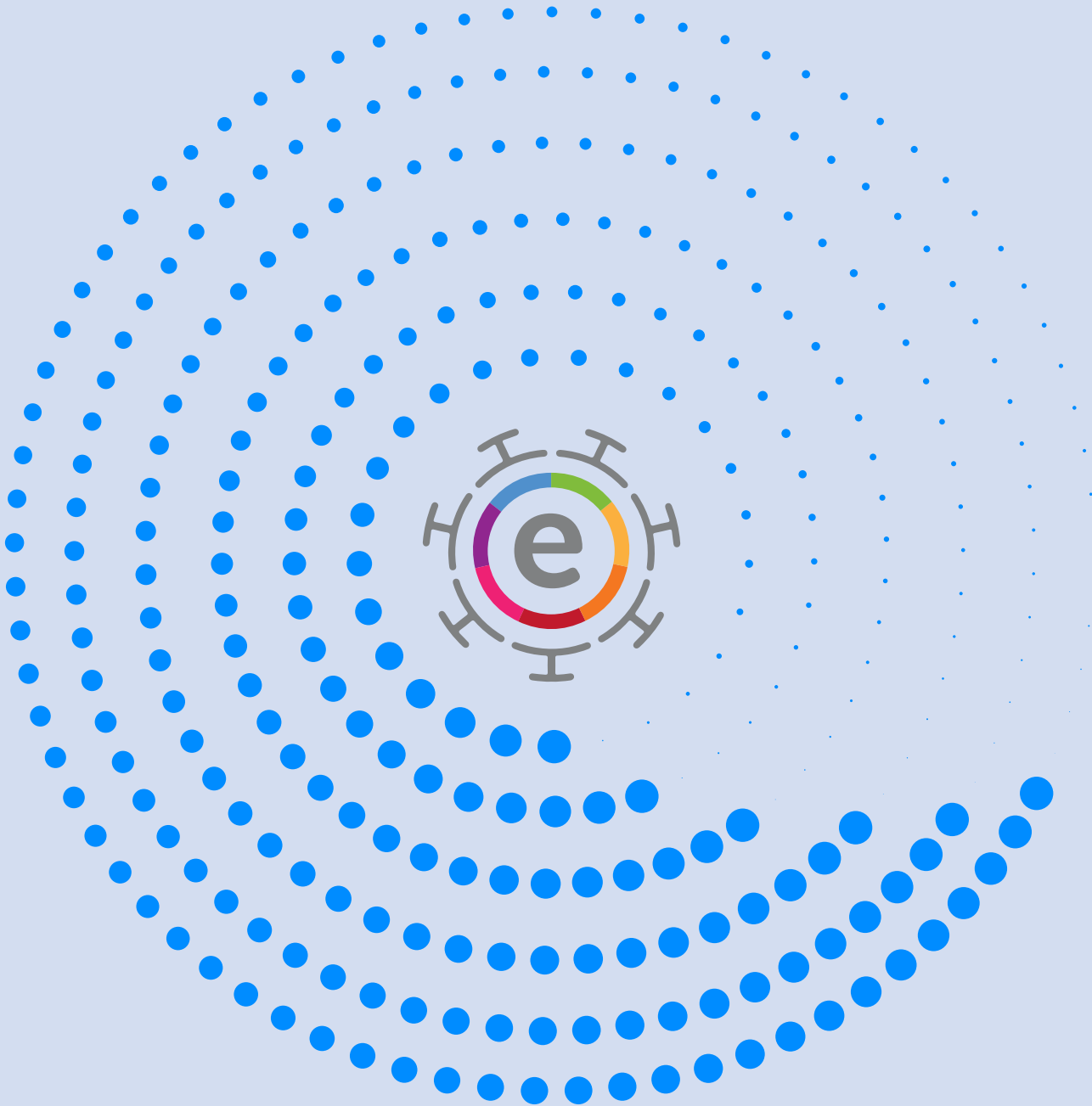


COVID-19 Impact on e-commerce

Post-pandemic COVID-19 Economic Recovery:
Harnessing E-commerce for the UNECE Transition Economies



United Nations Economic Commission for Europe

United Nations Centre for Trade Facilitation and Electronic Business

**Post-pandemic COVID-19
Economic Recovery:
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UNECE Transition Economies**



**United Nations
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Preface

The COVID-19 pandemic caused disruptions to global trade, supply chains and labour markets, curbed consumption and investments, and slowed economic activity worldwide. It created significant repercussions in the UNECE region, including in countries with economies in transition. Although e-commerce experienced a boost, a myriad of challenges, old and new, surfaced. Many countries adjusted their policies and undertook initiatives to address immediate needs. Despite these attempts, much remains to be done to fully harness the power of e-commerce for a sustainable, resilient and inclusive post COVID recovery.

This report explores the impact of the pandemic on domestic and cross-border e-commerce in the transition economies of the UNECE region and highlights key areas for attention of policy makers. The report gives particular attention to trade facilitation and logistics as a major facilitator of e-commerce. During the pandemic, the need for greater trade facilitation became obvious for faster movement of goods across borders, including essential goods such as medicine and food.

Through the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT), UNECE has for long been a leader in the development of norms and guidance on trade facilitation and electronic business. I hope that this report will contribute to greater understanding of the policy options for advancing e-commerce and fostering digitalization, as key levers for sustainable development in UNECE member States.



Olga Algayerova

United Nations Under-Secretary-General

Executive Secretary of the United Nations Economic Commission for Europe

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The preparation of the report was carried out under the UNCTAD-led eTrade for All initiative to assess the impact of the COVID-19 pandemic on e-commerce. The global team was led jointly by Torbjörn Fredriksson and Sabrina Ielmoli (UNCTAD), and Nanno Mulder (UNECLAC).

The report benefitted from the series of discussions for the preparation of the Global Report – “COVID-19 and e-commerce – a global review”, the UNECE webinar on “Harnessing e-commerce post-COVID-19: opportunities and challenges for transition economies” and regional reports prepared by the United Nations Regional Commissions. Special appreciation goes to Universal Postal Union (UPU) for providing customized data for the UNECE member States.

Review and substantive comments at various stages of the preparation of the report were received from (alphabetically) Sabrina Ielmoli Beuxe, Torbjörn Fredriksson, Nadezhda Sporysheva and Birgit Viohl. Lise Lingo edited the report. Batima Tleulinova assisted in the finalization of the report and Amélia Joseph provided administrative support to the processes.

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Abbreviations

ADB – Asian Development Bank

AEO – authorized economic operator

B2B – business to business

B2C – business to consumer

CAREC – Central Asian Regional Economic Cooperation

EAEU – Eurasian Economic Union

EU – European Union

GDP – gross domestic product

ICT – information and communication technology

IT – information technology

ITC – International Trade Centre

LLDC – landlocked developing countries

OECD – Organisation for Economic Co-operation and Development

SMEs/MSMEs – small and medium-sized enterprises/micro, small and medium-sized enterprises

SPECA – Special Programme for the Economies of Central Asia

SPS – sanitary and phytosanitary

TIR – Transports Internationaux Routiers

UNCTAD – United Nations Conference on Trade and Development

UNECE – United Nations Economic Commission for Europe

UN/CEFACT – United Nations Centre for Trade Facilitation and Electronic Business

UPU – Universal Postal Union

WCO – World Customs Organization

WTO – World Trade Organization

Executive Summary

The COVID-19 pandemic and the associated restrictions caused disruptions to global trade, supply chains and labour markets, curbed consumption, and investments, and slowed economic activity worldwide. Economies in transition of the UNECE region, the focus here, were hit hard by the economic downturn caused by the pandemic.

This report aims to explore the impact of the pandemic on domestic and cross-border e-commerce in economies in transition in the UNECE region and identify policies and initiatives that could support these economies, to enhance their readiness to engage in and benefit from e-commerce as a contributor to the post-pandemic recovery. It is part of a wider effort by the UNCTAD-led *e-Trade for all* initiative, in cooperation with some of the United Nations Regional Commissions (UNRCs), to engage in a range of studies on “Post-Pandemic Covid-19 Economic Recovery: Enabling Developing Countries to Better Harness E-commerce”.

Driven by constraints imposed by social distancing measures and restrictions on movement, businesses and consumers in the region – mirroring global trends – moved rapidly to digital channels, adapting to new business models, and adopting new consumption habits. In fact, 36.6 per cent of firms in Georgia, 40 per cent in the Republic of Moldova, 24 per cent in North Macedonia and 18 per cent in Albania started or increased online business activity in response to the pandemic.

E-commerce activity in Central Asia and the Caucasus remains modest but is gaining momentum. Kazakhstan is the largest business-to-consumer (B2C) e-commerce market in Central Asia and the Caucasus region, followed by Azerbaijan and Georgia. The market in Central Asia is dominated by international players, but local platforms have emerged in the past few years and are gaining ground.

The accelerated shift to digital platforms in response to the pandemic led to an increase in online retail trade, but it also unmasked challenges to harnessing the benefits of e-commerce. Many of these existed before the pandemic, including the moderate though evolving degree of internet connectivity and the considerable digital divide between countries in the region, coupled with the modest degree of financial inclusion on the one hand and weak digital financial services on the other hand.

Lockdowns, travel restrictions and quarantine requirements affected passenger and cargo flights, especially in the early part of the pandemic, leading to a fall in traffic. They also affected the availability, speed and cost of deliveries transported by road across the region and specifically in Central Asia and the Caucasus.

The need to facilitate trade, including through automation and digitalization of trade and border-related processes, became even more obvious during the pandemic with the imposition of the social distancing requirements and movement restrictions. The record of transition economies in implementing trade facilitation measures – both before and during the pandemic – is mixed, across both countries and measures. Measuring the implementation of trade facilitation measures contained in the World Trade Organization (WTO) Agreement on Trade Facilitation

provides a useful guide here. Central Asia and Eastern Europe, for example, have only limited implementation of pre-arrival processing and expedited shipments, both of which are crucial for faster clearance of parcel shipments and small packages traded through e-commerce. Automated customs systems are among the most implemented paperless, trade-related measures in the region while electronic payments are among the least implemented, especially in Eastern and South-Eastern Europe. Similarly, implementation of an electronic single window – a digital gateway for single submission of regulatory and commercial documents – has been limited in South-Eastern Europe.

Efforts to harness the benefits of e-commerce for the transition economies in the UNECE region would be improved by advancing the adoption and implementation of trade facilitation measures, including those related to paperless trade, pre-arrival processing, expedited shipments and electronic payments. Addressing challenges related to connectivity, financial inclusion and digital financial services would contribute to advancing the adoption and implementation of these measures. Governments worldwide and in the region had to react to the need to accelerate digitalization and enable the shift to a digital economy. This shift started decades ago, with varying levels of success across countries. During the pandemic, the need for accelerating the digital transition became pressing, and hence the need to address related challenges became a priority.

This report offers an overview of some of the key challenges and juxtaposes these with a bird's-eye impression of how some countries in the UNECE region have responded to the challenges since the onset of the pandemic. These challenges arose in the following areas:

Information and communication technology (ICT) infrastructure and services. The backbone of e-commerce is relatively weak in the transition economies of the UNECE region. A digital divide runs through these economies, especially in Central Asia and the Caucasus. Across the region, a lack of reforms in the telecommunication and other sectors concerned, barriers to entry, inadequate regulation of the State-owned enterprises, and the need to improve access and affordability as well as security all pose challenges.

As the pandemic unfolded, governments in the region intensified e-government implementation efforts, moving public services online, including in areas such as tax and customs. Armenia began offering a range of e-government services, including filing of tax reports. Uzbekistan implemented a legal act for the development and improvement of the country's telecommunication infrastructure and provision of electronic public services. In Tajikistan, the Decree of the President No. 1544, "On preventing the impact of the COVID-19 infectious disease on the social and economic spheres of the Republic of Tajikistan", was an important step towards creating an e-government platform and developing electronic payments.

Trade facilitation and logistics. Disruptions to trade, logistics supply chains and transport networks posed additional challenges to trade and e-commerce. Large volumes of parcel shipments and small packages overburdened customs and other border agencies, causing delays, and increasing the cost of trade.

Governments in the region undertook several measures to reduce the negative impact of disruptions to transport during the pandemic. These included, for example, the Republic of Moldova exempting from quarantine cargo drivers and transport service personnel, as well as crews of aircraft, ships, and trains, if they do not present clinical signs of respiratory infection. In another example, Uzbekistan prioritized accession to the electronic TIR (Transports Internationaux Routiers) customs guarantee agreement.

Governments across the region also undertook measures to facilitate trade. Azerbaijan implemented several initiatives to introduce and enhance the use of paperless trade, including automation and digitalization of trade-related documents. Georgia continued to issue trade documents online through the national paperless trading system and streamlined the electronic payment of customs and taxes through the introduction of a simplified procedure for tax refunds. Kazakhstan further developed its single window, with automation of a number of customs and logistics services. Uzbekistan fast tracked implementation of a single window customs information system, and Kyrgyzstan adopted emergency trade facilitation measures, among them the establishment of green corridors, provision of digital services including electronic certificates of origin and the intensified use of the electronic single window.

Legal and regulatory framework. Although several transition economies already either had or planned to put in place e-commerce policies and strategies, the pandemic provided a further boost to fast tracking the creation or implementation of these national e-commerce policies and strategies.

Key obstacles to e-commerce uptake are consumer concerns related to online transactions, including cybersecurity, data protection, security of payments, digital certificates and signatures, refunds, and dispute settlement. The majority of transition economies in the UNECE region are developing the regulatory framework for a secure e-commerce environment, but some still lack aspects of such a framework, in particular consumer protection laws related to e-commerce and legislation related to cybercrime and to personal data protection.

With the accelerated shift to online platforms during the pandemic, governments addressed consumer protection concerns through cyberlaws and consumer grievance redressal procedures. For example, the Republic of Moldova adopted measures with respect to public digital signatures. Turkmenistan adopted a law on e-documents that included provisions on the flow of documents and electronic services. Azerbaijan set up services for verifying the authenticity of digitally signed documents, one of the earliest of its kind in the subregion. In Kazakhstan, as part of the Law on Consumer Protection, the Government launched a unified platform for receiving complaints from consumers based on the single window approach.

Electronic payment systems. Financial inclusion and the use of digital financial services are essential for the expansion of e-commerce. Despite only moderate levels of financial inclusion in some countries in the region, greater connectivity and digitalization have led to growth of e-commerce over the past few years. Rates of digital financial inclusion are also on the rise, although cash remains the preferred mode of payment in most countries in the region.

In response to the accelerated need for digital payment systems during the pandemic, central banks in some countries temporarily permitted companies and banks to lower or scrap transaction costs and fees for digital payments and mobile money transfers, in order to encourage the use of mobile money in preference to cash. The National Bank of the Kyrgyz Republic, for example, published "The concept for the development of digital payment technologies in the Kyrgyz Republic 2020–2022", while in Georgia the Government streamlined the online payment of customs and tax and introduced a simplified procedure for tax refunds.

Skills development. Despite the increase in their online presence, many micro, small and medium-sized enterprises (MSMEs) in the region face challenges in penetrating the e-commerce market and harnessing the benefits of e-commerce. These challenges range from lack of the required skill set and information technology (IT) savviness to weak digital financial services, to problems related to navigating export markets.

Recognizing the opportunity that the pandemic provided to bring MSMEs into the e-commerce sector, several governments and private sector stakeholders put in place measures such as online platforms for e-businesses or financing linked to SMEs aimed at supporting business in general, including in the context of e-commerce.

Gender gap. Data indicate that women entrepreneurs and workers are disadvantaged in rank, remuneration and access to internet. The gender barriers would need to be transcended, including the digital divide, for women in the e-commerce sector.

Against the background of the trends, challenges and policy responses explored here, the report sets out some recommendations for consideration for the further development of e-commerce in the UNECE region:

- **Develop ICT Infrastructure and Services**

There is a need for addressing the digital divide by ensuring accessible, efficient, and affordable ICT services, such as telecommunication, computer and other IT services and emerging technologies. A key aspect is ensuring high-speed, consistent, and affordable internet connectivity, including to rural areas, by way of enhanced ICT infrastructure. As internet penetration and infrastructure for delivery and payment improves, B2C e-commerce in the Central Asian and Caucasus countries is expected to grow further.

- **Use Advanced Technologies**

Considering the fast and ongoing evolution of e-commerce markets in the UNECE transition economies and fast-paced technological developments, it will be useful to ensure that regulation and policy is – wherever possible – technologically neutral, to enable adaptation to advanced technologies.

- **Develop Appropriate Legal and Regulatory Frameworks**

In order to create an enabling and secure environment for e-commerce, there is a need to address consumer concerns related to online transactions, including security of payments, data protection, privacy, cybercrime, e-payments, dispute settlement and elements relating to e-transactions such as digital certificates and signatures, and refunds. Resolution of these issues

must be incorporated in law and implemented in practice. Although UNECE transition economies are pressing ahead, with significant successes already, much remains to be done in the region. In this context, the compatibility of cross-border legislation and standards as well as harmonization on a regional or global level, is important for the dynamic development of regional e-commerce in particular.

- **Develop Digital Financial Inclusion and Electronic Payment**

Factors that can help improve digital financial inclusion include building consumer confidence by addressing concerns related to consumer trust that hold back the uptake of online payment. This can be advanced through the consequent enactment and enforcement of legislation and regulation relating to data protection and privacy issues relevant to e-commerce, as well as cybercrime, data localization, e-transactions, dispute settlement and consumer grievance redressal.

In addition, in UNECE countries where cash dependence is high, enhancement of digital payment – including through improvements in digital and financial literacy – would result in multiple modes of payment beyond cash, benefitting the larger financial system. Finally, encouraging greater and secure competition in the online payment system, including by developing local payment applications where there are none, would create more choice and potentially reduce costs.

- **Improve Trade Facilitation and Logistics**

Some of the challenges that the pandemic has brought to the fore can be resolved through the continued implementation of the WTO Trade Facilitation Agreement and, where appropriate, even pursuing advanced digital solutions that are not part of the agreement. This would involve, first, identifying and prioritizing low-hanging fruit in digital service provision while working towards longer-term policy objectives (e.g. exchange of electronic certificates of origin or sanitary and phytosanitary certificates).

International standards are a key enabler for exchanging trade-related information between parties. The electronic business standards of the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) are relevant examples in this context.

- **Increase Access to E-commerce for MSMEs and Address Gender Gaps**

Raising awareness and assisting MSMEs in building up their online presence and developing their skill sets are important steps. Enhancing access to finance, developing the enabling environment by way of incentives to encourage MSMEs to go digital and addressing the gender gap are other steps in the right direction.

- **Measure E-commerce**

Enhanced understanding of e-commerce and the ecosystem that nurtures it, including the interlinkages with trade facilitation and the larger trade-in-services ecosystem, is essential for policymakers. This understanding could help policymakers to devise appropriate policies to improve the e-commerce ecosystem and harness its benefits and could lead to developing suitable ways to measure e-commerce. In this context, the work of international organizations

(in their different spheres) on e-commerce, trade in services, trade facilitation and electronic business standards provides a great starting point; that work needs to be brought together.

- **Strengthen Regulatory Cooperation and Coordination**

Without international cooperation at global, regional, or subregional levels, it is literally impossible to address the digital divide. Other areas that could benefit from international collaboration are the differing standards and evolving systems (e.g. in the United States, Europe, and China) within the e-commerce sphere, as well as cybersecurity, consumer confidence, market access and ICT infrastructure.

The ongoing e-commerce discussions at the WTO could benefit from cross-fertilization and input at the national and regional levels. National governments could build on ongoing initiatives related to e-commerce, model legislation, standards, and best practices to enhance and improve the e-commerce landscape. The use of international standards and guidance such as the ones developed by UN/CEFACT, is important for harmonized regulatory systems.

Chapter 1: Introduction

The COVID-19 pandemic has sunk the global economy into the deepest recession in decades and continues to take an unprecedented toll on human health and life. In an effort to contain and prevent the spread of the disease, governments across the globe, imposed restrictions on movement. Border closures and partial or full lockdowns became the new normal in many parts of the world. The pandemic and the associated restrictions caused disruptions to global trade, supply chains and labour markets; they curbed consumption and investments; and they slowed economic activity worldwide.

Economies in transition of the UNECE region, the focus here, were hit hard by the economic downturn caused by the pandemic. These economies are Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Montenegro, Serbia, Tajikistan, Turkmenistan, Turkey, North Macedonia, Ukraine and Uzbekistan – a subset of the membership of the United Nations Economic Commission for Europe (UNECE).¹

The Central Asia region, which depends heavily on exports of extractive industries and on migrant remittances, was heavily affected by border closures, lockdowns, and the collapse in international demand. As a result, GDP growth in Central Asia was expected to contract by 1.7 per cent in 2020.² The GDP growth rate for the Western Balkans was expected to contract by 4.8 per cent, in part due to the decline in tourism.³ Mobility restrictions, the declines in industrial production and in services (including tourism), losses in remittances and investment flows, and lower oil prices were factors in the projected economic decline of 4.9 per cent in the South Caucasus.⁴ Turkey's economy was projected to contract by 3.8 per cent in 2020, owing to sharp falls in tourism, investment and exports.⁵ The *World Investment Report 2020* estimated that foreign direct investment flows to the transition economies would decline by about 38 per cent in 2020.

The World Bank Enterprises Follow-up Survey, concluded for only four of the countries in focus here at the time of writing, shows the impact of the pandemic on businesses, including in terms of declines in sales. The majority of businesses in Albania (87.4 per cent), Georgia (87.2 per cent), the Republic of Moldova (90 per cent) and North Macedonia (76.9 per cent) experienced declines in monthly sales during the pandemic compared with the same period a year earlier, with the average decline reaching 51.6 per cent in Albania, 47.1 per cent in Georgia, 57.1 per cent in the Republic of Moldova and 43.0 per cent in North Macedonia.⁶

¹ The UNECE region consists of 56 member States in Europe, Central Asia and North America.

² Central Asia includes Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan. See World Bank, "Covid-19 and Human Capital: Europe and Central Asia Economic Update, Fall 2020", pages 27–28.

³ See World Bank, "Covid-19 and Human Capital: Europe and Central Asia Economic Update, Fall 2020", pages 27–28. The Western Balkans includes Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia and Serbia.

⁴ See World Bank, "Covid-19 and Human Capital: Europe and Central Asia Economic Update, Fall 2020", pages 27–28. The South Caucasus includes Armenia, Azerbaijan and Georgia.

⁵ See World Bank, "Covid-19 and Human Capital: Europe and Central Asia Economic Update, Fall 2020", pages 27–28.

⁶ World Bank Enterprise Surveys Follow-up on Covid-19: Impact on Firms (2020), <https://www.enterprisesurveys.org/en/covid-19>

Driven by constraints imposed by social distancing measures and restrictions on movement, businesses, and consumers in the region – mirroring global trends – rapidly moved to digital channels, adapting to new business models, and adopting new consumption habits. Digital connectivity was essential for businesses to maintain their operations and improve their economic resilience. Available data reflect this trend. According to the World Bank Enterprise Surveys 2020 measuring the impact of the pandemic on firms, 36.6 per cent of firms in Georgia, 39.5 per cent in the Republic of Moldova, 24.3 per cent in North Macedonia and 18.1 per cent in Albania started or increased online business activity in response to the pandemic.⁷

Digital connectivity was also important for people to cope with restrictions on movement during the pandemic, offering them the chance to work from home, shop online, and access education and other services online.

Governments worldwide and in the region had to react to the need to accelerate digitalization and enable the shift to a digital economy – a shift that started decades ago – with varying levels of success across countries and regions. The need for completing the shift became pressing during the pandemic. The experience of the recent months has underscored the role of digital connectivity and e-commerce⁸ in economic resilience and in recovery from the pandemic. Countries with robust digital connectivity were more successful in coping with the economic and social impact of the pandemic than those that lagged behind in digital development.

This report aims to explore the impact of the pandemic on domestic and cross-border e-commerce in economies in transition in the UNECE region and to identify policies and initiatives that could support these economies to enhance their readiness to engage in and benefit from e-commerce, as a contributor to the post-pandemic recovery. A key aspect in this discussion is the role of trade facilitation in enhancing or hampering cross-border e-commerce. Poor trade facilitation, including poor facilitation and automation of customs and related processes and border-related procedures, has a significant effect on both businesses and consumers.

This report offers a limited snapshot of a moving target. It is part of a broader effort by the UNCTAD-led *e-Trade for all* initiative's cooperation with some of the UNRC, to engage in a range of studies on "Post Pandemic Covid-19 Economic Recovery: Enabling Developing Countries to Better Harness E-commerce".

The report is structured as follows. Chapter 2 reviews the main trends in e-commerce before and during the pandemic. It shows that e-commerce already played an important and growing role in

⁷ World Bank, "Enterprise Survey, Covid-19: Impact on Firms", <https://www.enterprisesurveys.org/en/covid-19>.

⁸ Throughout the report, the term "e-commerce" refers to purchases of physical goods as well as intangible (digital) products and services conducted over computer networks using multiple formats and devices, such as the web, apps, personal computers and mobile devices. This report focuses on domestic and cross-border B2C transactions, many of which are intermediated by platforms, marketplaces or online stores. The OECD defines e-commerce as follows: "An e-commerce transaction is the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders. The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have to be conducted online. An e-commerce transaction can be between enterprises, households, individuals, governments, and other public or private organizations. To be included are orders made over the web, extranet or electronic data interchange. The type is defined by the method of placing the order. To be excluded are orders made by telephone calls, facsimile or manually typed e-mail." OECD (2011), *Competing in the Global Economy*, Science Technology and Industry Scoreboard, chapter 10, p. 184.

the region and that the pandemic has accelerated that growth, with differences among countries reflecting their levels of development, access to ICT and e-payment systems, and consumer habits, among other characteristics.

Despite promising opportunities for the expansion of e-commerce, the pandemic has unveiled key challenges to its sustainable growth, including in terms of soft and hard infrastructure, connectivity and access, as well as inadequate trade facilitation, overreliance on cash, weak e-payment regimes and lack of consumer trust. Many of these challenges are not new; they existed prior to the pandemic, hindering growth in the past. Chapter 3 examines these challenges and considers a cross-section of the wide range of policy responses that countries across the region devised, implemented, or advanced during the pandemic. These policies varied from enhancing ICT connectivity to putting in place the enabling environment for e-transactions, e-payments and e-government, and digital trade facilitation measures; to enhancing the digital skills of consumers and business and supporting SMEs, including by improving their access to finance. Some countries advanced the planning or implementation of national e-commerce strategies. This snapshot account of mostly anecdotal evidence of measures undertaken by governments and private actors shows that the capacity to respond is heterogeneous. Chapter 4 condenses the findings into a set of recommendations.

Although e-commerce is evolving rapidly, data on e-commerce are scarce, posing a challenge for mapping trends. For this report, it has been difficult to obtain data for several reasons. Data on e-commerce in general are difficult to access because of varying conceptual understandings of coverage, as well as the lack of a single neutral source. This has necessitated reliance on several “acceptable” sources, which in turn has made comparisons difficult and at times contradictory. Furthermore, since the pandemic is an ongoing phenomenon, the e-commerce landscape and emerging data are still evolving.

Chapter 2: Trends in E-commerce and Trade Facilitation Prior to and During the Pandemic in the Transition Economies of the UNECE Region

This chapter provides an overview of the main trends in e-commerce as well as developments in trade facilitation in economies in transition in the UNECE region prior to the outbreak of the COVID-19 pandemic and up to end of 2020.

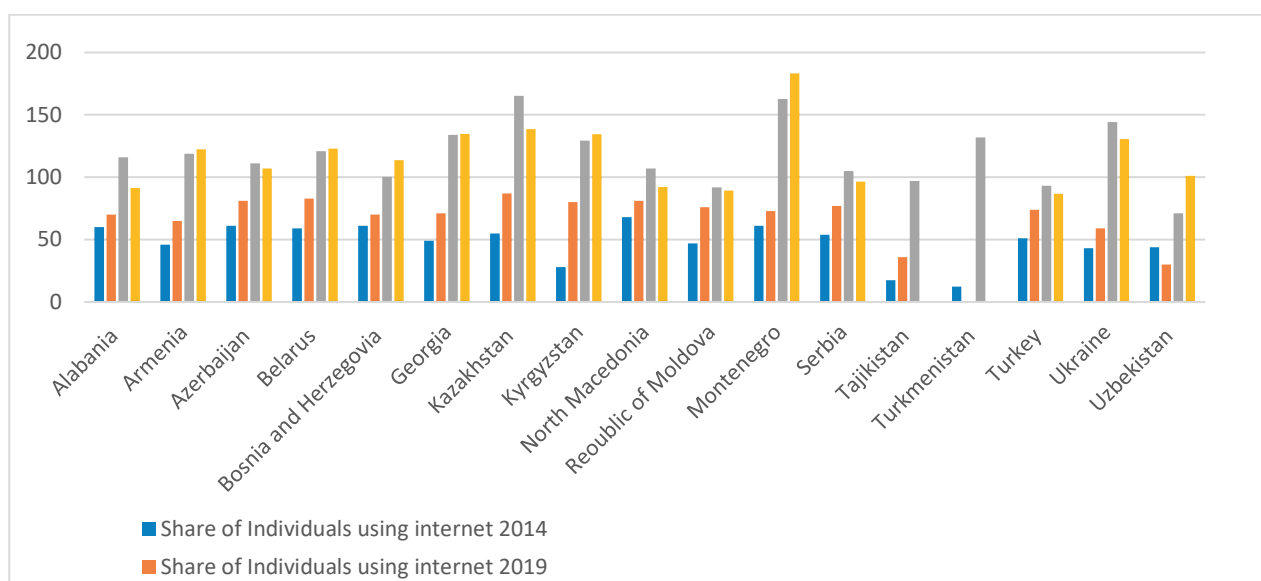
2.1 E-commerce Trends

Connectivity

Internet penetration, as measured by the percentage of people using the internet, is evolving. The regional average rose from 45 per cent of the population in 2014 to 70 per cent in 2019.⁹ However, this average masks a considerable digital divide among countries in the region, with a discrepancy in access that ranges from 30 per cent of people in Uzbekistan to 87 per cent in Kazakhstan.¹⁰ Internet penetration in some countries in the region is driven by access to mobile technology. Across the region, improvements in network coverage and accessible subscription plans for mobile phones mean that mobile penetration rates (measured by the share of subscriptions per 100 inhabitants) exceed internet penetration rates.

Figure 1.

Evolution of Connectivity in Transition Economies in the UNECE Region



Source: Based on International Telecommunication Union data, the UNCTAD B2C E-commerce Index 2020 and the UNCTAD B2C E-commerce Index 2016.

⁹ Author's calculations on the basis of data available in the UNCTAD B2C E-commerce Index 2016 and the B2C Index 2020.

¹⁰ UNCTAD B2C E-commerce Index 2020.

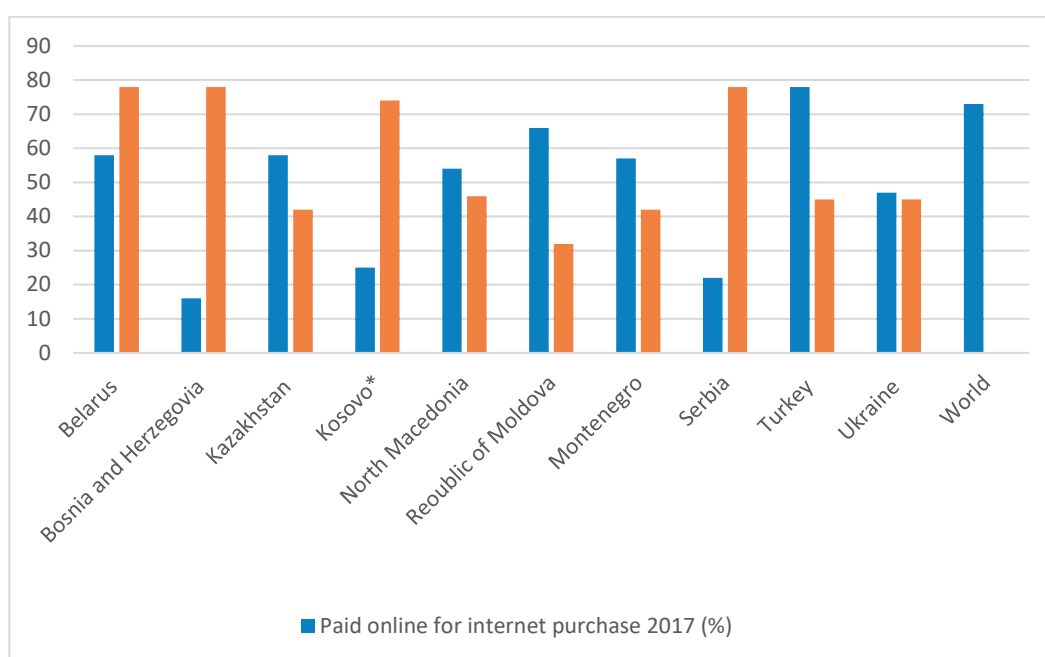
Digital Payments

Financial inclusion and the use of digital financial services are essential for the expansion of e-commerce. E-commerce transactions in markets with underdeveloped digital financial services must rely on cash payment upon delivery, which raises the risks and costs of e-commerce.

Financial inclusion, measured here by the share of people age 15 or older who have a financial account, has increased in the region from an average of 45.18 per cent in 2015 to 54.78 per cent in 2017.¹¹ Significant variations exist, ranging from 81 per cent in Belarus to only 29 per cent in Azerbaijan.¹²

With only 38.28 per cent of the adult population (age 15 or older) in the region using debit cards and 13.56 per cent using credit cards, and with more than 50 per cent unbanked in Albania, Armenia, Azerbaijan, Kyrgyzstan, Turkmenistan, Tajikistan and Uzbekistan, cash payments remain the dominant mode of payment in the region even for purchases made online. In fact, 56 per cent of payments for online purchases are made in cash upon delivery.¹³ On the other hand, online payment for internet purchases is more prominent in Kazakhstan, Montenegro, North Macedonia, and the Republic of Moldova, as illustrated in Figure 2.

Figure 2.
Payment for Online Shopping



Source: UNECE, based on the World Bank Global Findex Database.

¹¹ Author's calculations on the basis of data available in the World Bank, Global Findex database.

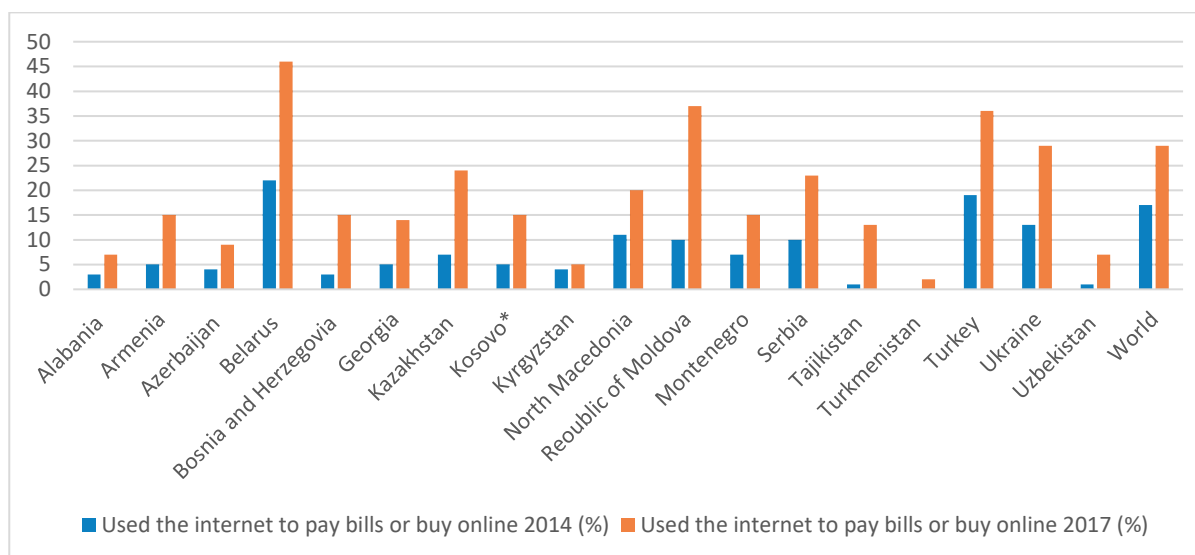
¹² Author's calculations on the basis of data available in the World Bank, Global Findex database.

¹³ Author's calculations on the basis of data available in the World Bank, Global Findex database.

* All references to Kosovo are made in the context of UN Security Council Resolution 1244 (1999).

Despite moderate levels of financial inclusion in some countries in the region, increased connectivity and digitalization have led to growth in e-commerce over the past years. Between 2014 and 2017, the share of the population age 15 and older that used the internet to pay bills or shop online more than doubled in most countries in the region, as illustrated in Figure 3.

Figure 3.
Use of Internet to Pay Bills or Buy Online 2014, 2017



Source: Based on the World Bank Global Findex Database.

Note: Among people age 15 and older. Data for Turkmenistan were available only for 2017.

The highest increases in rates of using the internet for purposes of making a digital payment were seen in countries where the rates in 2014 were low, such as Tajikistan (from 1 to 13 per cent), Uzbekistan (from 1 to 7 per cent) and Bosnia and Herzegovina (from 3 to 15 per cent). More modest increases were seen in Kyrgyzstan (from 4 to 5 per cent), North Macedonia (from 11 to 20 per cent) and Turkey (from 19 to 36 per cent).

Despite the increase between 2014 and 2017 in using the internet to make digital payments everywhere in the region, significant discrepancies existed in 2014 and continue to exist today, underscoring the digital divide in the region. Countries such as Belarus (46 per cent), the Republic of Moldova (37 per cent) and Turkey (36 per cent) show the highest rates, while countries such as Turkmenistan (2 per cent), Kyrgyzstan (5 per cent), Uzbekistan (7 per cent) and Albania (7 per cent) show low rates.

Digital Platforms

With restrictions on movement, closures, and lockdowns in most countries across the globe, the demand for online collaboration tools grew worldwide and electronically delivered services replaced physically delivered services in many parts of the world. A survey conducted by UNCTAD provides an indication of the magnitude of that growth and the shift in habit towards using online platforms for shopping and entertainment.¹⁴

¹⁴ Netcomm Suisse and UNCTAD, "COVID 19 and Ecommerce: Findings from a survey of online consumers in 9 Countries", September 2020. See also WTO, "Ecommerce, Trade and the COVID Pandemic", 4 May 2020, WTO Information Note.

Businesses across the world adopted new models to ensure their continuity, enabling greater use of teleworking and more online sales of goods and services. The World Bank Enterprise Surveys 2020 measuring the impact of the pandemic on firms, which at the time of writing had concluded for only some countries in the region, show that 36.6 per cent of firms in Georgia, 39.5 per cent in the Republic of Moldova, 24.3 per cent in North Macedonia and 18.1 per cent in Albania started or increased online business activity in response to the pandemic.¹⁵

This accelerated shift to online platforms led to an increase in online retail sales at a time when traditional retail sales declined. During the first quarter of 2020, online orders were up 50 per cent year-on-year, on average, in Europe and 120 per cent in North America¹⁶.

The spikes in e-commerce seen worldwide were also seen in the UNECE region, which appears to have experienced growth of more than 10 per cent in the online customer base during the pandemic.¹⁷ The growth in online retail sales was followed by a period of decline during the second half of 2020, partly as a result of the second wave of infections and lockdowns triggering economic concerns and unemployment among wide segments of consumers.

Available data suggest that Armenia, Azerbaijan and Kazakhstan saw sharp surges in e-commerce in the form of online purchases and payments.¹⁸ E-commerce sales in Eastern Europe amounted to 10 per cent of all retail sales in 2020, marking a 36 per cent increase from sales in 2019.¹⁹

The increase in e-commerce sales during the pandemic happened despite the challenges to logistics and transportation networks, which caused a 20 per cent decline in postal tonnage worldwide between January and October 2019, compared with the same period in 2020.²⁰ In contrast, parcel shipments increased in 2020, as seen by express courier service providers such as DHL Express, which experienced growth in shipment volume of about 35 per cent.²¹

Types of Goods and Services Purchased Online

Online purchases in the region during the pandemic focused on non-grocery items such as apparel, footwear and consumer electronics in Azerbaijan, Bosnia and Herzegovina, Ukraine and Uzbekistan.²² During lockdowns, consumers also purchased medical products, technology products and groceries, including household essentials, and food.²³

¹⁵ World Bank, Enterprise Survey, Covid 19: Impact on Firms, <https://www.enterprisesurveys.org/en/covid-19>.

¹⁶ OECD, "Policy Responses to Coronavirus (COVID-19), Connecting Businesses and Consumers During COVID-19: Trade in Parcels", 9 July 2020.

¹⁷ McKinsey & Company, "Consumer sentiment and behavior continue to reflect the uncertainty of the COVID-19 crisis", 8 July 2020.

¹⁸ Yelena Vassilevskaya, "Trade facilitation in times of pandemic: practices from North and Central Asia", *UNESCAP Working Paper 197*, 2020.

¹⁹ Euromonitor International as quoted in *Kyiv Post*, Interfax Ukraine, "Ukraine becomes leader in e-commerce growth in Eastern Europe in 2020", 6 October 2020, <https://www.kyivpost.com/business/ukraine-becomes-leader-in-e-commerce-growth-in-eastern-europe-in-2020.html?cn-reloaded=1&cn-reloaded=1>.

²⁰ UPU, Postal Development Report, 2020.

²¹ Post & Parcel, "DHL Express: Expects 50% more shipments compared to last year's peak season", 26 October, <https://postandparcel.info/128219/news/128219>.

²² Euromonitor (2020), "Country Reports for the respective countries".

²³ See also Santiago Fernandez, Paul Jenkins and Benjamim Vieira, "Europe's digital migration during COVID 19: Getting past the broad trends and averages", McKinsey & Company, 24 July 2020.

In Kazakhstan for instance, the categories of products most purchased online in 2019 were clothing, shoes, and sporting goods, followed by food and household goods. From March through May 2020, the leading products remained the same, with computers and mobile phones displacing household appliances as workers attempted to set up connections to work from home.²⁴

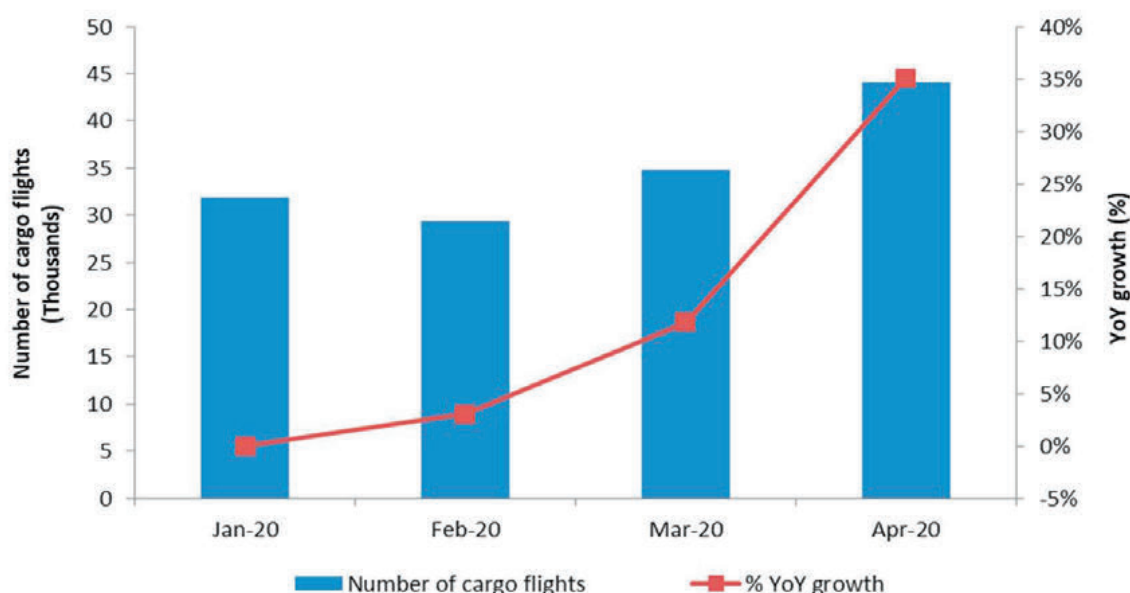
The shift in consumer habits to shopping online will likely continue in the future, underscoring the potential of e-commerce in the transition economies of the UNECE region.

Key categories of products for which online shopping is expected to continue post-pandemic are groceries, household purchases, retail shopping, entertainment services, remote learning, telemedicine, and online fitness and wellness.²⁵

Transport Links

The pandemic affected the cross-border transport of merchandise in the UNECE region. In July 2020, world freight traffic was reported to have declined 13.5 per cent year on year.²⁶ Prior to the pandemic, one third of the value of world trade was shipped by air.²⁷ Lockdowns, travel restrictions and quarantine requirements – especially in the early part of the pandemic – affected passenger and cargo flights, leading to a fall in traffic. However, by March–April 2020, as economic activity and consumption of goods slowly recovered, there had been a gradual recovery of air cargo, as illustrated in Figure 4.²⁸

Figure 4.
Air Cargo Operations



Source: ICAO ADS-B Operation Data.

²⁴ Ystats.com, “Kazakhstan B2C E-commerce and Payment Market 2020 & Covid-19’s impact”, 12 August 2020.

²⁵ McKinsey & Company, Consumer sentiment surveys for Belgium, Canada, Denmark and France, 30 June 2020; Germany, 26 June 2020; Italy, May 2020; the Netherlands, 30 June 2020; Poland, April 2020; Portugal, 25 June 2020; Spain, 25 June 2020; Sweden, Switzerland and the United Kingdom, 26 June 2020.

²⁶ ICAO, *Air Transport Monthly Monitor*, September 2020.

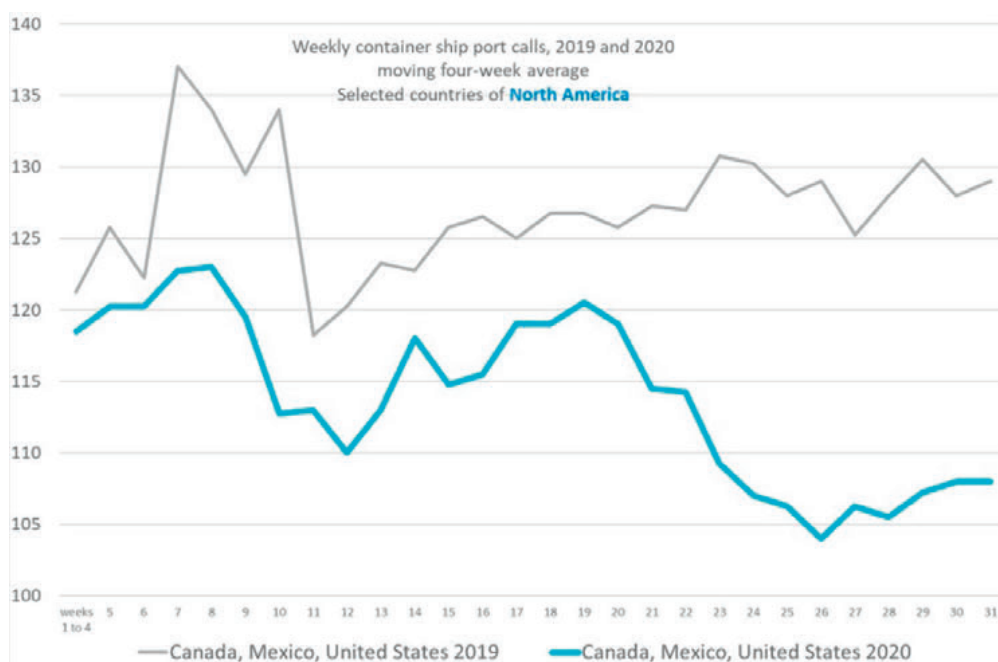
²⁷ Ibid.

²⁸ “IATA/UPU Warn of Air Capacity Shortage” UPU press release no. 38, 4 May 2020.

In Europe, given the well-connected road and rail infrastructure, a large portion of e-commerce deliveries occurs by way of road transport. However, across the region and specifically in Central Asia and the Caucasus, restrictions on movement and quarantine requirements affected the availability, speed and cost of deliveries transported by road.

Container shipping was also affected. Over 80 per cent of global merchandise trade by volume is carried by the international shipping industry.²⁹ During the first quarter affected by the pandemic, container trade in selected ports worldwide declined by 10 per cent.³⁰ Most regions saw some recovery starting in the third quarter of 2020; however, port calls still remained below their 2019 level, as illustrated in figures 5, 6 and 7.³¹

Figure 5.
Weekly Container Ship Port Calls – North America



Source: UNCTAD calculations, based on data provided by Marine Traffic. Includes all arrivals of container ships of 5,000 gross tons and larger.

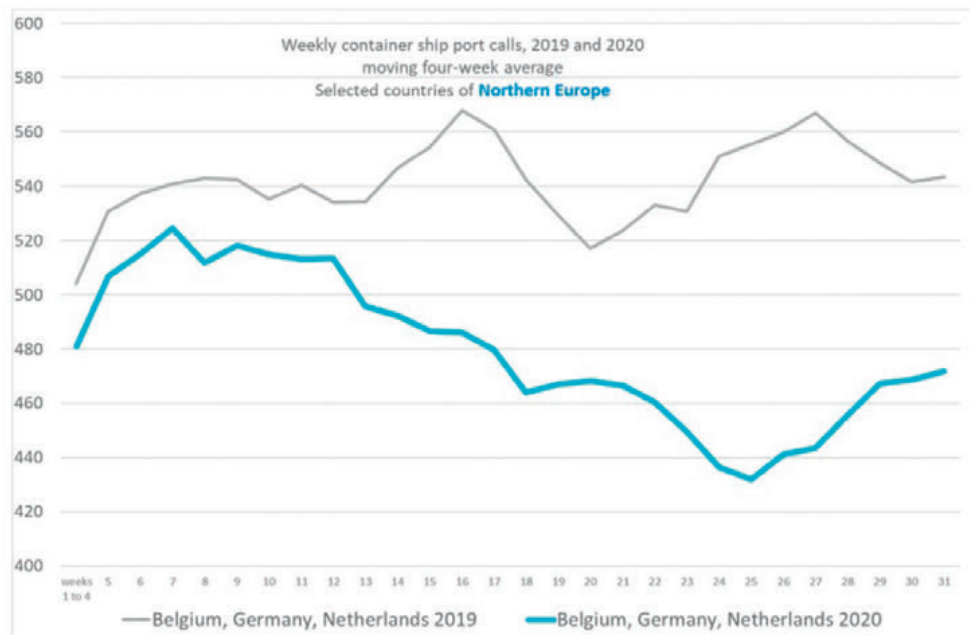
²⁹ UNCTAD, *Review of Maritime Transport*, 2017.

³⁰ Transport Intelligence, “Maersk updates volume and EBITDA expectations for Q2 2020”, 18 June 2020. <https://www.ti-insight.com/maersk-updates-volume-and-ebitda-expectations-for-q2-2020>.

³¹ Jan Hoffmann, Hassiba Benamara, Daniel Hopp and Luisa Rodriguez, “Navigating through the coronavirus crisis and uncertainty: How maritime transport data can help”, Article No. 60, UNCTAD *Transport and Trade Facilitation Newsletter* N° 87 – Third Quarter 2020, 7 September 2020.

Figure 6.

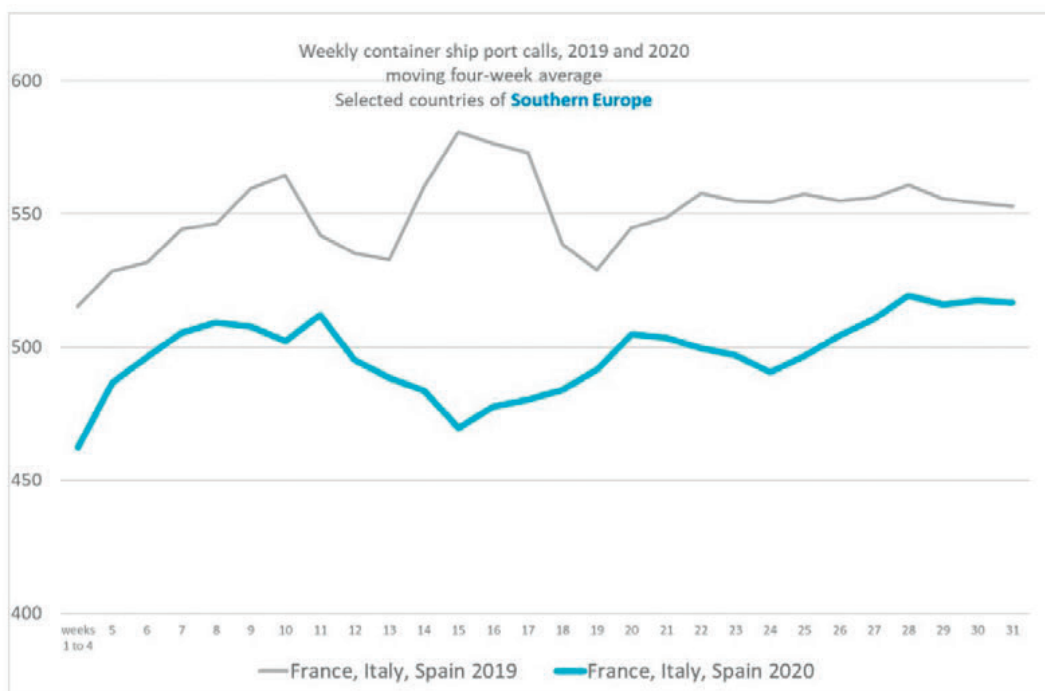
Weekly Container Ship Port Calls – Northern Europe



Source: UNCTAD calculations, based on data provided by Marine Traffic. Includes all arrivals of container ships of 5,000 gross tons and larger.

Figure 7.

Weekly Container Ship Port Calls – Southern Europe



Source: UNCTAD calculations, based on data provided by MarineTraffic. Includes all arrivals of container ships of 5,000 gross tons and larger.

Note: Data report the moving average over four weeks, up to week 31 of 2020, ending on 2 August.

E-commerce Market Share

Comparative data on e-commerce market size and characteristics are not available. This section therefore presents trends in only a few of the countries of the region.

B2C e-commerce in Central Asia and the Caucasus remains modest but is gaining momentum. Its share of all retail sales in transition economies is small but growing as rates of connectivity, digitalization and consumer adoption increase.³² Data suggest that 18.4 per cent of the population of Central Asia used e-commerce in B2C transactions in 2019.³³ Kazakhstan is the largest B2C e-commerce market in this region, followed by Azerbaijan and Georgia.³⁴

The market in Kazakhstan is growing at 55 per cent annually.³⁵ In 2019 double-digit growth in e-commerce continued, driven by high internet penetration rates – the highest in the region – and growing demand for convenience, speedy delivery and variety in products and payment methods.³⁶ In the first half of 2020, e-commerce trade represented 9.4 per cent of all retail trade in the country.³⁷ Data suggest that two fifths of the orders made in Kazakhstan are cross-border with the Russian Federation and China.

In Azerbaijan, the B2C e-commerce market is still in its early stages but is developing rapidly. The market size nearly tripled between 2015 and 2017, driven by rising urbanization, greater disposable income, and high internet penetration rates, in addition to the youthful and tech-savvy population.³⁸

The e-commerce market in Georgia is growing. In 2018, nearly a third of internet users there accessed the internet to browse for information on services and goods, and a smaller share bought goods and services online. Georgia had the highest degree of financial account ownership in Central Asia and the Caucasus in 2017.

In Kyrgyzstan, Tajikistan, and Turkmenistan, where internet penetration rates are below 50 per cent, B2C e-commerce is still in its early stages. As rates increase and infrastructure improves in the region, the growth prospects for B2C e-commerce in these countries are likely to improve.

Selected Market Players

International players such as Aliexpress, eBay and Amazon are the dominant platforms in Central Asia and the Caucasus, with Aliexpress in the lead in 2019.³⁹ Local platforms, such as Kaspi in

³² ResearchandMarkets.com, “CIS B2C E-commerce Market 2019”, May 2019, <https://www.researchandmarkets.com/reports/4771546/cis-b2c-e-commerce-market-2019#rela0-4771545>. The report focuses on Azerbaijan, Georgia and Kazakhstan.

³³ World Bank Findex Database.

³⁴ ResearchandMarkets.com, “CIS B2C E-commerce Market 2019”, May 2019, Azerbaijan, Georgia and Kazakhstan, <https://www.researchandmarkets.com/reports/4771546/cis-b2c-e-commerce-market-2019#rela0-4771545>; UNESCAP and ADB, “Embracing the e-commerce revolution in Asia And the Pacific”, June 2018.

³⁵ UNESCAP and ADB, “Embracing the E-commerce revolution in Asia and the Pacific”, June 2018.

³⁶ Euromonitor.com, “E-commerce in Kazakhstan”, February 2020.

³⁷ Prime Minister of Kazakhstan’s Office, “E-commerce market amounted to 435 billion tenge in first half of 2020” 28 July 2020, <http://government.kz/en/news/obem-rynka-elektronnoy-torgovli-za-i-polugodie-2020-goda-sostavil-435-mlrd-tenge-2861921>.

³⁸ ResearchandMarkets.com, “CIS B2C E-commerce Market 2019”, May 2019, Azerbaijan, Georgia and Kazakhstan, <https://www.researchandmarkets.com/reports/4771546/cis-b2c-e-commerce-market-2019#rela0-4771545>.

³⁹ Ystats.com, “Central Asia & Caucasus B2C E-commerce 2015”, 12 November 2015. See also Euromonitor, “Country Report: Ecommerce in Uzbekistan”, March 2020.

Kazakhstan and Osonol in Uzbekistan, have emerged in the past few years and are popular with shoppers.⁴⁰ On Kaspi’s website the number of orders more than doubled during the first few months of 2020, compared with the same period one year earlier.⁴¹ In Ukraine, as in other markets in the region, many companies established an online presence 2019; examples include the Eva drugstore chain and Vsisvoi, a clothing and footwear producer.⁴²

2.2 Trade Facilitation Trends

To meet customer expectations of fast and simple delivery, e-commerce requires an efficient trading environment. Electronic procedures and formalities deriving from B2G interaction and payment are part of user expectations. New actors also appear in the landscape, including digital logistics providers for tracking and tracing, as well as e-commerce platforms. Yet, e-commerce happens in an environment that is designed for traditional trade transactions with regard to transport infrastructure and services, supply chain actors and trade-related formalities. The growth of e-commerce has increased pressure on government authorities to improve and modernize procedures, in particular by enabling digital processes and digital data exchanges; it has also increased pressure to adopt an appropriate legal framework and procedures for cross-border e-commerce transactions. The pandemic has accelerated these modernization efforts. Customs administrations worldwide have adopted measures for digital transactions to reduce physical contact and ensure efficient processing, despite limitations on staff. Some of these measures were only temporary, but governments and traders are seeking to extend them.

The need to facilitate trade through automation and digitalization of trade and border-related processes became even more obvious during the pandemic. With social distancing requirements and restrictions on movement, the electronic lodging and processing of documents and formalities; the electronic payment of trade-related taxes and fees; the use of digital certificates and signatures, and single windows; and the automation of customs and border processes became essential to maintaining trade flows.

This section provides an overview of the trends and developments in trade facilitation in economies in transition in the UNECE region prior to and during the pandemic, with an emphasis on the implementation status of measures contained in the WTO Trade Facilitation Agreement.⁴³

⁴⁰ Ystats.com, “Kazakhstan B2C E-commerce and Payment Market 2020 & Covid-19’s impact”, 12 August 2020.

⁴¹ Euromonitor (2020), “Country Report: Ecommerce in Uzbekistan”, March.

⁴² Euromonitor (2020), “Country Report: Ecommerce in Ukraine”, March.

⁴³ The WTO Trade Facilitation Agreement requires Members to move towards better trade facilitation regimes including through expedited shipments, risk management and post-clearance audit, and border agency coordination. Several of these measures are directly relevant to e-commerce infrastructure, among them e-payments, national single windows, automation of border management, adoption of international standards (e.g. UN/CEFACT) and advance declarations. Annex A provides an overview of relevant trade facilitation provisions contained in the WTO Agreement on Trade Facilitation.

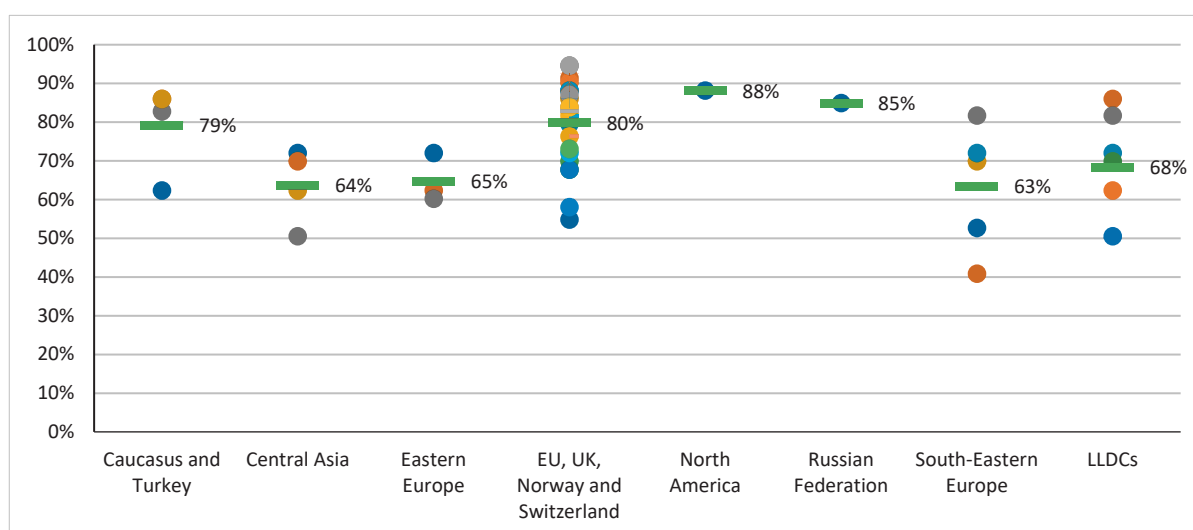
Implementation of trade facilitation measures

Trade facilitation, as defined by the UN/CEFACT, is the “simplification, standardization and harmonization of procedures and associated information flows required to move goods from seller to buyer and to make payment”.⁴⁴

The merits of trade facilitation and its impact on both businesses and consumers in terms of market access, growth, sales, prices, and choice of goods are well documented. Most countries, including in the UNECE region, have embarked on adopting and implementing trade facilitation measures ranging from harmonization of trade-related documentation to automation and digitalization of border-related processes.

According to the United Nations Global Survey on Digital and Sustainable Trade Facilitation 2019, the average rate of implementation⁴⁵ of trade facilitation measures in the UNECE region reached 72 per cent in 2019, well above the global average. Figure 8 provides an overview of implementation rates of trade facilitation measures across various groups of countries in the UNECE region.

Figure 8.
Implementation of Trade Facilitation Measures in the UNECE Region by Country Group, 2021



Source: United Nations Global Survey on Digital and Sustainable Trade Facilitation, 2021.

Note: The colored circles represent rate of implementation of trade facilitation measures by individual countries in a subregion in percentage terms. The colored lines represent the average in the subregion.

As the figure shows, overall implementation of trade facilitation measures varies from higher implementation rates in North America (83 per cent), the Russian Federation (81.7 per cent) and the European Union (EU), Norway and Switzerland (77.9 per cent) to moderate implementation rates in the economies in transition, reaching on average 75.3 per cent in the Caucasus and

⁴⁴ UN Trade Facilitation Implementation Guide.

<http://tfig.unece.org/details.html#:~:text=For%20UNECE%20and%20its%20UN,buyer%20and%20to%20make%20payment%E2%80%9D>.

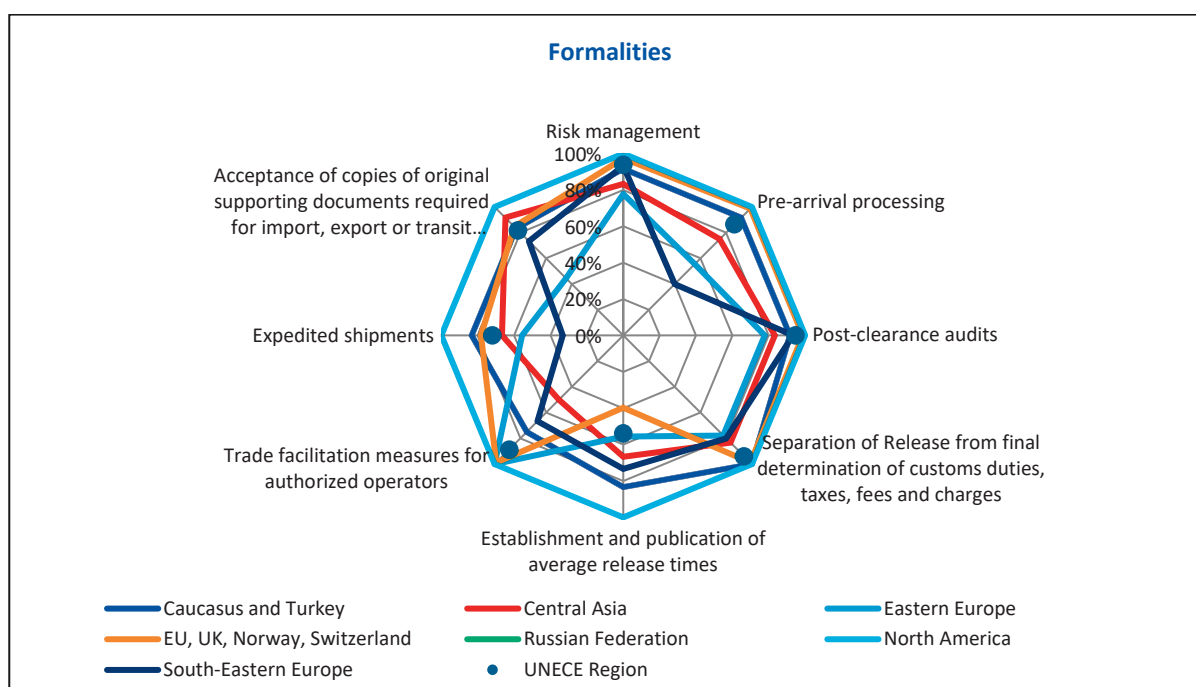
⁴⁵ The implementation rates are calculated based on a set of 31 trade facilitation measures relevant to all economies included in the survey and spanning five groups of measures including transparency, formalities, institutional arrangement, paperless trade and cross-border paperless trade.

Turkey and 64.5 per cent in Eastern Europe, with lower implementation rates in Central Asia, reaching only 54.8 per cent on average.⁴⁶

Implementation of formalities-related measures

Formalities-related measures cover trade facilitation measures related to risk management, post-clearance audits, pre-arrival clearance, expedited shipment and other measures. The average implementation rate of this category of measures in the UNECE region is 81.5 per cent, with variations among countries and country subgroupings and among measures. As Figure 9 shows, countries in Central Asia and in Eastern Europe, for example, have low levels of implementation of pre-arrival processing and expedited shipments, which are crucial for faster clearance of parcel shipments and small packages traded through e-commerce.

Figure 9.
Implementation of Formalities-Related Measures in the UNECE Region, 2021



Source: UNECE Regional Report on Digital and Sustainable Trade Facilitation, 2021.

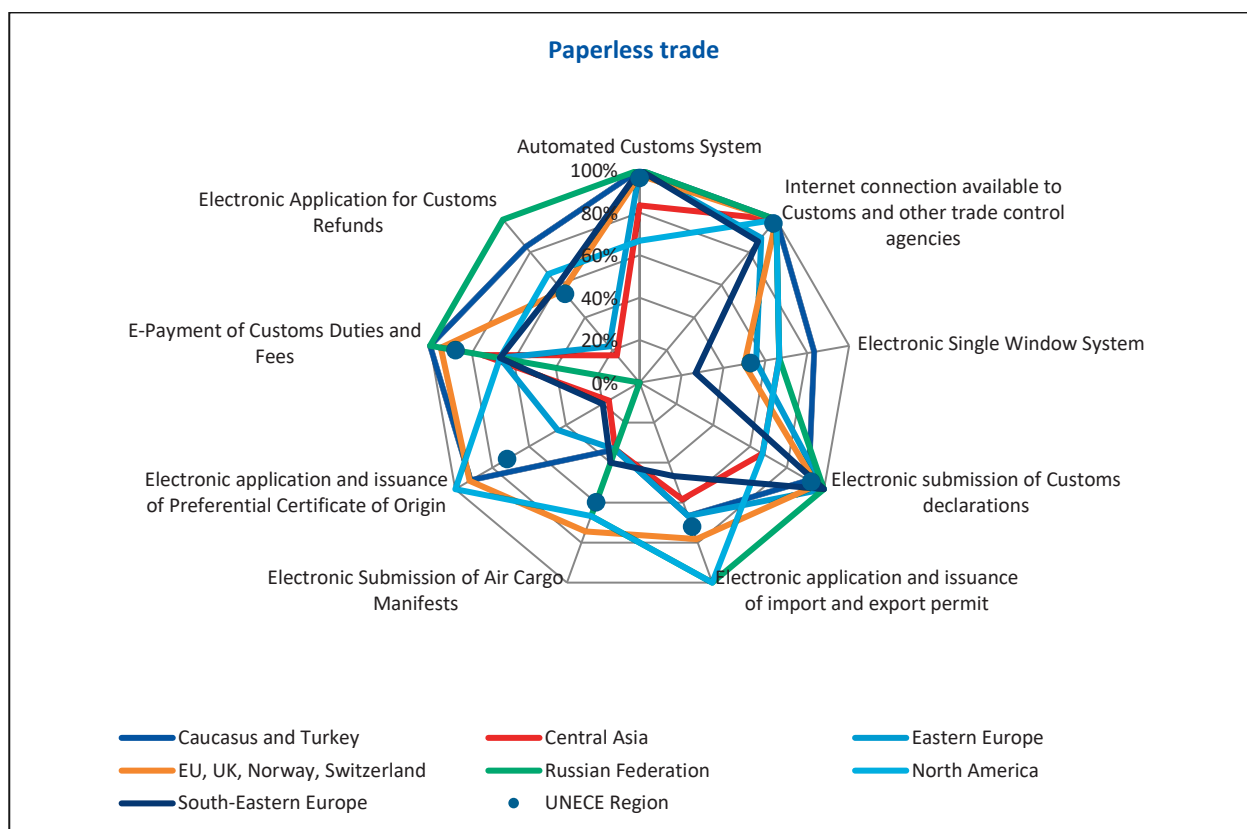
⁴⁶ UNECE, *Digital and Sustainable Trade Facilitation: UNECE Regional Report 2021* (Geneva, 2021), https://unece.org/sites/default/files/2021-12/ECE_TRADE_467_UNECE_Regional_Report_0.pdf

Implementation of Paperless Trade-Related Measures

Despite a regional average reaching 71.8 per cent, implementation of paperless trade varies significantly among UNECE countries and for various measures, as illustrated in Figure 10.

Figure 10.

Implementation of Paperless Trade-Related Measures in the UNECE Region, 2021



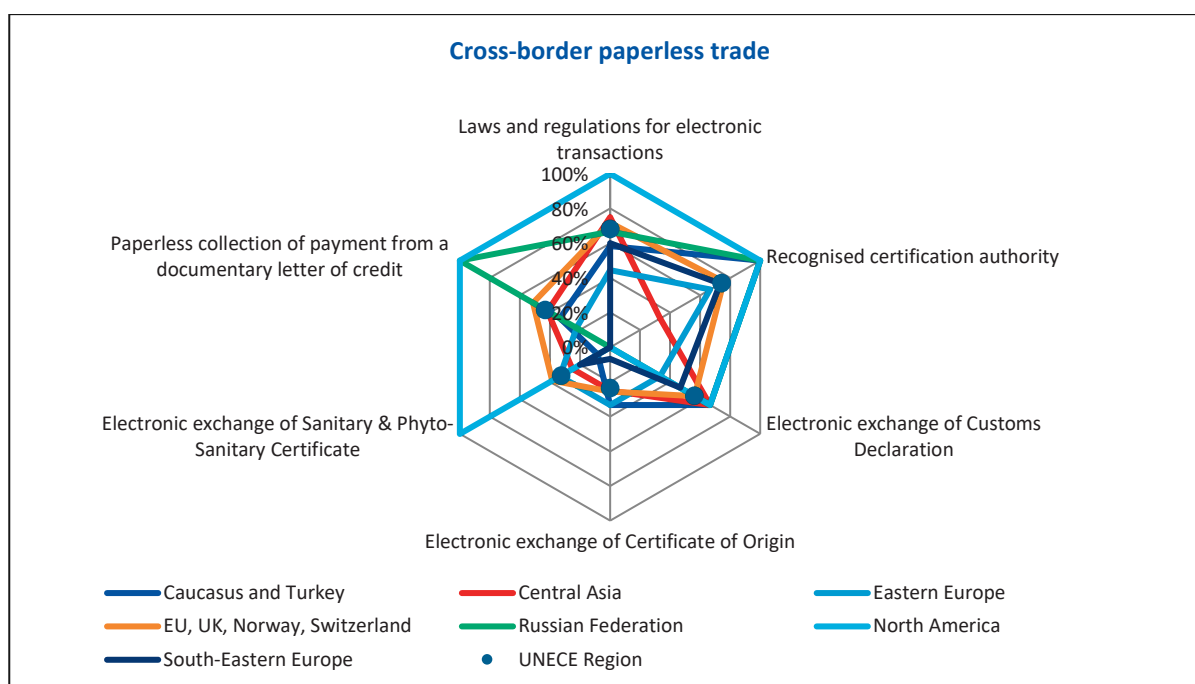
Source: UNECE Regional Report on Digital and Sustainable Trade Facilitation, 2021.

As the figure shows, measures such as automated custom systems are among the most implemented paperless trade-related measures in the region while electronic payments are among the least implemented measures, especially in Eastern and South-Eastern Europe. Similarly, the degree of implementation of electronic single windows – digital gateways for single submission of regulatory and commercial documents – has been moderate to low in the countries of South-Eastern Europe.

Implementation of cross-border paperless trade-related measures

Implementation of cross-border paperless trade-related measures remains low, with a regional average reaching only 45.8 per cent. Two of the six cross-border paperless trade measures relate to the adoption and implementation of laws and regulations for electronic transactions and the establishment and maintenance of recognized certification authorities (Figure 11). These are basic building blocks for enabling the exchange and legal recognition of trade-related data and documents, not only among stakeholders within a country but also within the entire international supply chain.

Figure 11.
Implementation of Cross-border Paperless Trade Measures in the UNECE Region, 2021



Source: UNECE Regional Report on Digital and Sustainable Trade Facilitation, 2021.

Implementation of Trade Facilitation for SMEs and Women

SMEs constitute the bulk of businesses in transition economies in the UNECE region, so adopting and implementing trade facilitation measures of relevance to SMEs is crucial for economic and social development in the region.

The average rate of implementation of trade facilitation measures for SMEs across the UNECE region is only 43.1 per cent, with some countries and subregions performing better than others. The Caucasus and Turkey, for example, lead the way in adopting and implementing measures related to SMEs in authorized economic operator (AEO) schemes.⁴⁷ The regional average rate of implementation of trade facilitation measures for women is only 20.4 per cent.

The pandemic revealed the importance of digitalization and automation of cross-border trade-related formalities and processes, and the acceleration of trade facilitation to maintain and enhance trade flows, including in the form of e-commerce. Harnessing the benefits of e-commerce for the transition economies in the UNECE region would benefit from advancing the adoption and implementation of trade facilitation measures including those related to paperless trade, prearrival processing, expedited shipments and electronic payments, among others. Addressing challenges related to connectivity, financial inclusion, and digital financial services, as mentioned earlier, would contribute to advancing the adoption and implementation of these measures.

⁴⁷ An AEO is a party involved in an international trade transaction (manufacturers, importers, exporters, brokers, carriers, consolidators, intermediaries, ports, airports, terminal operators, integrated operators, warehouses and distributors) that has implemented required security measures and best practices to the satisfaction of the relevant customs authorities.

Chapter 3: E-commerce Challenges and Responses to the Pandemic in the Transition Economies of the UNECE Region

This chapter focuses on challenges faced by transition economies in the UNECE region in harnessing the benefits of e-commerce. These include challenges related to internet connectivity, trade facilitation and logistics, the regulatory environment for cross-border e-commerce, electronic and digital payment methods, and the general e-readiness of businesses and individuals.

The chapter juxtaposes these challenges with a bird's-eye view of how some of these countries have responded, in the form of support to e-commerce activities, regulatory reform, or otherwise, since the onset of the COVID-19 pandemic. Governments in the region have indeed undertaken a range of measures directly focusing on e-commerce or indirectly relevant to enhancing the broader, enabling environment for e-commerce. Although some of the national responses that come in view in this context are not directed specifically to firms or MSMEs engaging in e-commerce, they often cover eligible e-commerce entities that therefore form relevant elements in the policy response related to e-commerce and to accelerating trade facilitation reforms.

For ease of reference, both challenges and policy responses are grouped in the following discussion under the focus areas identified in the UNCTAD-led *eTrade for all* initiative: ICT infrastructure and services, payments, trade logistics, legal and regulatory frameworks, skills development and e-commerce assessments. The exception is access to financing for e-commerce, which has been integrated in other focus areas. It bears repeating that the evidence currently available is anecdotal and the target is moving. The following discussion thus aims to provide only a series of snapshots, which cannot provide comprehensive coverage or statistical relevance but nonetheless, taken together, tell a story of interest.

3.1 ICT Infrastructure and Services

ICT infrastructure is quite literally the backbone of e-commerce. The transition economies in the UNECE region present a somewhat heterogeneous picture in this respect as well as a digital divide that runs through the region, especially in Central Asia and the Caucasus, as mentioned in Chapter 2.

Access to high-speed internet is expensive, especially for landlocked countries in Central Asia (e.g. Kyrgyzstan, Tajikistan and Uzbekistan) that are situated far from major fibre-optic lines, which complicates the provision of broadband connectivity.⁴⁸ Across the region, a lack of reforms in the telecommunication and other sectors concerned, as well as barriers to entry, State-owned enterprises, inadequate regulation and the need to improve access, affordability and security all play roles.

In addition, the operating environment is unpredictable for enabling cost-effective ICT connectivity between business and consumers. In Tajikistan for instance, in March 2019, sales

⁴⁸ See Emerging Europe, https://emerging-europe.com/news/the-importance-of-connecting-central-asia_

taxes and surcharges were announced that would have almost doubled the cost per gigabyte of traffic, making it difficult for people (particularly those from low-income households) and businesses to connect.⁴⁹ Later, these changes were reverted. Unpredictability can be an important constraint on business creativity and development.

Table 1 may serve as a proxy indicator of the parameters of this digital divide, covering people using the internet, financial inclusion, and ICT and postal infrastructure. The 10 highest-ranking transition economies, according to the UNCTAD B2C Index (2020), are Belarus, the Russian Federation, Serbia, Georgia, North Macedonia, Ukraine, the Republic of Moldova, Kazakhstan, Azerbaijan, and Bosnia and Herzegovina. Lower-income countries in the region tend to have a lower ranking, pointing to the importance of enhancing e-commerce readiness, not only with regard to internet connectivity but also in terms of financial inclusion, ICT and logistics infrastructure.

Table 1.
E-readiness in the Transition Economies of the UNECE

Country	Rank, 2019	Rank, 2020
Albania	75	86
Armenia	78	84
Azerbaijan	62	65
Belarus	37	35
Georgia	50	47
Kazakhstan	57	60
Kyrgyzstan	111	97
Republic of Moldova	54	53
Montenegro	77	78
North Macedonia	51	52
Russian Federation	40	41
Serbia	45	43
Tajikistan	129	121
Turkey	53	57
Ukraine	52	51
Uzbekistan	93	107

Source: UNECE, based on UNCTAD B2C Index 2019 and UNCTAD B2C Index 2020.

Policy Responses

Elsewhere in the UNECE region, notably in Western Europe, some governments and private sector stakeholders have moved to expand network capacity and spectrum to accommodate the shift to online activities and offer greater data services at little or no extra cost. This option may have been less obvious in the transition economies but other infrastructure-related measures were taken.

Governments in Central Asia, for example, intensified efforts towards e-government as the pandemic unfolded, creating better access for individuals and businesses. Kazakhstan, Kyrgyzstan

⁴⁹ Eurasianet, "Tajikistan: Internet just got way more expensive", 9 March 2019, <https://eurasianet.org/tajikistan-internet-just-got-way-more-expensive>.

and Uzbekistan, for example, had begun the process of moving public services online before the pandemic hit. This trend further intensified during the pandemic, including in areas such as tax and customs, creating an enabling environment for e-commerce, not least by reducing costs for business and government.

Uzbekistan implemented a legal act for the development and improvement of the country's telecommunication infrastructure and electronic public services provision – the Decree of the President of the Republic of Uzbekistan on approval of the Strategy “Digital Uzbekistan, 2030” – and a road map for its implementation. The Decree contains a set of measures to facilitate widespread introduction of digital technologies, raise the quality of public services and awareness of digital technologies, and improve availability of broadband and mobile internet services.⁵⁰

In Tajikistan, the Decree of the President No. 1544, “On preventing the impact of the COVID-19 infectious disease on the social and economic spheres of the Republic of Tajikistan”, outlined two measures of relevance here: the creation of an e-government platform and the development of electronic payments.

An area where responses have been encouraging is the facilitation of e-transactions through implementation of related consumer protection, including cyberlaws and consumer grievance redressal procedures. In March–April 2020, for example, the Republic of Moldova adopted measures with respect to public digital signatures.⁵¹ Turkmenistan adopted a law on e-documents, including document flows and electronic services.⁵² Azerbaijan set up services for the verification of authenticity of digitally signed documents, one of the earliest of its kind in the subregion.⁵³ In Kazakhstan, as part of the Law on Consumer Protection, the Government plans to launch a unified platform for receiving complaints from consumers, based on the single window approach.

3.2 Trade Facilitation and Logistics

The pandemic disrupted trade, transport and logistics supply chains with the drop in the number and frequency of cargo flights, delays and at times temporary closures of ports and border crossings and changing information on trade regulation and trade-related restrictions. These disruptions to trade and e-commerce were accentuated by challenges that predate the pandemic: poor infrastructure including ICT infrastructure and services, incomplete regulatory frameworks, and weak interinstitutional coordination and interoperability of systems for trade facilitation (e.g. lack of a single window for import or export of e-commerce goods), to name just a few.

⁵⁰ Ministry for the Development of Information Technologies and Communications of the Republic of Uzbekistan.

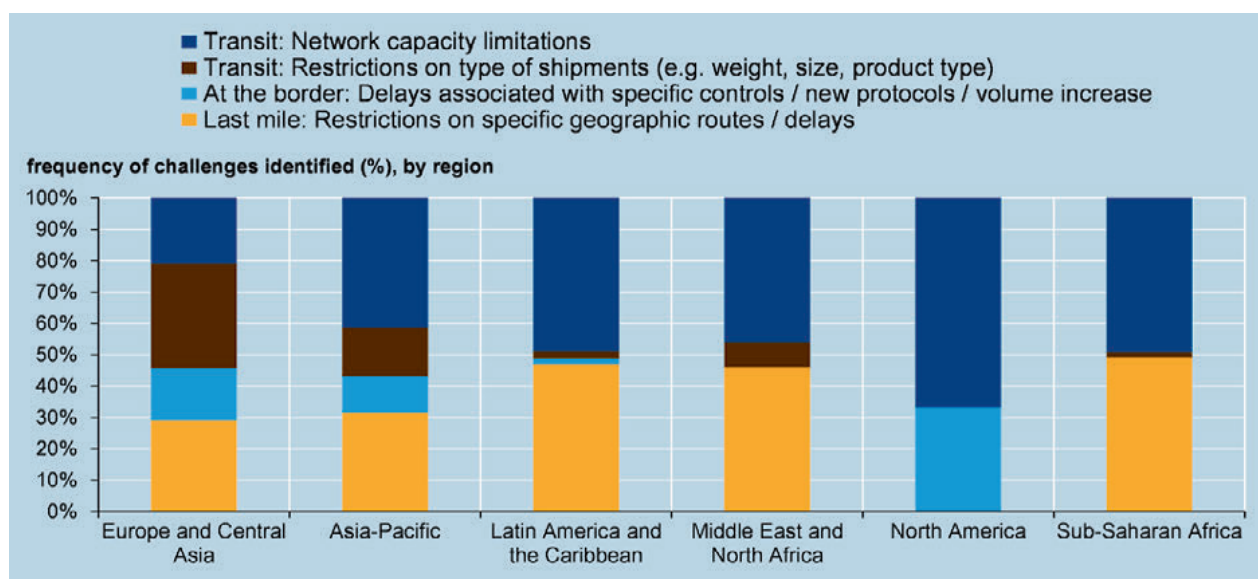
⁵¹ WTO, COVID-19: Measures affecting trade in services, as notified to the WTO Trade in Services Committee, as of 9 October 2020.

⁵² CAREC Institute, “Report of Workshop on Regulatory Framework for E-commerce Development in CAREC”, 28 May 2020.

⁵³ Yelena Vassilevskaya (2020), “Trade facilitation in times of pandemic: practices from North and Central Asia”, UNESCAP Working Paper 197.

Figure 12.

Challenges Reported by Logistics Operators in Shipping Goods Internationally During the



Pandemic

Source: OECD compilation based on information reported by LetMeShip from carriers shipping internationally between February and May 2020 (OECD Policy Responses to Coronavirus (COVID-19), “Connecting Businesses and Consumers During COVID-19: Trade in Parcels” 9 July 2020, <https://www.letmeship.com/en/corona-and-logistics-current-information-from-the-carriers>).

Transport capacity impacts: Cancellations and the slow-down of air and maritime cargo in the UNECE region significantly reduced transport capacity and increased shipping costs for cross-border B2C and B2B transactions. Stakeholders identified transit-related restrictions, including network capacity, as a key challenge in Central Asia between February and May 2020, as shown in Figure 12.⁵⁴

“Enhanced” border controls: When goods cross borders, customs authorities and border agencies enforce national rules related to duties, tariffs, security, health and safety regulations, and quality checks, among others. During the pandemic, additional administrative regulations accompanied by increased e-commerce volumes have made the task of customs and border agencies more difficult, resulting in delays and costs to providers of logistics services. Delays associated with specific controls or new protocols at borders appear to be significant in Central Asia.

Large volumes of small packages: Customs authorities and other border agencies became overburdened as the number of small packages delivered directly to consumers increased, raising concerns about health and safety regulation compliance in importing countries. Border, postal and other regulatory agencies responsible for assessing product conformity with such regulations

⁵⁴ Transit challenges relate to limitations of network capacity and restrictions on the type of shipments (e.g. weight, size, product type). At the border challenges relate to delays associated with specific controls / new protocols / volume increase and Last mile challenges relate to geographic restrictions with closures of specific routes / delays. See OECD Policy Responses to Coronavirus (COVID-19), “Connecting Businesses and Consumers During COVID-19: Trade in Parcels”, 9 July 2020.

are not necessarily equipped to inspect large volumes of small packages, especially for conformity with SPS and technical barriers to trade standards.⁵⁵

Responses related to trade facilitation and logistics

In response to the pandemic, many governments across the globe increased their use of digital tools to facilitate trade and streamline border-related processes, including creating or maintaining online information portals, accepting electronic trade-related documents in place of physical copies and increasing the number of procedures that benefit from electronic pre-arrival processing.

Transport

To facilitate transport services during the pandemic, the Republic of Moldova exempted cargo drivers and transport service personnel who transport goods, as well as the crews of aircraft, ships and train crews, from the requirement to self-isolate (quarantine for 14 days) if they do not present any clinical signs of respiratory infection.⁵⁶ Uzbekistan prioritized joining the electronic TIR customs guarantee agreement.

Paperless trade

Azerbaijan undertook several initiatives to introduce and enhance the use of paperless trade, including automation and digitalization of trade-related documents, enabling the electronic submission of customs declarations and electronic receipt of certain approval documents and permits, including certificates of origin, quality and phytosanitary certificates, quarantine permits and other approvals for import and export operations. It also automated services for clearance of perishable goods, such as “Applying for permanent use of the ‘Green Corridor’ clearance system”.⁵⁷

Armenia’s e-government website⁵⁸ now offers features for electronic submission of tax reports, electronic payments and visa applications. The State Revenue Committee expanded its list of remotely accessible services through a single electronic system.⁵⁹

Georgia has been harmonizing the electronic flow of information among key players in the logistics, shipping, and transport industries by launching the Trade Facilitation System, which aims to enable traders, customs brokers, freight forwarders, shipping lines and other players in international trade to submit information through a single entry point.⁶⁰ During the pandemic,

⁵⁵ WTO, “Ecommerce, Trade and the COVID Pandemic”, WTO Information Note, 4 May 2020.

⁵⁶ WTO COVID-19: Measures affecting trade in services, as notified to the WTO Trade in Services Committee, 9 October 2020.

⁵⁷ Yelena Vassilevskaya, “Trade facilitation in times of pandemic: practices from North and Central Asia”, UNESCAP Working Paper 197, 2020.

⁵⁸ <https://www.e-gov.am>

⁵⁹ Yelena Vassilevskaya, “Trade facilitation in times of pandemic: practices from North and Central Asia”, UNESCAP Working Paper 197, 2020.

⁶⁰ International Trade Association, “Georgia Commercial Guide”, 2020, https://www.trade.gov/country-commercial-guides/georgia-ecommerce_

the Government continued to issue trade documents online through the national paperless trading system.⁶¹

Kazakhstan deployed a single window portal in 2019⁶². To respond to the pandemic, the country continued to develop it further, with the automation of a number of new customs and logistics services, reaching 60 licenses and approval documents, as well as inclusion into customs registries of 43 authorized economic operators, bonded warehouse owners and registries of customs activities.⁶³

Uzbekistan Railways has developed a software programme for processing and providing preliminary electronic information to customs authorities about goods transported by rail.⁶⁴ In response to the pandemic, the President of Uzbekistan issued Resolution No. PP-4297, “On measures to further improve administrative procedures of foreign economic activities”, according to which the single window customs information system was to be fully implemented by January 2021. Some of the associated measures included the development and deployment of the “E-TRANZIT” automated information system are: deployment in test mode of a system to track goods and vehicles using electronic seals, development and deployment of a system that enables electronic exchange of documents and/or data between customs authorities and entities engaged in foreign trade, implementation of the single window customs information system at border customs checkpoints, implementation of a system that enables the processing of a customs inspections act using a mobile app, development and implementation of an information platform, and provision of information on all procedures, time and financial costs for foreign economic activity.⁶⁵

⁶¹ *The impact of COVID-19 on trade and structural transformation in Georgia: Evidence from UNECE’s survey of Micro, Small and Medium Enterprises* (UNECE 2020a).

⁶² <http://eokno.gov.kz>

⁶³ Yelena Vassilevskaya, “Trade facilitation in times of pandemic: practices from North and Central Asia”, UNESCAP Working Paper 197, 2020.

⁶⁴ Yelena Vassilevskaya, “Trade facilitation in times of pandemic: practices from North and Central Asia”, UNESCAP Working Paper 197, 2020.

⁶⁵ Yelena Vassilevskaya, “Trade facilitation in times of pandemic: practices from North and Central Asia”, UNESCAP Working Paper 197, 2020.

Snapshot 1.

The Pandemic and Trade Facilitation in Kyrgyzstan

According to the Ministry of Economy of Kyrgyzstan, the country's international trade decreased by more than 22 per cent in the first half of 2020 compared with the same period in 2019. But traders were keen to get back to normal trading operations. The Government has been looking at ways to recover from the loss and facilitate trade in a safe and sustainable manner.

To address the pandemic, Kyrgyzstan established a "Republican Headquarters" on 5 March 2020 comprising key ministries, with the Ministry of Economy as the focal agency for trade issues. The country is coordinating its COVID-19 response measures related to trade facilitation with the Eurasian Economic Union (EAEU), which Kyrgyzstan is a member of.

Access to information and trade facilitation for essential supplies

Emergency trade facilitation measures were published on websites of relevant state agencies. Trade facilitation measures were harmonized within the EAEU to facilitate movement of essential and relief products. These measures included establishing "green corridors" at border crossings for all freight vehicles that transport medicines and essential goods, with representatives of the State Sanitary and Epidemiological Service controlling the safety of drivers and disinfecting cargoes.

Provisions of digital services

The procedure for issuing certificates of origin (type A) was temporarily simplified, allowing for the use of a paper or electronic copy of the document for a period of six months and non-submission of the original certificate during the declaration (Decision No. 36 of 3 April 2020 of the Council of the European Economic Commission). Kyrgyzstan intensified its use of the electronic single window called Tulpar. The number of permits issued in January–October 2020 rose 17 per cent over the number in the same period in 2019, partly due to the lockdown. Plans are in place for the roll-out of pre-arrival processing as well as risk management systems through implementation of digital systems at airports and borders for faster and safer trade. In addition, Kyrgyzstan plans to implement e-TIR (electronic customs guarantee) and e-CMR (consignment note). One of the key visions of the National Trade Facilitation Roadmap of Kyrgyzstan, supported by UNECE and published in June 2021 includes fully eliminating paper documents for export and import of essential goods (UNECE 2021a).

Source: UNECE, based on National Expert Consultation Workshop on Trade Facilitation Road Map for Kyrgyzstan (virtual)

3.3 Legal and Policy Frameworks

Key obstacles to e-commerce uptake are consumer concerns related to online transactions, including cybersecurity, data protection, security of payments, digital certificates and signatures, refunds, and settlement of disputes.

Table 2.

E-commerce Legislation Adopted in Economies in Transition in the UNECE Region

Country	Electronic Transactions	Consumer Protection	Privacy and Data Protection	Cybercrime
Armenia	●	–	●	●
Azerbaijan	●	○	●	●
Georgia	●	○	●	○

Turkey	•	•	•	•
Kazakhstan	•	–	•	•
Kyrgyzstan	•	○	•	•
Tajikistan	•	–	•	•
Turkmenistan	•	–	•	•
Uzbekistan	•	–	•	•
Belarus	•	•	•	•
Republic of Moldova	•	–	•	•
Ukraine	•	•	•	•
Albania	•	–	•	•
Bosnia and Herzegovina	•	•	•	•
Montenegro	•	–	•	•
North Macedonia	–	–	–	–
Serbia	•	–	•	•

Legislation | • | *Draft legislation* | ○ | *No Data* | -

Source: Author (Deepali Fernandez) compilation based on UNCTAD database, *Summary of Adoption of E-commerce Legislation Worldwide*. Data were collected through UNCTAD research as well as contributions by its partners, including the Commonwealth Secretariat, the Council of Europe, the International Telecommunication Union, the United Nations Commission on International Trade Law, the United Nations Economic and Social Commission for West Africa, the United Nations Office on Drugs and Crime and the World Bank. UNCTAD's focus in mapping the global legal e-commerce landscape has been on primary legislation. The UNCTAD Global Cyberlaw Tracker is the first global mapping of cyberlaws. It tracks the state of e-commerce legislation on e-transactions, consumer protection, data protection and privacy, and cybercrime (https://unctad.org/en/Pages/DTL/STI_and_ICTs/ICT4D-Legislation/eCom-Global-Legislation.aspx).

Adopting and implementing e-transactions laws that recognize the legal equivalence between paper-based and electronic forms of exchange is a prerequisite for conducting commercial transactions online and providing consumers with a secure environment.

As illustrated in Table 2, the majority of transition economies in the UNECE region adopted electronic transaction laws but many still lack consumer protection laws related to e-commerce.

Cybercrime is another concern. In 2015, worldwide over half a billion personal information records were stolen or lost.⁶⁶ Most countries in the region, except for Belarus and Georgia, have adopted cybercrime-related legislation.⁶⁷

Privacy and data protection laws are key to consumer trust in electronic transactions. In a survey by KPMG of 18,000 online consumers in 50 countries, 41 per cent of the respondents said that

⁶⁶ Symantec, "Over Half a Billion Personal Information Records Stolen or Lost in 2015". <https://docs.broadcom.com/doc/istr-reporting-breaches-or-not-en>.

⁶⁷ Georgia cybercrime legislation is in a draft state, according to UNCTAD's B2C cyberlaw tracker.

having control of how their personal data are used was more likely to make them trust a company. Some countries, such as the Russian Federation, require data localization.⁶⁸

Snapshot 2 presents some key e-commerce legislation in the Central Asian Regional Economic Cooperation (CAREC) countries.⁶⁹

Snapshot 2.

Overview of E-commerce Legislation and Issues for Central Asian (CAREC) Countries

E-transactions	<ul style="list-style-type: none"> - Some CAREC members have a single law on e-transactions, often called the “law on electronic signatures and electronic documents”. The purpose of the law is often to make an e-document legally effective only if it has a secure form of e-signature. - Some countries have two separate laws (an e-documents law and an e-signatures law). These may give some scope for an e-document to stand on its own, legally, though they usually still need some form of e-signature associated with them for validity.
Privacy/ Personal Data	<ul style="list-style-type: none"> - Most CAREC members have some form of privacy legislation that tends to reflect international standards. - In some jurisdictions, personal data can be collected only with the consent of the data subject and only for the purpose for which the consent was obtained.
Cybercrime	<ul style="list-style-type: none"> - Most CAREC members have consistent provisions on cybercrime.
Consumer Protection	<ul style="list-style-type: none"> - Many CAREC members have no consumer protection laws by that name, though provisions against fraud or misrepresentation could be relevant to consumers as well as to businesses. These laws vary in terms of being up to date or outdated, fully or partially.
Problems	<ul style="list-style-type: none"> - Legislation is inconsistent across CAREC members. - Legislation may be out of step with best practices. - CAREC countries’ commercial laws differ in their applicability to virtual instruments of trade and commerce as well as online transactions.

Source: CAREC Institute, *Regulatory Framework for e-commerce in CAREC, Policy Brief, April 2020*.

Finally, the risk of anti-competitive conduct by businesses and the taxation of e-commerce transactions have been highlighted as areas of relevance to several countries of Central Asia and the Caucasus.⁷⁰

⁶⁸ Adrien Henni, “Constraints and Opportunities in the Russian Market – Best Practices for Global Online Merchants”, in *Paypers Report, Cross Border Payments and Commerce Report 2019-2020*.

⁶⁹ CAREC countries are Afghanistan, Azerbaijan, China, Georgia, Kyrgyzstan, Kazakhstan, Mongolia, Pakistan, Tajikistan, Turkmenistan and Uzbekistan.

⁷⁰ CAREC Institute, “Workshop Report. E-commerce Development in CAREC”, May 2020.

National Responses (Central Asia)

An area in which responses to the pandemic have been encouraging is the facilitation of e-transactions through related consumer protection, including cyberlaws and consumer grievance redressal procedures. In March–April 2020 the Government of the Republic of Moldova, for example, adopted measures with respect to public digital signatures.⁷¹ Turkmenistan adopted a law on e-documents, including document flows and electronic services.⁷² Azerbaijan set up services for verifying the authenticity of digitally signed documents, one of the earliest of its kind in the subregion.⁷³ In Kazakhstan, as part of the Law on Consumer Protection, the Government plans to launch a unified platform for receiving complaints from consumers based on the single window approach.

Although several transition economies had or planned to put in place e-commerce policies and strategies, the pandemic provided a further boost to fast tracking the creation or implementation of these national e-commerce policies.

The Kazakh Ministry of Trade and Integration formed a five-year plan to develop e-commerce infrastructure, with special programmes to support SMEs in e-commerce.⁷⁴ Plans to enhance the e-commerce environment include direct support for promotion on internet platforms for novice and experienced entrepreneurs, and country partnerships to bring Kazakh companies to international online trading platforms. In addition, the tax code has been amended to provide exemptions for individual entrepreneurs if income from e-commerce is at least 40 per cent of the total annual income.⁷⁵

Kyrgyzstan intensified its existing policy measures on trade digitization. In March 2020, the Decree of the Government of Kyrgyzstan No. 98-r 43 was adopted to fast track the digital transformation of the country as reflected in “Digital Kyrgyzstan 2019–2023”.

The Turkmenistan authorities stepped up efforts to digitalize government services, expand e-commerce, and facilitate online and phone payments by SMEs and State-owned enterprises through banks.⁷⁶

In Uzbekistan, the Government fast tracked the implementation of the President’s decree, “On Measures for the Development of E-commerce” 2018 which sought to create conditions conducive to the expansion of internet retailing in Uzbekistan.⁷⁷

⁷¹ WTO, COVID-19: Measures affecting trade in services, as notified to the WTO Trade in Services Committee, as of 9 October 2020.

⁷² CAREC Institute, “Report of Workshop on Regulatory Framework for e-commerce Development in CAREC”, 28 May 2020.

⁷³ Yelena Vassilevskaya, “Trade facilitation in times of pandemic: practices from North and Central Asia”, *UNESCAP Working Paper 197*, 2020.

⁷⁴ CAREC Institute, “Report of Workshop on Regulatory Framework for e-commerce Development in CAREC”, 28 May 2020.

⁷⁵ Prime Minister of Kazakhstan’s office, “E-commerce market amounted to 435 billion tenge in first half of 2020”, 28 July 2020, <http://government.kz/en/news/obem-rynka-elektronnoy-torgovli-za-i-polugodie-2020-goda-sostavil-435-mlrd-tenge-2861921>.

⁷⁶ IMF, COVID-19 Policy Response Tracker.

⁷⁷ Euromonitor, “Country Report: Ecommerce in Uzbekistan”, March 2020.

3.4 Electronic Payment Systems

Financial inclusion and the use of digital financial services are essential for the expansion of e-commerce. Despite moderate levels of financial inclusion in some countries in the region, greater connectivity and digitalization have led to the growth of e-commerce over the past years. Between 2014 and 2017, the share of the population age 15 and older that used the internet to pay bills or shop online more than doubled in most countries in the region, as mentioned in Chapter 2.

Although cash remains the preferred mode of payment in most countries in the region, card penetration is increasing rapidly. As of January 2020, there were 6.1 million debit cards and 0.6 million credit cards issued across Georgia's population of 3.7 million people.⁷⁸ In Kazakhstan, cash on delivery and payment by bank card were the leading methods of payment for goods ordered online. The spread of COVID-19 in the spring months of 2020 further nudged the movement toward cashless payments. Kazakhstan has also developed its own successful payment applications.

Snapshot 3.

KASPI, Kazakhstan's E-commerce Banking App

Kaspi.kz is an e-commerce banking app that holds a 65 per cent share of the digital payments market in Kazakhstan and a 45 per cent share of the country's entire e-commerce market. Since Kaspi launched its e-commerce offering in 2014, it has acquired more than 40 per cent of the overall population as users and is moving the country from traditional to online commerce.

Kaspi lets users log into their tax accounts through the app, plug in meter readings for bills, and purchase items – be they household appliances or loans – through its marketplace, with the option of paying in instalments without interest. In 2019, Kaspi made a \$515 million profit: \$74 million through its marketplace, \$369 million from its fintech platform and \$73 million from its payments business.

Kaspi has a 32 per cent market share of consumer lending and is ranked first by growth in the country's savings institutions. The shift from cash to digital has seen digital payments reach 30 per cent of transactions – up from about 10 per cent in over two years. Kaspi plans to expand into neighboring Commonwealth of Independent States countries, starting with Azerbaijan.

During the pandemic, Kaspi.kz was an essential partner for many companies in Kazakhstan, helping retailers increase their sales and grow their businesses. During the first eight months of 2020, the number of purchases grew by 150 per cent compared with the same period in 2019.

Source: *Forbes Kazakhstan*, "Kaspi.kz – no.1 in e-commerce for the 3rd year in a row", https://forbes.kz/process/internet/kaspikz_no1_in_e-commerce_for_the_3rd_year_in_a_row/?; *Hinchcliffe Ruby*, "Kazakhstan's ecommerce banking app Kaspi quietly expands in CIS region", *Fintech Futures*, 18 June 2020, <https://www.fintechfutures.com/2020/06/kazakhstan-ecommerce-banking-app-kaspi-quietly-expands-in-cis-region>.

The picture, though varied in the UNECE region, appears to promise growth in the payment market and the carry-on benefits for e-commerce markets, but it also shows several challenges, in particular for the countries of Central Asia and the Caucasus. These challenges relate to the need for greater financial inclusion of consumers and businesses – in particular, MSMEs – which

⁷⁸ International Trade Association, "Georgia Commercial Guide", 2020, <https://www.trade.gov/country-commercial-guides/georgia-ecommerce>.

is a result of efficient and price-competitive ICT access, as well as to the need to address consumer trust in the security of online payments. With these challenges overcome, consumer habits and preferences are likely to change away from cash dependence.

Responses to facilitate digital and mobile payments

Central banks in some countries temporarily permitted companies and banks to lower or scrap transaction costs and fees on digital payments and mobile money transfers in order to encourage the use of mobile money in preference to cash. The National Bank of the Kyrgyz Republic, for example, initiated Resolution No. 2020-П-14\17-4-(П) of 27 March 2020 for developing digital payment technology in the country for 2020–2022.⁷⁹ In Georgia, customs and tax payments continued to be made online through the revenue customs service platform and were further streamlined through the introduction of simplified procedures for tax refunds.⁸⁰

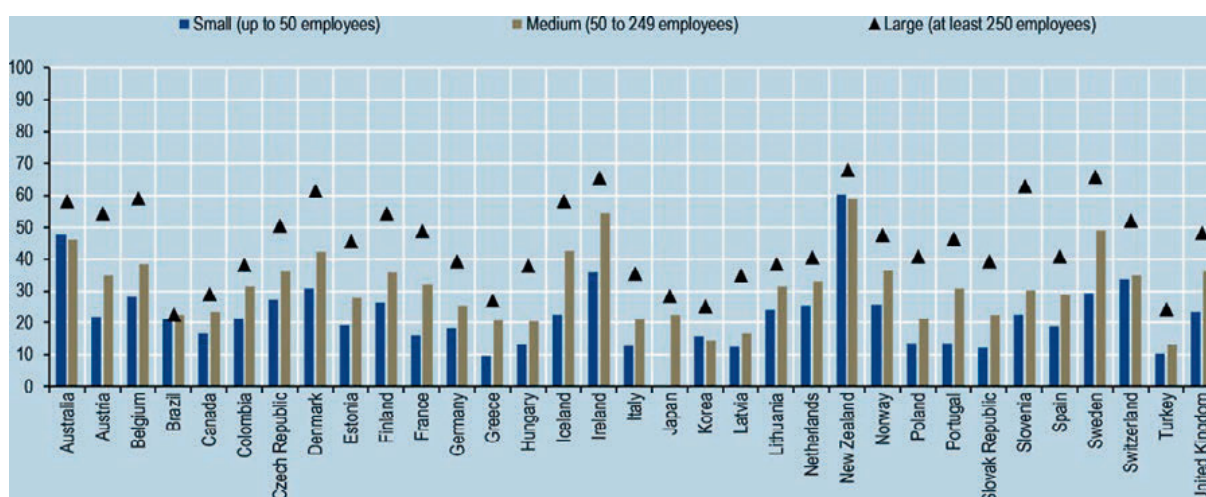
3.5 Skills Development

E-commerce can support small businesses and enable them to access customers across wider markets. However, SMEs (and MSMEs) in the UNECE region did not fully realize the business opportunities that e-commerce provides.

Prior to the pandemic, 20 per cent or more of small firms and over 30 per cent of medium-sized firms in Europe received orders through computer networks, while larger firms were the biggest beneficiaries of e-commerce-linked business, as illustrated in Figure 13.

Figure 13.

Orders Received Through Computer Networks Matter for All Firms



Source: OECD Policy Responses to Coronavirus (COVID-19), “Connecting Businesses and Consumers During COVID-19: Trade in Parcels”, 9 July 2020.

⁷⁹ Trade facilitation in times of pandemic: practices from North and Central Asia, UNESCAP Working Paper 197, 2020.

⁸⁰ The impact of COVID-19 on trade and structural transformation in Georgia: Evidence from UNECE’s survey of Micro, Small, and Medium Enterprises, UNECE 2020.

In response to the pandemic, many firms increased their online presence, as mentioned in Chapter 2 above. Several firms saw an increase in online business activity, with notable increases among SMEs, as illustrated in Table 3.

Table 3.
Firms Going Digital in Response to the Pandemic

Country	Share of Firms that Started or Increased Online Business Activity (%)			Proportion of Establishment's Online Sales Out of Total Sales (%)		
	S	M	L	S	M	L
Albania	15.9	24.8	14.5	3.74	3.53	0.65
Bulgaria	10.2	5.4	4.8	5.91	1.55	2.37
Georgia	26.4	27.3	30.1	10.77	10.39	10.97
Republic of Moldova	30.4	33.9	42.2	14.64	3.29	3.4

Source: World Bank Enterprise Surveys Follow up on COVID-19 (2020).

Note: S = small firms (5–19), M = medium-sized firms (20–99), L = large firms (100+).

Despite the increase in online presence, many SMEs/MSMEs face challenges in penetrating the e-commerce market and harnessing the benefits of e-commerce. These challenges range from the lack of the required skill set and IT savviness, to weak digital financial services to navigating export markets.⁸¹

⁸¹ *The impact of COVID-19 on trade and structural transformation in Georgia: Evidence from UNECE's survey of Micro, Small, and Medium Enterprises (UNECE 2020a). The impact of COVID-19 on trade and structural transformation in Armenia: Evidence from UNECE's survey of Micro, Small, and Medium Enterprises (UNECE 2020b). The impact of COVID-19 on trade and structural transformation in Serbia: Evidence from UNECE's survey of Micro, Small, and Medium Enterprises (UNECE 2021c); The impact of COVID-19 on trade and structural transformation in the Republic of Belarus: Evidence from UNECE's survey of Micro, Small, and Medium Enterprises (UNECE 2021b).*

Snapshot 4.

Challenges Faced by MSMEs During the Pandemic – UNECE Survey Results

Armenia

Only 19 per cent of the MSMEs surveyed increased their engagement in e-commerce to boost sales but the overall impression was that MSMEs did not reap the expected benefits of e-commerce owing to the low level of domestic demand, the economic recession and consumers' modest appetite for e-commerce in the domestic market. MSMEs also struggled with processing online transactions and reported difficulties accessing export markets.

Belarus

Although MSMEs accounted for 77.6 per cent of active enterprises in 2019, only 25 per cent engaged in e-commerce, targeting primarily the domestic market. Trade procedures remain predominantly paper based. Launching or expanding online sales in regional and global markets would be difficult in the absence of a paperless trading environment, favourable cross-border trade facilitation conditions and supply shortages. MSMEs with no engagement in e-commerce lamented the inadequate ICT systems and lack of expertise and skills.

Georgia

E-commerce did not figure high among the surveyed MSMEs' strategies for coping with the impact of the pandemic. Georgian MSMEs used e-commerce to boost sales in domestic markets and not as an export enhancing tool. The lack of equipment and ICT skills were cited among the reasons for such a limited engagement, particularly in the case of farmers and small enterprises. Other obstacles include the lack of incentives and difficulties navigating international e-commerce legislation pertaining to, among others, customs issues, currency fluctuations, shipments and fraud. Further difficulties surrounding shipments and the risk of costs arising from delayed deliveries and/or damaged goods featured prominently as obstacles.

Serbia

Similar responses were made by MSMEs in Serbia, which reported limited engagement in e-commerce for boosting sales in domestic markets and were quick to emphasize that they cannot rely on their online platforms to maintain operations. The remaining MSMEs were not engaged in e-commerce, even though several had institutional websites that they used for promotional purposes. The majority cited hesitancy to venture into e-commerce, as well as the modest appetite for e-commerce in domestic markets, particularly in rural areas, and lamented the lack of financial resources for procuring necessary equipment, information and ICT skills. Regulatory requirements for safety, health and environmental protection in export markets posed another challenge to exporting MSMEs.

Source: UNECE Studies on the impact of COVID-19 on trade and structural transformation in Georgia: Evidence from UNECE's survey of Micro, Small, and Medium Enterprises.

Responses to enhance digital skills of consumers and businesses

Recognizing the opportunity that the pandemic provided to bring MSMEs into the e-commerce sector, several governments and private sector stakeholders put in place measures such as online platforms for e-businesses or SME-linked financing aimed at supporting business in general, including in the context of e-commerce. In Kyrgyzstan, for example, the Electronic Commerce Association set up a website with a list of online stores, marketplaces and online platforms providing services during the quarantine. The Government also introduced supporting measures

for SMEs such as tax deferrals, exemptions from value added tax and prolongation of rent payments.

Several UNECE governments undertook measures to address the lack of finance faced by SMEs including exploring digital finance channels, direct lending, guarantee schemes and concessional lending. Armenia, for example, introduced several measures to assist SMEs during the pandemic, including measures relating to concessional financing, subsidies, preferential loans and grants. One of the measures is aimed at supporting IT projects with funding (75 per cent interest-free loans and 25 per cent grants).⁸²

3.6 Gender Gaps

Although specific data on the situation of women entrepreneurs and workers in the e-commerce sector during the pandemic is difficult to obtain, more general data on the situation of women in the UNECE region indicates that women entrepreneurs and workers in Eastern Europe, Turkey and Central Asia are in a disadvantaged position. Throughout the region, women work longer hours than men, when unpaid work is factored in.⁸³ Women's gross hourly earnings in 2015 were, on average, 21.8 per cent less than those of men in Central and Eastern Europe.⁸⁴ Women also account for a minor share among top managerial and business leaders in the region.

The digital divide also disadvantages women and girls. In Central Asia women have 30 per cent less access to the internet than men, undermining their chances to obtain skills necessary for e-commerce.⁸⁵

During the pandemic, women employees were more seriously impacted. In select UNECE member States, women formed a high proportion of workers laid off across all firm sizes. In Albania, for example, the proportion of female workers among the workers laid off during the pandemic were 74.5 per cent from small businesses and 98.3 per cent from large businesses.⁸⁶ In Georgia, the proportions were 42.8 per cent (small businesses) and 70.6 per cent (large businesses).⁸⁷

⁸² The Government of Armenia has developed a package of measures to mitigate the social and economic impact of the coronavirus pandemic. The programme comprises 21 actions, 9 of which are directly designed to support the economy.

⁸³ United Nations Development Programme, "Progress at Risk: Inequalities and Human Development in Eastern Europe, Turkey and Central Asia, Regional Human Development Report, 2016", <http://hdr.undp.org/en/content/regional-human-developmentreport-2016-eastern-europe-turkey-and-centralasia>.

⁸⁴ UN WOMEN, "Progress of the World's Women 2015-2016, Transforming Economies, Realizing Rights, Trends & Statistics", p. 87, <http://www.unwomen.org/en/digital-library/publications/2015/4/progress-of-the-worlds-women-2015>. European Commission, press release, http://ec.europa.eu/justice/newsroom/gender-equality/infographs/equal-pay-day-2015/equal-pay-day/index_en.html.

⁸⁵ Intel, "Women and the Web, Bridging the Internet gap and creating new global opportunities in low and middle-income countries", 2013, p. 10, <http://www.intel.com/content/dam/www/public/us/en/documents/pdf/women-and-the-web.pdf>. Skewed gender ratios were registered in Azerbaijan (second only to China), Armenia, Georgia, Albania, Montenegro, North Macedonia, Kosovo and Turkey.

⁸⁶ World Bank Enterprise Surveys Follow up on COVID-19 (2020).

⁸⁷ World Bank Enterprise Surveys Follow up on COVID-19 (2020).

These generic observations of women workers and women entrepreneurs provide insights into the gender barriers, including the digital divide, that women must transcend in the e-commerce sector.

Chapter 4: Future Areas for Consideration

Against the background of the trends, challenges and policy responses explored in Chapters 2 and 3 above, this chapter sets out some areas for consideration for the further development of e-commerce in the UNECE region. While these suggestions focus primarily on the experiences of transition economies in Central Asia, Eastern Europe and Caucasus most apply in varying degrees to the larger UNECE membership. Building on the UNCTAD-led *eTrade for all* initiative and methodologies as well as UNECE's trade facilitation programme, it would be important to further evaluate and build on national considerations for the UNECE region, specifically for the transition economies. The recommendations on international cooperation are relevant to all UNECE member States.

4.1 Develop and Improve ICT Infrastructure and Services

Address the digital divide by ensuring accessible, efficient and affordable ICT services, such as telecommunication, computer and other IT services and emerging technologies

UNCTAD's B2C Index makes it clear that there is an urgent need to advance work on closing the digital divide in internet connectivity in the UNECE region, especially for transition economies in Eastern Europe and the Caucasus. This in turn will facilitate B2C e-commerce. A key aspect of addressing the digital divide is ensuring high-speed, consistent, and affordable internet connectivity, including to rural areas, by way of enhanced ICT infrastructure. As internet penetration and infrastructure for delivery and payment improves, B2C e-commerce in the Central Asian and Caucasus countries is expected to grow further. A number of UNECE countries were making progress before the pandemic, notably in telecommunication development and infrastructure programmes to expand mobile access. These initiatives need to be enhanced and sustained, ensuring access to affordable high-quality telecommunication services and network equipment, such as fibre-optic cables and routers, that underpins broadband networks.

4.2 Use Advanced Technologies

Ensure technology-neutral regulations

Flexibility in dealing with advanced technologies and new trends in the e-commerce market such as artificial intelligence, robotics, 3D printing and fintech may impact the manner in which e-commerce is conducted. Given the fast and ongoing evolution of the e-commerce market(s) in the UNECE transition economies in particular, coupled with fast-paced technological developments, it will be useful to ensure that regulation and policy is – wherever possible – technologically neutral, to enable adaptation to emerging technologies.⁸⁸ This will ensure that whatever the technology utilized, the core principles stay the same and regulations are not developed in silos. Furthermore, new trends such as greater blending of online and offline retail

⁸⁸ Technological neutrality is considered a principle of good regulation. See OECD, *Policy Guide on Convergence and Next Generation Networks*, 2008, p. 4. It is also one of the key principles of the European Regulatory Framework for Electronic Communications, which entails a requirement for Member States to ensure that national regulatory authorities take the utmost account of the desirability of making regulation technologically neutral, i.e. it neither imposes nor discriminates in favour of the use of a particular type of technology.

will alter distribution and logistics chains, particularly in the regional context. These trends need to be better understood and communicated to national businesses.

4.3 Develop Appropriate Legal and Regulatory Frameworks

Legislative and regulatory “soft” infrastructure is key to a functioning e-commerce market. One main focus is on consumer confidence, both within national markets and in trade across borders.

Enhance consumer confidence and business concerns including cross-border legislation

The legislative set-up underlying e-commerce transactions is a crucial factor in instilling consumer confidence in e-commerce. In order to create an enabling and secure environment for e-commerce, there is a need to address *consumer concerns related to online* transactions, including payment security, data protection, privacy, cybercrimes, e-payments, dispute settlement and elements relating to e-transactions such as digital certificates and signatures, and refunds. These issues have to be incorporated in law and implemented in practice. Much remains to be done here, but UNECE transition economies are pressing ahead, with significant successes already to show.

In this context, the compatibility of cross-border legislation and standards as well as harmonization on a regional or global level is important for the dynamic development of regional e-commerce in particular. For the UNECE region, apart from global models, regional legislative development models, including in the context of the EU and Eurasian Economic Union (EAEU), are relevant examples. Furthermore, cyber legislation should reflect current e-commerce market trends and consumer and business interests. Broader legal issues for consideration include the need to address anti-competitive conduct by businesses and taxation of e-commerce transactions.

4.4 Fostering Digital Financial Inclusion and Electronic Payments

Expand financial inclusion through ensuring appropriate regulation and multiple modes of payment

The availability and uptake of online payment options and methods vary across the UNECE region, depending on member States’ level of development, internet access and financial inclusivity, among other factors. Several success stories, some involving private initiatives or public-private partnerships, shine some light on the way ahead.

Factors that can contribute to better online financial inclusion include, arguably first and foremost, building consumer confidence by addressing consumer trust issues that hold back the uptake of online payment. This can be advanced through the consequent enactment and enforcement of legislation or regulation relating to e-commerce-specific issues of privacy, cybercrime, data localization, e-transactions, dispute settlement and consumer redressal.

Furthermore, in some UNECE countries where cash dependence is high, enhancement of digital payments – including by improving digital and financial literacy – would result in multiple modes of payment beyond cash, benefitting the larger financial system. Finally, encouraging greater and

secure competition in the online payment system, including by developing local payment applications where there are none, would create more choice and potentially reduce costs.

4.5 Improve Trade Facilitation and Logistics

Implementation of the WTO Trade Facilitation Agreement and beyond

For several UNECE member States, particularly the landlocked developing countries (LLDCs), e-commerce offers both a stimulus for reform and a source of solutions for improving their trade facilitation regimes. Some of the challenges that the pandemic has brought to the fore can be resolved through the continued implementation of the WTO Trade Facilitation Agreement – where appropriate, even pursuing advanced digital solutions that are not part of the Agreement:

1. Identification and prioritization of low-hanging fruit in digital service provision (e.g. automated customs systems, single windows), while working towards longer-term policy objectives (e.g. exchange of electronic certificates of origin or SPS certificates).
2. Assessment of the costs and benefits of trade facilitation provisions and monitoring their implementation.
3. Effective implementation of policy decisions without parallel systems (e.g. paper-based and digital systems for import-export permits).
4. Design of digital provisions in a way that addresses the needs of SMEs and women traders and contributes towards the 2030 Sustainable Development Agenda.

In this context UNECE's Guide to Drafting a Trade Facilitation Roadmap offers a useful tool for planning and designing trade facilitation reforms.⁸⁹

International standards, recommendations and guidance

International standards are a key enabler for exchanging trade-related information between parties. The electronic business standards developed by UNECE-hosted UN/CEFACT⁹⁰ offer one example. UN/CEFACT develops openly available, harmonized, and interoperable electronic exchange standards to help businesses and government agencies connect intelligently. This intergovernmental body also develops trade facilitation recommendations, guidelines and other resources that can help achieve efficiency in trade transactions. Some examples are set out in Table 4 and 5.

⁸⁹ UNECE, "Guide to drafting a National Trade Facilitation Roadmap", <https://www.unece.org/fileadmin/DAM/trade/Publications/ECE-TRADE-420E.pdf>. For more National Trade Facilitation Roadmaps, developed by UNECE, see: <https://unece.org/trade/support-transition-countries>

⁹⁰ UN/CEFACT is a subsidiary, intergovernmental body of UNECE which serves as a focal point within the United Nations Economic and Social Council for trade facilitation recommendations and electronic business standards. It has global membership, and its members are experts from intergovernmental organizations, individual countries' authorities and the business community. UN/CEFACT's mission is to improve the ability of business, trade and administrative organizations from developed, developing and transitional economies to exchange products and relevant services effectively. Its principal focus is on facilitating national and international transactions, through the simplification and harmonization of processes, procedures and information flows, and so contribute to the growth of global commerce.

Table 4.
Overview of UNECE-UN/CEFACT Instruments

Area	Trade Facilitation Recommendations
Single window	Recommendation 37 : Single Submission Portal, November 2019
	Recommendation 36 : Single Window Interoperability, December 2017
	Recommendation 35 : Establishing a Legal Framework for an International Trade Single Window, January 2014
	Recommendation 34 : Data Simplification and Standardization for International Trade, February 2011
	Recommendation 33 : Recommendations and Guidelines on Establishing a Single Window, December 2005
Electronic data interchange	Recommendation 25 : Use of the United Nations Electronic Data Interchange for Administration, Commerce and Transport (UN/EDIFACT), September 1995
	Recommendation 26 : Commercial Use of Interchange Agreements for Electronic Data Interchange (EDI), March 1995
	Recommendation 14 : Authentication of Trade Documents, March 1979
E-commerce	Recommendation 31 : Electronic Commerce Agreement, May 2000
	Recommendation 32 : E-commerce Self-Regulatory Instruments (Codes of Conduct), March 2001
Trade facilitation monitoring	Recommendation 42 : Trade and Transport Facilitation Monitoring Mechanism, December 2017
COVID-19	Recommendation 47 : Pandemic Crisis Trade-Related Response

Sources: UNECE Trade Facilitation Recommendations, Revised Edition, 2019, www.unece.org/fileadmin/DAM/trade/Publications/ECE_TRADE_442-Rev.1_CF-SummaryRecs.pdf. UNECE Annual Report 2019, https://www.unece.org/fileadmin/DAM/UNECE_Annual_Report_2019_Web_FINAL.pdf.

Table 5.
Overview of other UNECE - UN/CEFACT Instruments

Area	Other Instruments
E-commerce	UNECE regulatory framework on cybersecurity that can be used by authorities and policymakers, especially in sectors where no dedicated regulation exists
Maritime digitization	A new partnership between the International Maritime Organization, the WCO, UNECE and the International Standards Organization to support increased maritime digitalization, 2020
MSMEs	UNECE White Paper on Integrated Services for MSMEs in International Trade, 2019
Supply chain	Supply chain delivery process, e-quality certificates, purchase-order financing, smart containers, and data pipeline (capturing data earlier in the supply chain in order to improve data quality in electronic messages), 2019
SDG	Portal created to identify and map more than 1000 UNECE standards and 30 partner organizations to support the SDGs
Trade facilitation monitoring	Digital and Sustainable Trade Facilitation – UNECE Regional Report 2021
	Trade Facilitation and Paperless Trade Implementation – UNECE Regional Report 2019

COVID-19	Report on the impact of the COVID-19 outbreak on international trade and logistics and the ways advanced technologies can help overcome such disruptions, 2020
Gender	UNECE Declaration on Gender Responsive Standards and Standards Development with elements gender pay gap, gender action plans, and gender-balance assessment of standards development committees
Transportation	Electronic Consignment Note (eCMR), 2018
Knowledge portals	http://tfig.unece.org

Sources: *UNECE Trade Facilitation Recommendations, Revised Edition, 2019*, www.unece.org/fileadmin/DAM/trade/Publications/ECE_TRADE_442-Rev.1_CF-SummaryRecs.pdf. *UNECE Annual Report 2019*, https://www.unece.org/fileadmin/DAM/UNECE_Annual_Report_2019_Web_FINAL.pdf.

Some conventions have been amended to ensure they can work in an electronic environment. For example, the UNECE-administered TIR Convention and its e-TIR International System, as well as the Customs Convention on the International Transport of Goods under Cover of TIR Carnets (the “TIR Convention”) facilitate the use of a safe and efficient intermodal transport system. These instruments allow for moving cargo across borders without requiring physical checks and for reducing contact between people. Countries agreed on provisions on the legal basis for the paperless operation of the TIR Convention (the so-called eTIR). The TIR system already reduces cross-border transport time by up to 80 per cent, and costs by up to 38 per cent. The full computerization of the Convention’s procedures will unlock further efficiency gains, particularly in intermodal transport.⁹¹

Another example is the CMR Convention – the Contract for the International Carriage of Goods by Road. Under this convention, a consignment note can be issued, primarily for commercial transport purposes (B2B). The consignment note is often checked by law enforcement and customs authorities at the borders. The electronic CMR or e-CMR is a paperless version of the CMR document, introduced as an additional protocol in 2008. In 2019, Tajikistan and Belarus alongside Finland, Poland, Portugal, Romania, and the United Kingdom acceded to the additional protocol. One billion transport contracts are issued annually and based on the CMR Convention, enabling seamless road freight. Digitalization brings significant additional efficiency gains.⁹²

4.6 Enhance Access to E-commerce by MSMEs

Plan and adopt a range of short-, medium- and long-term measures, particularly for the transition economies

E-commerce provides a business opportunity to SMEs and MSMEs, yet its potential has not been fully achieved by countries in the UNECE region, in particular the countries of Central Asia, Eastern Europe and the Caucasus.

Certain measures can help facilitate SME/MSMEs e-commerce access, among them the following:

⁹¹ UNECE, “Annual Report 2019”.
https://www.unece.org/fileadmin/DAM/UNECE_Annual_Report_2019_Web_FINAL.pdf.

⁹² UNECE, “Annual Report 2019”,
https://www.unece.org/fileadmin/DAM/UNECE_Annual_Report_2019_Web_FINAL.pdf.

- Raise awareness of e-commerce business opportunities including requisite data.
- Make smaller and less formal firms aware of public support interventions and expand their range to include e-commerce firms and digital channels.
- Assist MSMEs in building their online migration, branding, and outreach, including through a process of financing, and building their skill sets.
- Enhance access to finance for e-commerce MSMEs.
- Create an enabling environment by way of incentives, tax rebates and the like to encourage MSMEs' e-commerce strategies.
- Adopt trade facilitation strategies suitable for MSMEs involved in e-commerce.
- Build on existing postal infrastructure, especially for connectivity in rural areas for transport and delivery. This is particularly relevant for MSMEs.
- Develop online portals to provide all trade-related services, including customs declaration, transportation, logistics, loans, and insurance, based on UN/CEFACT's ISMIT (Integrated Services for Micro, Small and Medium Enterprises in International Trade) framework.⁹³

4.7 Address the Gender Gaps in E-commerce

Undertake R&D collection for developing evidence-based initiatives for greater participation of women in e-commerce.

There is a need to enhance the roles that women can play in the e-commerce sector as employees, managers, and entrepreneurs. Collection of data on the existing gender-specific contributions of women to this sector is an important starting point. Enhancing women's internet skills, technological knowledge and wider awareness of the commercial opportunities that e-commerce can bring is important, especially in the UNECE member States where women's inclusion in general has been limited. At a global level, the eTrade for Women initiative is one such effort in this direction.

4.8 Understand and Measure E-commerce

Strive for increased measurement of e-commerce to support evidence-based policy decisions.

Enhanced understanding of e-commerce and the ecosystem that nurtures e-commerce, including the interlinkages with trade facilitation and the larger trade in services ecosystem, is essential for policymakers. This understanding can help them devise appropriate policies to enhance e-commerce and harness its benefits and lead to developing suitable ways to measure e-commerce. In this context, the work of international organizations on e-commerce, trade in services, trade facilitation and electronic business standards provides a great starting point that needs to be brought together.

⁹³ UN/CEFACT White Paper on Integrated Services for MSMEs in International Trade (ISMIT) 2019, https://unece.org/fileadmin/DAM/cefact/GuidanceMaterials/WhitePapers/WP_MSMEs-ISMIT_Eng.pdf.

4.9 Strengthen Global and Regional Cooperation

Pursue regulatory cooperation at global, regional or subregional levels and build on existing initiatives in a coordinated effort to advance e-commerce

The development of e-commerce based on a set of agreed principles that are conducive to addressing the digital divide is of paramount importance. Without international cooperation at global, regional or subregional levels, it is literally impossible to address the digital divide. Cooperation at the various levels can help implement the principle of “leaving no one behind” in the 2020 Sustainable Development Agenda. For instance, governments need to evaluate what types of technologies are best suited for their countries, how much technological freedom to give businesses and the extent of State intervention on technology used for e-commerce.⁹⁴ Other areas that could benefit from international collaboration are addressing the differing standards and evolving systems (United States, Europe, China) within the e-commerce sphere, as well as cybersecurity, consumer confidence, market access and ICT infrastructure.

Keep abreast of the WTO e-commerce discussions

The ongoing e-commerce discussions at the WTO are progressing, and a draft negotiating text is being developed. These discussions could benefit from enhanced regional and national impulses to reflect national and regional challenges and perspectives. Equally important is to raise awareness about these discussions among businesses in the region. This could provide greater certainty of market access, foster consumer confidence and enhance the overall development of e-commerce.

Leverage regional groupings and initiatives

National governments could build on several ongoing or established initiatives related to e-commerce, model legislation and other initiatives to enhance and improve the e-commerce landscape.

The recent initiative to formulate effective mechanisms of comprehensive legal regulation of e-commerce at the level of the EAEU, for instance, is worth monitoring. The scope of such a legal framework will include cross-border e-commerce, special customs administration, and customs duties and taxes, as well as non-tariff, technical and other regulation measures. Discussions also relate to the potential for setting up an e-commerce institution, with the goal of achieving a simplified and convenient customs administration, including through a single window and the creation of a category of authorized persons who would be responsible for filing declarations and paying customs duties and taxes on behalf of recipients, among other things.⁹⁵

⁹⁴ CAREC Institute, “Report of Workshop on Regulatory Framework for e-commerce Development in CAREC”, 28 May 2020.

⁹⁵ EAEU, “EAEU countries prepare rules for comprehensive regulation of cross-border Internet trade”, press release, 10 April 2020, <http://www.eurasiancommission.org/ru/nae/news/Pages/10-04-2020-4.aspx>.

Annex A

Trade Facilitation Measures from the UNECE Regional Survey Directly Relevant to Facilitating E-commerce Transactions, with Relevant Correspondent WTO Trade Facilitation Agreement Articles

Grouping		Trade Facilitation Measures	TFA Article
Digital Trade Facilitation Measures	Formalities	Risk management (as a basis for deciding whether a shipment will be physically inspected or not)	7.4
		Pre-arrival processing	7.1
		Post-clearance audit	7.5
		Separation of release from final determination of customs duties, taxes, fees and charges	7.3
		Establishment and publication of average release times	7.6
		Trade facilitation measures for authorized operators	7.7
		Expedited shipments	7.8
		Acceptance of paper or electronic copies of supporting documents required for import, export or transit formalities	10.2.1
	Paperless trade	Electronic/automated customs system established (e.g. ASYCUDA)	
		Internet connection available to customs and other trade control agencies at border crossings	
		Electronic single window system	10.4
		Electronic submission of customs declarations	
		Electronic application and issuance of import and export permit	
		Electronic submission of sea cargo manifests	
		Electronic submission of air cargo manifests	
		Electronic application and issuance of Preferential Certificate of Origin	
		E-payment of customs duties and fees	7.2
		Electronic application for customs refunds	
	Cross-border paperless trade	Laws and regulations for electronic transactions in place (e.g. e-commerce law, e-transaction law)	
		Recognized certification authority issuing digital certificates to traders to conduct electronic transactions	
		Customs declarations electronically exchanged between countries	
		Certificate of origin electronically exchanged between countries	

		SPS certificate electronically exchanged between countries	
		Banks and insurers in recipient country retrieving letters of credit electronically without lodging paper-based documents	
Sustainable Trade Facilitation Measures	Transit facilitation	Transit facilitation agreement(s) with neighbouring country(ies)	
		Customs authorities limit physical inspection of transit goods and use risk assessment	10.5
		Support for pre-arrival processing for transit facilitation	11.9
		Cooperation between agencies of countries involved in transit	11.16
	Trade facilitation for SMEs (5 measures)	Government has developed trade facilitation measures that ensure easy and affordable access for SMEs to trade-related information	
		Government has developed specific measures that enable SMEs to more easily benefit from the AEO scheme	
		Government has taken actions to make single windows more easily accessible to SMEs (e.g. by providing technical consultation and training services to SMEs on registering and using the facility)	
		Government has taken actions to ensure that SMEs are well represented and made key members of National Trade Facilitation Committees	
		Implementation of other special measures to reduce costs for SMEs	
		Application, verification and issuance of SPS certificates automated	
		Special treatment given to perishable goods at border crossings	7.9
	Trade finance facilitation (3 measures)	Single window facilitates traders' access to finance	
Banks allow electronic exchange of data between trading partners or with banks in other countries, to reduce dependence on paper documentation			
A variety of trade finance services available			

Note: TFA = Trade Facilitation Agreement of the World Trade Organization.

Source: UNECE

Bibliography

- CAREC Institute (2020). Report of Workshop on Regulatory Framework for e-commerce Development in CAREC. May.
- Dingel, Jonathan and Brent Neiman (2020). How many jobs can be done at home. NBER Working Paper 26948, National Bureau of Economic Research. April.
- E-commerce Foundation (2019). Global E-commerce Report. January.
- Emarketeer (2020). Global E-commerce 2020 Report. January.
- Euromonitor.com (2020a). Country Report: E-commerce in Ukraine. March.
- Euromonitor.com (2020b). Country Report: E-commerce in Uzbekistan. March.
- Euromonitor.com (2020c). E-commerce in Kazakhstan. February.
- Fernandes Deepali (2017). Free Access to the Sea: Bilateral Transit and Transportation Agreements of LLDCs: Benefits and Bottlenecks-Case India and Nepal, UNDP Mongolia and International Think Tank for LLDCs. July.
- Hannon, Eric, Heid Bernd, Anja Huber, and Christoph Klink (2020). Rethinking last-mile logistics, post-COVID-19: Facing the 'next normal'. June.
- Hoffman, Jan, Hassiba Benamara, Daniel Hopp and Luisa Rodriguez (2020). Navigating through the coronavirus crisis and uncertainty: How maritime transport data can help. Article No. 60. UNCTAD Transport and Trade Facilitation Newsletter N°87 – Third Quarter 2020. 07 September.
- ICAO (International Civil Aviation Organization) (2020). Air Transport Monthly Monitor. September.
- IMF (International Monetary Fund) (2020). COVID-19 Policy Response Tracker.
- International Trade Association (2020). Georgia Commercial Guide. July.
- ITC (International Trade Centre) (2019). COVID-19 Business Impact Survey. May.
- McKinsey & Company (2020a). Consumer sentiment and behavior continue to reflect the uncertainty of the COVID-19 crisis. July.
- McKinsey & Company (2020b). National Consumer Sentiment Surveys, 2020 for Belgium, Canada, Denmark and France, 30 June; Germany, 26 June; Italy, the Netherlands, 30 June; Poland, April; Portugal, Spain, 25 June; Sweden, Switzerland, United Kingdom. June.
- Netcomm Suisse and UNCTAD (2020). COVID 19 and E-commerce: Findings from a survey of online consumers in 9 countries. September.
- Nielsen (2015). Global Connected Commerce Survey. Q4.
- OECD (2020a). Policy Responses to Coronavirus (COVID-19). Connecting Businesses and Consumers During COVID-19: Trade in Parcels. July.
- OECD (2020b). Policy Responses to Coronavirus (COVID-19). Leveraging digital trade to fight the consequences of COVID-19. July.
- OECD (2020). Coronavirus (COVID-19): SME Policy Responses. July.
- Paypers (2020). Cross-Border Payments and Commerce Report 2019–2020. Insights into Global Commerce and Marketplaces. January.
- Paypers (2020). Payment Methods Report 2020 – What's New in the Way People Prefer to Pay. August.

- Santiago Fernandez, Paul Jenkins, Vieira Benjamim (2020). Europe's digital migration during COVID 19: Getting past the broad trends and averages. McKinsey & Company. July.
- UNCTAD (2019a). Digital Economy Report 2019. Value Creation and Capture: Implications for Developing Countries. September.
- UNCTAD (2019b). UNCTAD B2C e-commerce index 2019. UNCTAD Technical Notes on ICT for Development, No. 14. December.
- UNCTAD (2020). UNCTAD B2C e-commerce index 2020. UNCTAD Technical Notes on ICT for Development, No. 17. December.
- UNCTAD (2020). Cyberlaw Tracker.
- UNECE (2019a). Annual Report. June.
- UNECE (2019b). Digital and Sustainable Trade Facilitation. UNECE Regional Report 2019. December.
- UNECE (2019c). Trade Facilitation Recommendations, Revised Edition, 2019.
- UNECE (2020a). The impact of COVID-19 on trade and structural transformation in Georgia: Evidence from UNECE's survey of micro, small, and medium enterprises. September.
- UNECE (2020b). The impact of COVID-19 on trade and structural transformation in Armenia: Evidence from UNECE's survey of micro, small, and medium enterprises. December.
- UNECE (2020). UN/CEFACT. Advisory Group on Advanced Technologies in Trade and Logistics. Report on the impact of the COVID-19 outbreak on international trade and logistics and the ways advanced technologies can help overcome such disruptions. June.
- UNECE (2021a). National Trade Facilitation Roadmap of the Kyrgyz Republic 2021-2025. June.
- UNECE (2021b). The impact of COVID-19 on trade and structural transformation in the Republic of Belarus: Evidence from UNECE's survey of micro, small, and medium enterprises. March.
- UNECE (2021c). The impact of COVID-19 on trade and structural transformation in Serbia: Evidence from UNECE's survey of micro, small, and medium enterprises. October.
- UNESCAP and ADB (2018). Embracing the E-commerce Revolution in Asia and the Pacific. April.
- United Nations Development Programme (2016). Progress at Risk: Inequalities and Human Development in Eastern Europe, Turkey and Central Asia. Regional Human Development Report. October.
- Universal Postal Union (2020a). The COVID-19 crisis and the postal sector. Impact, scenarios, and perspectives for the way forward. May.
- Universal Postal Union (2020b). Trends and Drivers for International Letter Mail, Parcels, and Express Mail Services, Research on Postal Markets Report. March.
- Vassilevskaya Yelena (2020). Trade facilitation in times of pandemic: practices from North and Central Asia. UNESCAP Working Paper 197. August.
- World Bank (2020). Entrepreneurship Surveys COVID-19. September.
- WTO (2020a). E-commerce, Trade and the COVID Pandemic. WTO Information Note. May.
- WTO (2020b). Measures affecting trade in services, as notified to the WTO Trade in Services Committee. October.

COVID-19 Impact on e-commerce

Post-pandemic COVID-19 Economic Recovery: Harnessing E-commerce for the UNECE Transition Economies

The COVID-19 pandemic caused disruptions to global trade, supply chains and labour markets, curbed consumption and investments, and slowed economic activity worldwide. It created significant repercussions in the UNECE region, including in countries with economies in transition. Although e-commerce experienced a boost, a myriad of challenges, old and new, surfaced. Many countries adjusted their policies and undertook initiatives to address immediate needs. Despite these attempts, much remains to be done to fully harness the power of e-commerce for a sustainable, resilient and inclusive post COVID recovery.

This report explores the impact of the pandemic on domestic and cross-border e-commerce in the transition economies of the UNECE region and highlights key areas for attention of policy makers. The report gives particular attention to trade facilitation and logistics as a major facilitator of e-commerce. During the pandemic, the need for greater trade facilitation became obvious for faster movement of goods across borders, including essential goods such as medicine and food.

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