement to invest over US\$ 100,000, reduces the attractiveness of Mongolia for smaller, non-mining sector investments, including into digital companies.¹⁶² Conclusion of the new BITs, increasing an overall comparatively modest number of such treaties concluded this far (44), could also serve as a positive signal indicating openness of the economy to welcome non-mining investors and encourage the development of their projects.¹⁶³

¹⁶⁰ Invescore, ‘Invescore NBF’, accessed 15 December 2022, <https://invescore.mn/mn/>

¹⁶¹ Tsolmon, ‘WorldPlus: A New Platform for Exploring the World’, BUSINESS.MN, 31 May 2021, <https://business.mn/2021/05/31/delhiitei-taniitsah-shine-talbar/>

¹⁶² U.S. Department of State, ‘Mongolia’

¹⁶³ UNCTAD, ‘Mongolia: International Investment Agreements Navigator / Investment Policy Hub’, accessed 15 December 2022, <https://investmentpolicy.unctad.org/international-investment-agreements/countries/139/mongolia>



CONCLUSION

Mongolia has taken multiple strides towards e-commerce, including through the policies aimed at overall digitalization of the economy and economic diversification. Nevertheless, lacking a common approach and interlinkages, these steps forward are not contributing to their full potential. Progress has been made, yet bottlenecks remain in all seven areas under the assessment.

Despite the clear interest of the Mongolia's government in supporting the development of e-commerce in the country, the mere notion of "e-commerce", as a particular segment of economic digitalization, lacks understanding, while the advancement of e-commerce itself faces insufficient strategic and institutional direction and coordination. Varied governmental and development partners' initiatives, which might be conducive to e-commerce, are implemented in silos. The National E-commerce Task Force, which was established during the assessment, might help Mongolia reinforce coordination in the area; however, this nascent structure still needs institutionalization and commitment from its members.

Domestic e-commerce market in Mongolia exists and was accelerated by the COVID social isolation measures. This market is largely comprised of MSMEs,

often providing "full-cycle" e-commerce service to their customers. The size of this market nevertheless cannot be ascertained yet due to the lack of dedicated statistics. The surveys conducted for the purposes of this assessment demonstrated differences in the online behaviours and likings of consumers and businesses located in different geographical parts of Mongolia, including with respect to the products acquired through e-commerce. Deepening such type of knowledge could be instrumental in shaping the implementation of the national e-commerce agenda. In introducing the pertinent statistical indicators, Mongolia might be guided by UNCTAD's Manual for the Production of Statistics on the Digital Economy 2020 and the work of UNCTAD's Working group on measuring e-commerce and the digital economy.

The eT Readiness assessment of Mongolia has made it possible to formulate a set of recommendations in the seven thematic areas on which the eTrade for all initiative is based. These recommendations are detailed in the Action Matrix with an indication of the expected results, level of priority and supporting government institutions and stakeholders, including development partners that will assist in the development of the e-commerce sector in the country.



THE WAY FORWARD: ACTION MATRIX

E-COMMERCE READINESS ASSESSMENT AND STRATEGY FORMULATION					
No.	Indicative action	Expected results	Priority level	National agencies and stakeholders	Potential support by
1.1	Elaborate a comprehensive need-based e-commerce strategy to provide an operational tool for planning and implementing priority actions as defined in the eT Ready Action Matrix.	A comprehensive e-commerce strategy is elaborated and is aligned/linked to the UNSDCF 2023-2027 and national policies (new recovery policy and 2050 agenda).	High	MED, MFA, MDDC, MCGA, MRT, BOM, [other] Members of the E-commerce National Task Force (ENTF), E-Mongolia Academy, Private sector, Academia, Civil Society Organizations	UNCTAD, UNRCO, ADB, ITC, ESCAP, EBRD, UNDP, other development partners
1.2	Build on and formalize the E-commerce National Task Force (ENTF) created for the eT Ready, supported by a secretariat and a high-level steering committee, to develop national e-commerce.	The ENTF is formalized; coordination among stakeholders is strengthened. Mongolia may use the existing body and create the ENTF under it as a subcommittee/working group.	High	MFA, MED, MDDC, [other] Members of the National ENTF and other competent agencies Private sector, Academia, Civil Society Organizations	
1.3	Map the provisions of the national / sectoral / regional strategic instruments of relevance to e-commerce to ensure synergies in their implementation and to avoid duplications.	The mapping is completed. Coordination in achieving the targets set by different strategies of relevance to e-commerce is established.	Medium	MFA, MED, MDDC, ENTF, BOM, Private sector, Academia, Civil Society Organizations	ADB
1.4	Enable / enhance regular collection of statistics of relevance to e-commerce, including on gender (i.e., ways of doing e-business, e-consumer and e-business profiles, preferences, concerns, etc.).	Regular collection of gender disaggregated statistics of relevance to e-commerce is enabled. New statistical indicators are developed and implemented as necessary. Policy, law-making and implementation efforts are supported by the quality and objective empirical data collected following best international practices in the area.	High	NSO, MED, MFA, MDDC	UNCTAD, ADB
1.5	Enhance the dialogue with development partners implementing the projects of relevance to e-commerce development on a regular basis. Map the projects / segments of the projects of relevance to e-commerce, which are being implemented. Request development assistance in the priority areas not covered by such projects / lacking budgetary outlays, if any.	The dialogue with the development partners implementing the projects of relevance to e-commerce is enhanced. The mapping of the relevant projects is completed. Requests for development assistance in the priority areas not covered by the development partners' projects / lacking budgetary outlays, are elaborated and made.	High	MFA, MED, MDDC, E-Mongolia Academy, Private sector, Academia, Civil Society Organizations	UNCTAD, UNRCO, ESCAP, ADB, EBRD, JICA, other development partners
1.6	Continue / enhance participation in the international (multi- and plurilateral) and regional fora and initiatives elaborating e-commerce and other related rules. Build public and private sector awareness of these international efforts and seek regular relevant feedback.	Participation in the relevant negotiations is ensured, engagement is maintained, policy proposals / textual submissions / comments reflecting relevant national priorities are made. Stakeholders are aware of these international negotiations / initiatives and contribute to shaping of position of Mongolia therein.	High	MFA, MED, MDDC, Private sector, Academia, Civil Society Organizations	UNCTAD, ESCAP, WTO, ACWL



E-COMMERCE READINESS ASSESSMENT AND STRATEGY FORMULATION					
No.	Indicative action	Expected results	Priority level	National agencies and stakeholders	Potential support by
1.7	Establish mechanism for monitoring the implementation of international obligations undertaken in the area of e-commerce under the existing agreements (Mongolia- Japan FTA) and the future dedicated treaties.	The monitoring mechanism for monitoring of implementation of the FTA obligations in the area of e-commerce is established. Broad public and private sector participation in functioning of the mechanism is ensured.	Medium	MFA, MED, MDDC, Private sector, Academia, Civil Society Organizations	ESCAP, JICA
1.8	Enhance bilateral cooperation in e-commerce by concluding e-commerce specific agreements / [FTAs with] e-commerce chapters, DEAs/DEPAs, MRAs concerned with electronic communications, implementing cross-border pilot projects and regulatory sandboxes of relevance to e-commerce.	Bilateral cooperation in the e-commerce area is enhanced through conclusion / implementation of varied cross-border treaties, projects and arrangements. Priority cooperation partners are identified, negotiations commence or continue, DEAs/DEPAs or MRAs are concluded. This activity could be carried out via the ESCAP CPTA.	Medium	MFA, MED, MDDC, Private sector	ESCAP, ADB
1.9	Participate in international negotiations and other cooperation projects aimed at improving overall business environment, which might have collateral effect on the development of e-commerce; for instance, the WTO JSI initiatives on Investment Facilitation or on MSMEs.	Mongolia actively participates (incl. through making interventions, submissions, etc.) in the international negotiations of e-commerce rules (for instance in the WTO JSIs on E-commerce, on MSMEs, etc.).	High	MFA, MED, MDDC, line ministries, Private sector, Academia, Civil Society Organizations	WTO, UNCTAD, ACWL
1.10	As a part of the economic diversification strategy, conduct a feasibility study of development of the business e-services / business outsourcing services export potential, including identification of the relevant national legal and capacity gaps to be filled and identification of relevant markets.	The feasibility study is completed. Relevant potential and gaps are identified. Implementation is streamlined into the relevant national strategies (including the e-commerce strategy). The UNCTAD Productive Capabilities Gap Assessment (PCGA) may be utilized for this purpose.	High	MED, MFA, MDDC, line ministries Private sector, Academia, Civil Society Organizations	UNCTAD, WTO, ITC, UNIDO, EBRD
1.11	As a part of the economic diversification strategy, conduct analysis of e-commerce priority export markets and products with export potential, taking into account the GSP preferences granted in favour of Mongolia and the FTA in place.	The relevant assessment is completed. The relevant products and markets are identified. Targeted policies are designed. The PCGA may be utilized.	High	MED, MFA, MOFALI, line ministries, Private sector, Academia, Civil Society Organizations	UNCTAD, EBRD, ADB, ITC

ICT INFRASTRUCTURE AND SERVICES					
No.	Indicative action	Expected results	Priority level	National agencies and stakeholders	Potential support by
2.1	Ensure affordable and quality access to the Internet for public sector, businesses, and consumers throughout the country, including in rural areas.	Availability and quality of Internet connection is improved throughout Mongolia. Users' online experience is seamless.	High	MDDC, CRC, Private sector	ITU, EBRD, ADB, UNDP, WB
2.2	Review investment requirements and the investment approval process of relevance to investments in ICT infrastructure with the view of its liberalization / simplification.	Investments in the ICT infrastructure are encouraged through simplification and streamlining of the investment process and thus increase.	Medium	MED, MDDC, CRC	EBRD



ICT INFRASTRUCTURE AND SERVICES					
No.	Indicative action	Expected results	Priority level	National agencies and stakeholders	Potential support by
2.3	Further ascertain / ensure competition between the providers of telecommunications services following the international best practices, for instance, reflected in the WTO (GATS) Reference Paper on Basic Telecommunications and its modifications proposed in the WTO JSI on E-commerce. Conduct an assessment of compliance of the relevant legal framework with the best international practices.	Assessment of the competitive environment (gap study) is completed. The plan addressing filling the identified gaps is elaborated and is being implemented. Feasibility study on joining the WTO Reference Paper on Basic Telecommunications and its modified version considered in the WTO JSI on e-commerce is completed. Its recommendations are implemented.	Low	MDDC, MFA, CRC	EBRD
2.4	Implement the rules authorizing infrastructure sharing by the ISPs.	Rules regulating ISPs' infrastructure sharing are fully implemented. Infrastructure sharing is incentivized.	Medium	MDDC, CRC	EBRD
2.5	Review state support measures for broadband expansion, including universal broadband and state-aid policies, to align with best international practices.	State funding is administered in a fair and transparent manner and incentivises private investors in order to achieve policy objectives where these objectives cannot be met by commercial investments alone.	Medium	MDDC, CRC, MED	EBRD
2.6	Make ICT hardware, notably cell phones, more affordable by removing tariffs imposed thereon in a targeted manner, or via joining the WTO ITA and ITA II, or through extending de minimis regime to such equipment. Establish domestic production of the ICT equipment (as per Vision 2050).	Factors increasing the cost of the ICT hardware are assessed, measures towards reduction of such costs are taken. Feasibility of domestic production of the ICT equipment (or components) is assessed. If feasible, domestic ICT production is established.	Medium	MOF, MCGA, MDDC, MED, MFA	WTO
2.7	Increase the scope of / deepen the WTO GATS commitments in telecommunications subsector.	GATS commitments in the telecommunications sector are reviewed / reassessed and improved.	Medium	MFA, MED, MDDC	WTO
2.8	Continue implementation of satellite connectivity agenda.	The satellite connectivity agenda is being further elaborated and implemented.	High	MDDC, CRC, Private sector	
2.9	Streamline licensing regime applicable to telecommunications providers.	Licensing requirements applicable to the telecommunications providers are simplified. Licensing procedures are made more transparent and efficient.	High	MDDC, CRC	
2.10	Encourage emergence of the PPP ICT infrastructure projects.	Reasons for the low popularity of PPP in the ICT infrastructure are assessed. Steps to increase the number of such projects are taken.	High	MED, MDDC, Private Sector	ESCAP

TRADE LOGISTICS AND TRADE FACILITATION					
No.	Indicative action	Expected results	Priority level	National agencies and stakeholders	Potential support by
3.1	Implement the National Electronic Single Window / consolidate, systemize and publish the list of the existing electronic documentary submission and exchange solutions in the area of international trade.	National Electronic Single Window is implemented. Transparency over the electronic documentary submission options is improved.	High	MFA, MED, MOF, MCGA, MDDC, CRC, ministries and agencies having implemented/ planning to implement electronic documentary solutions of relevance to international trade	WCO, WTO, ADB, ESCAP, UNCTAD, ITC, Bilateral donors



TRADE LOGISTICS AND TRADE FACILITATION					
No.	Indicative action	Expected results	Priority level	National agencies and stakeholders	Potential support by
3.2	Actively participate in the implementation of the CPTA, including shaping and implementing the cooperation projects thereunder such as individual action plan.	Mongolia engages in the CPTA implementation, including elaboration of particular cooperation projects.	High	MFA, MED, MCGA, MDDC, line ministries	ESCAP CPTA Parties
3.3	Introduce mechanism of monitoring of de-minimis utilization.	Tracking of de minimis utilization is improved to better understand the situation and prevent fraud.	Medium	MOF, MED, MCGA	WCO, ITC, ESCAP
3.4	Consider creation of retail imports zones to facilitate cross-border B2C e-commerce.	The feasibility of the creation of retail import zones is assessed. Pilot project is implemented.	Medium	MFA, MED, MCGA, MOF	ESCAP, UNCTAD
3.5	Conduct business process re-engineering and digitalization of the processes in order to reduce, simplify and streamline trade administration processes.	Business process re-engineering and digitalization of trade administration processes continues.	High	MDDC, MED, MOF, MCGA, CRC, BOM, line ministries	ESCAP
3.6	Continue implementation of paperless trade solutions in/ of relevance to customs clearance.	Paperless trade solutions continue to be implemented.	High	MCGA, MFA, MED, MOF, BOM, MDDC, line ministries	ESCAP, WCO, WTO, ADB, ITC
3.7	Implement risk-based approach with respect to customs clearance/ inspections.	Implementation of risk-based approach in customs clearance/ inspections progresses.	Medium	MCGA	WCO, WTO, UNCTAD, EBRD, ITC
3.8	Implement trade facilitation measures specifically targeting e-commerce imports and exports.	E-commerce / small packages-specific trade facilitation measures are considered/implemented.	High	MFA, MED, MCGA	WCO, ESCAP, ITC
3.9	Update the ESCAP Readiness Assessment for Cross-border Paperless Trade Report (2019) in the light of the new technical and legal developments and monitor the implementation of recommendations made.	ESCAP Readiness Assessment for Cross-border Paperless Trade report 2019 is updated. Implementation of the recommendations is subject to regular monitoring.	Medium	MFA, MED, MDDC, MCGA, BOM, line ministries	ESCAP
3.10	Continue upgrading physical infrastructure ensuring internal transit (road and railway connection) to enhance efficiency and speed, including within the framework of the transport infrastructure development projects.	Physical infrastructure upgrade continues. Internal transit is simplified and rendered speedier.	High	MRTD, MFA, MED	ADB, CAREC
3.11	Implement dry [e-] ports.	Electronic solutions are implemented as dry ports are developed.	High	MRTD, MFA, MCUD, National Committee on Border Port Recovery	UNCTAD, ESCAP, WB
3.12	Simplify, standardize, automate customs clearance of incoming international mail and packages. Ensure that the databases used by the logistics providers and customs interoperable.	Customs clearance of incoming international mail and packages is simplified. Interoperability of the databases used is ensured.	High	MCGA, CRC, MASM, MongolPost, Private Sector	UPU, ESCAP, JICA
3.13	Continue digitalization of the delivery services to allow seamless processing and package / mail tracking by customers.	Digitalization of delivery services continues. Tracking is introduced/ improved.	Medium	MRTD, CRC, Postal service provider, logistics/ delivery companies	JICA, ESCAP
3.14	Create/develop an addressing (database) system on the basis of the existing addresses used nationally.	Consolidated addressing system is developed.	High	MDDC, MCUD, NSO, ALAMGC, CRC, logistics/ delivery companies	



TRADE LOGISTICS AND TRADE FACILITATION					
No.	Indicative action	Expected results	Priority level	National agencies and stakeholders	Potential support by
3.15	Diversify the portfolio of transportation options for the goods traded via e-commerce, moving beyond the “road only”. Explore / enhance use of air transportation as a mean of delivery of the goods traded via e-commerce.	A study on transportation options for particular types of goods traded via e-commerce is conducted. Pilots diversifying the portfolio of the transportation options are implemented. Use of air transport for e-commerce deliveries is considered. Particular types of goods traded through e-commerce / destinations to be served are identified.	Medium	MED, MRTD, MCGA, logistics / transportation companies	
3.16	Support the establishment of a cooperation mechanism [or initiate a dialogue] between different delivery services providers in order to streamline deliveries and foster economies of scale and scope.	An inclusive mechanism ensuring interaction / cooperation between delivery services providers is established.	Medium	MRTD, MDDC, Postal service provider	ITC
3.17	Undertake GATS commitments in the transportation sector to enhance competition / foreign participation and equity investments.	GATS commitments in the transportation services sector are undertaken.	Medium	MRTD, MFA, MED	WTO, ITC
3.18	Measure export and import of digitizable goods (software, movies, e-books etc.) from / to Mongolia and the actual possibility of their tracing / collection of customs revenue thereon in Mongolia (in the case of importation) in order to ensure a reasoned position on the issue of Moratorium of Customs Duties on Electronic Transmissions on the agenda of the WTO and the other e-commerce fora.	Assessment of feasibility and potential benefits of the collection of customs duties on electronic transmissions is conducted. Informed position is taken in the WTO and other negotiations.	High	MCGA, MED, MFA, MDDC	WTO
3.19	Consider undertaking additional GATS commitments developed by the WTO Joint Initiative on Services – Domestic Regulation.	WTO Joint Initiative on Services – Domestic Regulation is joined; respective additional GATS commitments (in the committed sectors) are undertaken.	High	MFA, MED, MDDC, line ministries	WTO, ITC
3.20	Reduce delivery time, bring the goods transacted via e-commerce closer to the customer, and streamline the relevant logistics, consider establishment of the regional e-commerce warehouses featuring stock of the e-commerce goods in demand in a particular area.	Establishment of regional e-commerce warehouses is considered.	Medium	MED, MRTD, MDDC, CRC	
3.21	Implement the USOF with respect to postal services delivery in rural areas.	Implementation of the USOF is extended to postal services.	High	MDDC, Private Sector	

PAYMENT SOLUTIONS					
No.	Indicative action	Expected results	Priority level	National agencies and stakeholders	Potential support by
4.1	Continue to improve supervision and oversight of the financial system to reinforce its standing / image internationally and facilitate future bilateral and other payment facilitation arrangements and pilots.	Financial system of Mongolia is further reinforced, in particular with respect to the oversight function.	High	BOM, MOF, FRC	ADB



PAYMENT SOLUTIONS					
No.	Indicative action	Expected results	Priority level	National agencies and stakeholders	Potential support by
4.2	Further clarify the interrelation and cooperation patterns between the BOM, FRC, and CRC, currently regulated by the internal MOUs.	BOM, FRC, and CRC cooperation patterns are further formalized.	High	BOM, FRC, CRC	
4.3	Encourage the development of payment integration (consolidation) mechanisms to facilitate the resort to electronic payments for private sector and consumers / enhance use of the digital payment means.	Payment integration mechanisms are developed.	Medium	BOM, FRC, CRC, commercial banks and NBFIs	
4.4	Ensure further integration of the existing e-payment means and mechanisms developed by the private sector for commercial transactions with the e-government services (enable these mechanisms as payment means for e-government services; enable the data interchange with e-barimt and similar initiatives).	Private e-payments mechanisms are integrated with e-government services.	Medium	MOF, BOM, FRC, CRC, MDCC, MCGA, commercial banks and NBFIs	
4.5	Follow international best practices and standards related to the development of e-payments.	International best practices in the e-payment area are followed, consistently studied, and implemented.	High	BOM, FRC, CRC, commercial banks and NBFIs	ADB
4.6	Encourage / authorize / carry out cross-border e-payment pilots.	Cross-border payment pilots are carried out with select partners.	High	BOM, FRC, commercial banks and NBFIs	
4.7	Continue negotiations with international e-wallets with respect to their entry into the Mongolian market. Further diversify the relevant offer.	Negotiations with larger international e-payment wallets, such as PayPal and Stripe, are ongoing, feasibility of the requirements set by these providers is studied / implemented.	High	BOM, commercial banks and NBFIs	USAID
4.8	Implement the Law on Virtual Assets (2021).	The Law on Virtual Assets (2021) is fully implemented.	Medium	FRC	
4.9	Catalogue available in- and out-bound cross-border electronic payment mechanisms, specifying the relevant conditions and fees. Raise awareness thereof among private sector stakeholders.	Cross-border electronic payments mechanisms are mapped. Private sector awareness of such mechanisms is improved.	High	BOM, FRC, CRC, commercial banks and NBFIs	
4.10	Progressively enable domestic T-cards for cross-border payments by bringing them into compliance with the relevant international standards.	T-cards are progressively enabled for cross-border [outgoing] payments.	Medium	BOM, commercial banks	KOICA
4.11	Raise awareness about different digital payments methods for consumers and the private sector outside of Ulaanbaatar, and particularly in rural areas.	Awareness / capacity-building programmes on electronic payments for consumers outside of Ulaanbaatar, in particular in rural areas, are developed and implemented.	High	BOM, FRC, commercial banks and NBFIs, E-Mongolia Academy	ADB, EBRD
4.12	Ensure closer collaboration between the financial regulators and private sector (both banks and NBFIs) to promote synergies and avoid duplications.	Private sector cooperation with financial regulators is ensured.	Medium	BOM, FRC, CRC, commercial banks and NBFIs, private sector stakeholders	ADB
4.13	Take measures to ensure or reinforce security of e-payment solutions.	Domestic and cross-border e-payment solutions are secure. Possibility of cyber breaches is minimized. Relevant recovery and business continuity measures are in place	Medium	BOM, MDCC, FRC, CRC, commercial banks and NBFIs	ADB



LEGAL AND REGULATORY FRAMEWORKS					
No.	Indicative action	Expected results	Priority level	National agencies and stakeholders	Potential support by
5.1	Implement laws relevant to e-commerce, including the newly adopted / revised Law on E-signatures, Law on Private Data, Law on Access to Public Information (in particular, in the context of the open governmental data rules) and Law on Cybersecurity.	Full implementation of the laws of relevance to e-commerce is ensured.	High	MED, MDDC, MJHA, NHRC, MCGA	ITC, EBRD, ADB
5.2	Introduce a comprehensive regulation of electronic transactions in line with the UNCITRAL MLEC and the newly adhered to UN Convention on Electronic Communications by supplementing the rules now contained in the Civil Code of Mongolia and the Law on Electronic Signatures.	Comprehensive regulation of electronic transactions in line with international best practices supplementing the existing rules is introduced.	High	MDDC, MED, MFA, MJHA	UNCITRAL, ITC, ADB
5.3	Based on the report on e-commerce laws of Mongolia developed by ADB, elaborate an action plan to harmonize national policies and legislation with international best practices, covering regulatory and implementation gaps identified.	Report on e-commerce laws of Mongolia is completed and the recommendations made are followed.	High	MED, MDDC, MOF, MFA, MJHA	ADB, ITC
5.4	In order to support participation in the WTO JSI on e-commerce negotiations and raise awareness among stakeholders in Mongolia about international rules and best practices in the area of e-commerce, conduct gap analysis study assessing compatibility of legal framework of Mongolia with the rules proposed in the WTO JSI. The gap study might serve as the basis for legal amendments, policy recommendations, preparation / drafting of the textual proposals or comments.	The gap study is conducted. Evidence-based participation in the WTO JSI on e-commerce negotiations is enhanced.	High	MFA, MED, MDDC, NLI	UNCTAD, WTO, ITC
5.5	Establish legal framework regulating electronic transferrable records in line with the UNCITRAL MLETR in order to further facilitate logistical arrangements (for instance, through e-bill of lading) and payments (e-letter of credit, etc.).	Legal framework regulating electronic transferable records is established and is in line with the UNCITRAL MLETR (this step could be joined with the development of the comprehensive e-transactions law).	Medium	MED, MDDC, MRTD, MFA, MJHA	ADB, UNCITRAL, ITC
5.6	Conduct capacity-building / awareness raising on the legal framework of relevance to e-commerce for the representatives of public sector, private sector, and consumers.	Capacity-building activities programme, sensitizing private sector stakeholders and consumers about e-commerce is developed and implemented.	High	MED, MFA, MDDC, NLI, E-Mongolia Academy	ITC, ADB
5.7	Ensure private sector input in e-commerce rulemaking, making it stakeholder- (industry-) driven.	Private sector participation in e-commerce rulemaking is ensured.	High	MED, MDDC, MJHA, MFA	ITC, ADB, WTO
5.8	Diversify the available e-signature options, moving beyond non-technology neutral digital signature/ PKI.	E-signatures options are diversified, notably, simple and advanced electronic signature solutions are legally recognised.	High	MDDC	UNCITRAL, ESCAP, EBRD
5.9	Enhance e-consumer protection to reinforce consumer trust and adoption of e-commerce solutions.	E-consumer protection is improved.	High	AFCCP, MED	ITC, ADB



LEGAL AND REGULATORY FRAMEWORKS					
No.	Indicative action	Expected results	Priority level	National agencies and stakeholders	Potential support by
5.10	Enable e-consumer redress, including through introduction of Online Dispute Resolution (ODR) as an option for resolution of e-commerce disputes. Develop the relevant legal framework / procedural rules.	E-consumer redress is enabled. ODR is introduced.	High	MDDC, AFCCP, MED, MJHA	ITC, ADB
5.11	Establish a more detailed regulatory framework for cross-border data flows (for both personal and commercial data).	Cross-border data flows / data localization rules and exceptions thereto are developed in line with the international standards.	High	MED, MDDC, NSO	ITC
5.12	Develop a legislative action plan for regulation of innovative digital solutions facilitating e-commerce, including those mentioned in Digital Mongolia (AI, IoT, blockchain, etc.).	Legislative action plan for the development of innovative digital solutions, including those mentioned in Digital Mongolia, is developed.	High	MDDC, MED, MJHA	ITC
5.13	Continue engaging with foreign partners with the view of conclusion of bilateral or regional legal instruments setting e-commerce rules aligned with Mongolia's e-commerce development agenda.	Participation in bilateral / regional e-commerce rulemaking is enhanced. National position underlying such participation and reflecting the interests of Mongolia is established.	Medium	MFA, MDDC, MED, BOM	ITC, ESCAP

E-COMMERCE SKILLS DEVELOPMENT					
No.	Indicative action	Expected results	Priority level	National agencies and stakeholders	Potential support by
6.1	Develop the obligatory and post-obligatory education curriculum to make it better suited to developing digital economy skills. Involve private sector / industry representatives to ensure the relevance of the changes introduced. Conduct teaching staff training to ensure the availability of the skills sufficient to deliver material as developed.	Obligatory and post-obligatory education curriculum is revised focusing on the development of digital economy skills. Engagement of private sector representatives in the revision process is ensured. The trainers are trained as necessary.	High	MES, E-Mongolia Academy, Academia	UNICEF, UNESCO
6.2	Enhance linguistic training in the key languages of relevance to regional / international digital trade – English, Chinese, and Russian.	Linguistic training in the languages relevant to the international / regional digital trade is enhanced.	High	MES, Academia	
6.3	Continue cooperation with development partners in putting together / implementing life-long training programmes focused on ICT development and related skills.	Cooperation with development partners in the area of life-long capacity-building / skills development, continues.	High	MDDC, E-Mongolia Academy, MES, MDDC, MFA	ITC, UNCTAD, WTO, ADB, JICA, UNIDO, ESCAP, EBRD, WCO, UNICEF, UNESCO
6.4	Enhance the training opportunities aimed at development of entrepreneurial e-commerce skills in Mongolian language for MSMEs and individuals.	Training opportunities focused on entrepreneurial skills in e-commerce in Mongolian are enhanced.	High	MDDC, E-Mongolia Academy, MES, Academia, Private sector	ITC, UNDP
6.5	Develop e-consumer skills through training / life-learning activities.	Capacity-building agenda focused on e-consumer skills is developed and integrated in the life-learning activities offer.	High	MES, AFCCP, E-Mongolia Academy, Private sector	ITC, UNDP



E-COMMERCE SKILLS DEVELOPMENT					
No.	Indicative action	Expected results	Priority level	National agencies and stakeholders	Potential support by
6.6	Conduct cataloguing / mapping of the training and capacity-building initiatives in e-commerce domain, accessible by different groups of stakeholders.	Available training activities of relevance to e-commerce domain in Mongolia are catalogued for better transparency / clarity about the status quo.	High	MDDC, E-Mongolia Academy, MES, MED, National IT Park, Private sector	ITC, UNCTAD, WTO, ADB, JICA, UNIDO, ESCAP, EBRD, WCO, UNICEF, UNESCO
6.7	Conduct targeted sectoral e-commerce capacity-building programmes and events reuniting different types of stakeholders (public sector, private sector, academia, consumers).	Sectors in need of targeted e-commerce capacity-building programmes are designated, such programmes are developed and implemented.	Medium	MDDC, E-Mongolia Academy, MED, MFA	ITC, UNCTAD, WTO, ADB, JICA, UNIDO, ESCAP, EBRD, WCO, UNICEF, UNESCO
6.8	Build capacity of incubators, accelerators, BSOs and other relevant players (e.g., domestic marketplaces) to ensure that they are equipped with the skills necessary to scale-up e-commerce.	Technical and professional guidelines for incubators, accelerators, and BSOs assisting e-commerce startups are developed. Awareness of the guidelines is raised among the stakeholders.	Medium	MES, MDDC, National IT Park, E-Mongolia Academy, Private sector	ITC, JICA
6.9	Increase the availability of startup incubator programmes for technological startups.	Startup incubator programmes offer for technological startups is increased.	High	MES, National IT Park, Private sector	ITC, JICA, EBRD
6.10	Ensure more regular post-incubation (acceleration) and further follow up support for technological startups – successful graduates of the incubation programmes.	Regular post-incubation / post acceleration support to technological startups is ensured.	High	E-Mongolia Academy, National IT Park, Private sector	ITC, JICA, EBRD
6.11	Further include ITC skills programmes in secondary school business studies and TVET finance, business and commerce curriculum.	ITC skills programmes for secondary school business studies and TVET finance, business and commerce curriculum, are developed and implemented.	Medium	MES, BOM, Mongolian National Institute for Educational Research	
6.12	ITC training and re-training of professional teachers, including women, of business studies in secondary education.	Measures promoting professional teachers, including women in ICT, are developed and implemented.	Medium	MES, BOM, General Authority for Education	ITC
6.13	Conduct targeted awareness raising / capacity-building activities aimed at development of e-commerce skills for the vulnerable groups (disabled, elderly, rural nomadic population, etc.).	Targeted capacity-building campaign of development of ICT/ e-commerce skills for vulnerable population groups is developed and implemented. Position of Mongolia in the respective rankings is improved.	High	MDDC, E-Mongolia Academy, MES, National IT Park, Private sector	ITC, UNDP
6.14	Enhance cooperation between academia and private sector in the area of digital innovation through identification and alleviation of existing bottlenecks.	The state of private sector – academia cooperation in the area of digital innovation is assessed. Measures aimed at its improvement are implemented.	Medium	MDDC, MES, E-Mongolia Academy, Private sector, Academia	
6.15	Clarify division of competencies between MED, MDDC and MEDS with respect to regulation in the area of innovation.	Regulatory competences in the area of innovation are clarified. Dedicated MOUs are concluded if needed.	High	MES, MDDC, MEDS	



ACCESS TO FINANCING					
No.	Indicative action	Expected results	Priority level	National agencies and stakeholders	Potential support by
7.1	Elaborate / implement financial literacy / fundraising enabling capacity-building programme for the MSMEs active in (or considering engagement into) ICT/ e-commerce.	Financial literacy of MSMEs active in the ICT is improved.	High	BOM, MED, MOF, FRC, Commercial Banks, NBFIs, Private sector	ADB, EBRD
7.2	Further develop legal regulation of franchising by banking and non-banking institutions (including a coherent institutional mechanism).	Franchising is legally regulated.	Medium	BOM, FRC	EBRD
7.3	Further develop legal regulation of crowdfunding.	Crowdfunding is legally regulated.	Medium	BOM, FRC	EBRD
7.4	Raise awareness about different types of financing, including blended financing, targeted at MSMEs active in the ICT sector. Establish an online portal/ database containing information about financing options available to MSMEs active in the ICT sector, introducing best practices in the area, providing a platform for experience-sharing.	Awareness raising campaign on financing for MSMEs active in the ICT sector is developed and implemented. Financing options available to MSMEs are consolidated. Experience-sharing e-platform is established.	High	BOM, MED, Commercial Banks, NBFIs, Private sector	EBRD
7.5	Review / simplify implementation of the investment regime to enable / encourage investments beyond the mining sector, i.e., into digital businesses (including through the revision of the Mongolian Model BIT / update of the existing and conclusion of the further BITS).	Investments in the digital businesses are facilitated and encouraged. Respective regulations are revised accordingly. Amendments to the Model BIT, reflecting diversification of the targeted sectors, are considered.	High	MED, MFA, MDDC	UNCTAD, EBRD, ADB
7.6	Introduce a separate entry in the BOM SME loan statistics database dedicated to loans to enterprises involved in e-commerce.	BOM SME loan statistics indicators are adjusted to include enterprises involved in e-commerce.	High	NSO, BOM, Agency for SMEs	
7.7	Raise Mongolian startups' awareness of Crunchbase and similar platforms, consolidating and systemizing information about startups globally. Train the startups about creation of profiles on these platforms.	Mongolian startups are integrated into the global platforms consolidating and systemizing startup information.	Medium	MED, MDDC, MNCCI	
7.8	As a part of the acceleration process, raise awareness of Mongolian startups about going public (offering a part of their stock to outside investors). Among other things, the training should introduce the startups to the preparation of prospectus and the process to be followed.	Mongolian startups are aware of "going public" as an option available at the advance stage of their development cycle and are able to complete procedural steps leading to the public share offering.	Medium	MED, Agency for MSE, Mongolian Stock Exchange	



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Annex: List of UNCTAD eTrade Readiness Assessments

- Member States of the Economic Community of West African States (ECOWAS): eTrade Readiness Assessment (September 2022).
- Kenya: eTrade Readiness Assessment (June 2022).
- Jordan: eTrade Readiness Assessment (February 2022).
- Tunisia: Évaluation de l'état de préparation au commerce électronique (February 2022).
- Côte d'Ivoire: Évaluation de l'état de préparation au commerce électronique (February 2021).
- Iraq: eTrade Readiness Assessment (November 2020).
- Member States of the West African Economic and Monetary Union: eTrade Readiness Assessment (November 2020).
- Niger: Évaluation rapide de l'état de préparation au commerce électronique (July 2020).
- Bénin: Évaluation rapide de l'état de préparation au commerce électronique (June 2020).
- Malawi: Rapid eTrade Readiness Assessment (May 2020).
- United Republic of Tanzania: Rapid eTrade Readiness Assessment (May 2020).
- Mali: Évaluation rapide de l'état de préparation au commerce électronique (February 2020).
- Kiribati: Rapid eTrade Readiness Assessment (December 2019).
- Tuvalu: Rapid eTrade Readiness Assessment (November 2019).
- Lesotho: Rapid eTrade Readiness Assessment (June 2019).
- Bangladesh: Rapid eTrade Readiness Assessment (March 2019).
- Islamic Republic of Afghanistan: Rapid eTrade Readiness Assessment (March 2019).
- Madagascar: Évaluation rapide de l'état de préparation au commerce électronique (December 2018).
- Zambia: Rapid eTrade Readiness Assessment (December 2018).
- Uganda: Rapid eTrade Readiness Assessment (December 2018).
- Burkina Faso: Évaluation rapide de l'état de préparation au commerce électronique (October 2018).
- République du Togo: Évaluation rapide de l'état de préparation au commerce électronique (October 2018).
- Solomon Islands: Rapid eTrade Readiness Assessment (July 2018).
- Republic of Vanuatu: Rapid eTrade Readiness Assessment (July 2018).
- République du Sénégal: Évaluation rapide de l'état de préparation au commerce électronique (July 2018).
- Liberia: Rapid eTrade Readiness Assessment (April 2018).
- Lao People's Democratic Republic: Rapid eTrade Readiness Assessment (April 2018).
- Myanmar: Rapid eTrade Readiness Assessment (April 2018).
- Nepal: Rapid eTrade Readiness Assessment (December 2017).
- Samoa: Rapid eTrade Readiness Assessment (October 2017).
- Bhutan: Rapid eTrade Readiness Assessment (April 2017).
- Cambodia: Rapid eTrade Readiness Assessment (April 2017).

All reports are available on the website: <https://etradeforall.org/dev-solution/unctad-et-readies/>





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