



# Digital trade and e-commerce – long standing priorities in the CAREC program



rising **digital trade**



**innovation** and **e-commerce** becoming necessity and opportunity



**paperless** trade and customs services improving



## **CAREC Integrated Trade Agenda 2030**

- alignment with international instruments
- cross-border connectivity
- knowledge-sharing on best practices on e-commerce

The pandemic has heightened the **need** and **potential** to accelerate digitalization — *to expand trade, make it safer, and more efficient.*

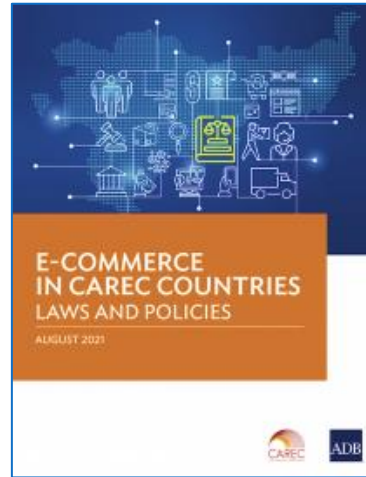
**Developing E-commerce in CAREC Countries**



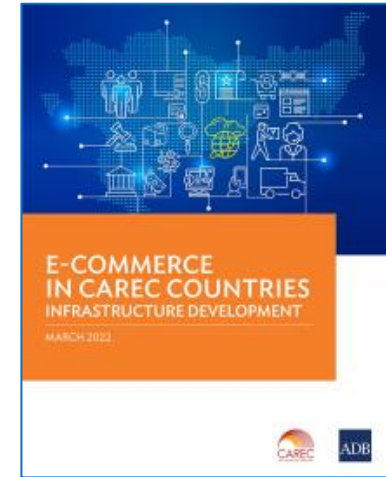
# Dimensions for E-Commerce Development and ADB-CAREC Institute assessments



Source: [ADB and ESCAP 2018, Embracing the Economic Revolution in Asia and Pacific, Manila.](#)



<http://dx.doi.org/10.22617/TCS210304-2>



<http://dx.doi.org/10.22617/TCS220098-2>

**Developing E-commerce in CAREC Countries**



# Key Messages



## Enabling environment

Align with international conventions and international best practices to increase consumer confidence and support e-commerce ecosystem and private sector growth.



## Infrastructure development

Establish backbone networks, internet exchange points, and data centers. Expand payment systems capacity, logistics services, and cross-border connectivity.



## Regional cooperation

Collective effort to harmonize, build mutual trust and share good practices. Facilitate trade and improve rules on cross-border e-commerce transactions.

# E-Commerce in CAREC Countries: Laws and Policies

## Remove Barriers

### Electronic transactions

UN Convention on the use of Electronic Communications in International Contracts (ECC)

UNCITRAL model laws on electronic commerce and electronic signatures

### International certifications/foreign signatures

Recognition or equivalence in accordance with bilateral agreement or principle of reciprocity

## Regulate

### Privacy

OECD Guidelines on protection of privacy and cross-border flows of personal data

Council of Europe Convention on the Protection of Individuals

### Cybercrime

Council of Europe Convention on Cybercrime (Budapest Convention of 2001)

### Consumer Protection

UN Guidelines for Consumer Protection  
OECD Consumer Protection in E-Commerce

## Facilitate trade

### Trade facilitation agreements

UN Framework Agreement on Facilitation of Cross-Border Paperless Trade in Asia and the Pacific

UN Convention on the International Sale of Goods

WTO Trade Facilitation Agreement

WCO Revised Kyoto Customs Convention

## Recent Developments

WTO MC-12 outcomes

Digital Trade Agreements

Developing E-commerce in CAREC Countries



# E-Commerce in CAREC Countries: Laws and Policies

International Instruments	Remarks
<b>UN Convention on the Use of Electronic Communications in International Contracts (ECC)</b>	ECC in effect for Azerbaijan (2018) Mongolia (2021); signed by PRC (2006)
<b>UNESCAP Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific</b>	Azerbaijan and PRC are parties (agreement entered into force in Feb 2021). Turkmenistan acceded in 2022.
<b>UN Convention on the International Sale of Goods</b>	Azerbaijan, PRC, Georgia, Kyrgyz Republic, Mongolia, and Uzbekistan are parties
<b>WTO Trade Facilitation Agreement</b>	All CAREC members that are members of WTO have ratified. Others at various WTO accession stages.
<b>WCO Revised Kyoto Customs Convention</b>	Azerbaijan, PRC, Georgia, Kazakhstan, Kyrgyz Republic, Mongolia, Pakistan, Tajikistan, Turkmenistan and Uzbekistan
<b>Customs Convention on the International Transport of Goods under Cover of TIR Carnets (TIR Convention)</b>	All CAREC countries. Annex 11 on digital documents (entered into force May 2021)
<b>Council of Europe Convention on Cybercrime (Budapest Convention of 2001)</b>	Azerbaijan and Georgia

- **accede to or adopt international instruments that facilitate trade and cross-border e-commerce**
- **consider cross-border collaboration and mutual recognition**
- **ensure effective enforcement**

# E-Commerce in CAREC Countries: Laws and Policies

- **harmonization of CAREC country legislations using best practices (e.g., e-signature recognition or certification)**
- **balance between private interests and public goals**
- **capacity to enforce include communications and dispute resolution**

Domestic Law Reforms	Remarks
Adopt the <b>UN ECC</b>	For domestic transactions
Maximize and harmonize ability to use simple <b>e-signatures</b> across the CAREC region	Some CAREC country laws have some flexibility, few give effect to minimalist e-signature processes
Harmonize the <b>certification process</b> for digital signatures across the CAREC countries	Options: (i) copy the rules of the state whose system works best, or (ii) adapt existing rules into a single version that will work for everybody.
Harmonize <b>cybercrime</b> legislation with international standards	CAREC laws largely consistent. Consider state capacity to enforce and cooperate with other countries.
Enact <b>modern privacy</b> legislation	Consider state capacity to enforce.
Enact <b>modern consumer protection</b> legislation	Harmonize legislation based on UN guidelines for online consumer protection. Consider state capacity to enforce. Join International Consumer Protection and Enforcement Network

# E-Commerce in CAREC Countries: Infrastructure

Internet Infrastructure	Payment Systems	Delivery and Logistics Infrastructure	E-Commerce Market
<p><b>Consumer adoption</b></p> <ul style="list-style-type: none"> <li>Affordability of and access to information and communications technology</li> <li>Coverage</li> <li>Gap analysis: Online shopping</li> <li>Barriers to internet use</li> </ul> <p><b>Data infrastructure</b></p> <ul style="list-style-type: none"> <li>International internet bandwidth</li> <li>Internet exchange points</li> <li>Data centers</li> <li>Cloud services</li> </ul> <p><b>Business use of Internet</b></p> <ul style="list-style-type: none"> <li>Business internet-related infrastructure (fixed broadband, autonomous system numbers, cybersecurity)</li> </ul>	<p><b>CAREC payment landscape</b></p> <ul style="list-style-type: none"> <li>Bank cards</li> <li>Mobile payments</li> <li>Internet banking</li> <li>Payment card infrastructure</li> <li>Non-cash payment usage and volume</li> <li>Supporting merchants</li> </ul> <p><b>Cashless payment environment</b></p>	<p><b>Fulfillment</b></p> <ul style="list-style-type: none"> <li>Delivery</li> <li>Hubs</li> <li>Warehousing</li> </ul> <p><b>Cross-border trade facilitation</b></p> <ul style="list-style-type: none"> <li>Paperless trading</li> <li>Electronic single windows</li> <li>De minimis</li> </ul>	<p><b>Market size</b></p> <p><b>Country profiles</b></p>



**Developing E-commerce in CAREC Countries**

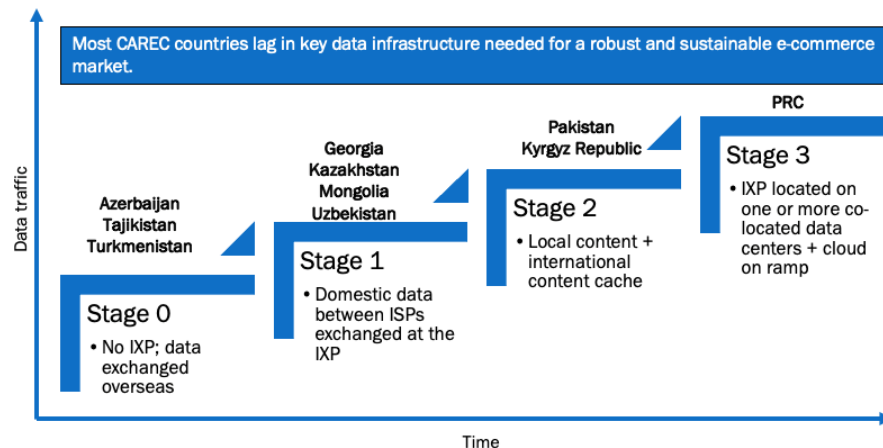




# E-Commerce in CAREC Countries: Infrastructure

- Most countries have adequate level of **last mile infrastructure**, to enable access to internet.
- **Affordability** and **digital literacy** are main barriers to internet use.
- International **bandwidth and national data infrastructure** need to be in balance
- **IXPs** are not very successful in most countries
- Limited core **data infrastructure** (data centers and cloud computing)
- Incomplete **information** on ICT use
- **Business use** of e-commerce is low, particularly among SMEs

## Data infrastructure maturity ladder



IXP = internet exchange points, ISP = internet service provider

# E-Commerce in CAREC Countries: Infrastructure

## Payments

- **Antiquated payment laws** create constraints; **online merchants** face challenges establishing an account.
- **Payment card ownership** rising rapidly
- Growth in **digital payments**, partially due to pandemic.
- Some countries introduce advanced digital payment tools such as **contactless, e-money** and **QR codes**.
- Leapfrogging payment card stage with **e-money** increasingly popular.
- **Innovative banks and Fintech** offer opportunities
- **Payments systems** need regular upgrade – including with enhanced security – to handle growing number of payments in real time

# E-Commerce in CAREC Countries: Infrastructure

## Logistics & Delivery

- Majority have **universal postal coverage**
- Most aspire to be e-commerce **delivery** or **logistics hubs**
- Lack of clarity in **parcel statistics** make it difficult to analyze impact of e-commerce and capacity of delivery systems to handle the growing number of packages.
- Few **integrated e-commerce logistics platforms** for delivery and warehousing (outside PRC, Pakistan and Kazakhstan).
- Considerable difference in implementation of **single windows** and use of electronic documents
- Varying degrees of readiness of customs agencies to handle cross-border e-commerce consignments. Reform or adopting **de minimis thresholds** could benefit consumers and SMEs.

# E-Commerce in CAREC Countries: Infrastructure

## Domestic Market

- Domestic e-commerce marketplaces are small except in the PRC, Kazakhstan, and Pakistan. **Lack of trust** cited among main reasons for low level of online shopping.
- Most e-commerce websites (outside of PRC) are **hosted abroad**.
- Countries might focus on where their **selling strengths** are to boost demand.
- Support for e-commerce-oriented **start-ups** needed.
- Outside of Pakistan, **foreign investment** in the e-commerce sector has been limited.
- **Innovative banks** can play a key role in integrating the e-commerce ecosystem.

# International experience – some lessons for CAREC

## PRC leads in logistics.

Beyond simple delivery, to huge warehouses, use of big data and emerging automation (robots, drones) and 5G and internet of things (IoT) technology, PRC logistics networks owned by e-commerce operators are at the cutting edge of innovation. Logistics has also been a big driver of employment.



## The Republic of Korea is notable for its cross-border sales.

So called, "K-Beauty" cosmetics products accounted for 87% of cross-border e-commerce sales in 2019 or US\$ 4.4 billion.



**In Malaysia, increasing importance on supporting SMEs to sell online.**  
Duty free zone to facilitate SMEs participating in e-commerce and attracting foreign investment into e-commerce logistics.



## The Netherlands stands out for its iDEAL payment system.

Included with every bank account, iDEAL accounted for half of retail e-commerce payments in 2019. iDEAL generates QR codes for merchants that can be rapidly scanned by shoppers' mobile phones.



# Conclusion and Next Steps

## Regulatory framework

Generally advanced in most CAREC countries – with some gaps and areas for reforms

## Adopt holistic approach

Build and strengthen institutions, enhance stakeholder awareness and consultations, strengthen private sector engagement

## Participate at international and regional platforms (CAREC, UNNEXT)

- Policy dialogue to promote harmonization of laws and mutual recognition
- Cross-learning to share experience and information (experts' network)
- Cross-border connectivity and interoperability (e-platforms, customs cooperation, CAREC Digital Strategy 2030)
- Reduce trade barriers in digital economy through regional agreements

# Conclusion and Next Steps

Address **core infrastructure** gaps that undermines potential for e-commerce growth

- Strengthening IXPs
- Attracting private sector investment in data centers
- Attracting one or more major cloud providers to establish a data center in the region

Strengthen **payments** environment

- Introduce big data
- Support SME digital financing and liberalize financial sector
- Potential regional payment card

# Conclusion and Next Steps

Support **start-up** ecosystems

- incubators and accelerators
- Venture capital
- E-Commerce Association (e.g., Pan-Asian E-commerce Alliance)

Overcome lack of **trust**

- Consumer protection legislation
- Awareness raising
- Improve cybersecurity infrastructure
- Digital literacy programs
- Establish “Trustmarks”