Annex 1 to Trusted Data Exchange Framework for Central Asia
Pilot Model for Cross-Border Data Exchange
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1. Geographic Coverage

The pilot initiative encompasses five Central Asian countries — Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, and Turkmenistan — with a primary focus on major road corridors identified as CAREC Corridors 1, 2, and 6.

The region spans approximately 4 million square kilometers and contains over 150 officially registered border crossing points (road, rail, and passenger), distributed as follows:

- Kazakhstan: 93 checkpoints (Source: State Revenue Committee, gov.kz)

- Uzbekistan: Over 50 checkpoints (Source: Uzbekistan Customs Committee)

- Kyrgyzstan: 29 checkpoints (Source: GIZ Report, 2020)

- Tajikistan: Between 16 and 20 checkpoints (Source: CAREC logistics data)

- Turkmenistan: Approximately 15 checkpoints (Source: ESCAP transport survey)

Selected pilot locations correspond to key transit points with demonstrated trade volume and institutional readiness.

2. Selected Pilot Checkpoints

The pilot initiative is intended to focus on the following border points:

- Khorgos (China – Kazakhstan)
  Recognized as a flagship Belt & Road hub featuring advanced infrastructure, intermodal capabilities, and compliance with WCO and CAREC standards (Source: CAREC CPMM 2023).

- Gisht Kuprik – Jibek Joly (Uzbekistan – Kazakhstan)
  The busiest customs crossing for Uzbekistan, operating continuously with significant bilateral trade flow (Source: Uzbekistan Customs Committee, 2024).

- Dustlik (Uzbekistan – Kyrgyzstan)
  A key gateway in the Ferghana Valley supporting extensive SME activity and informal trade within a densely populated area (Source: GIZ Border Assessment, 2022).

- Oybek (Uzbekistan – Tajikistan)
  A critical corridor facilitating labor migration and freight transport between Tashkent and Khujand (Source: CAREC Trade Report, 2023).

- Alat – Farab (Uzbekistan – Turkmenistan)
  The principal operational link connecting Uzbekistan with Turkmenistan and Caspian Sea trade routes (Source: ESCAP Transport Survey, 2023).

3. Scope of the Pilot

The pilot initiative is designed to evaluate the following components:

- Electronic transport documentation in accordance with UN/CEFACT e-CMR specifications

- Advanced customs data submission leveraging UN/EDIFACT IFTMIN and UBL XML message formats

- Shipment visibility through GS1 EPCIS 2.0 standards

- Secure API integration utilizing RESTful services, OAuth 2.0 authentication, and TLS 1.3 encryption protocols

The modular deployment approach facilitates phased onboarding of additional checkpoints contingent upon readiness assessments.

4. Quantitative Indicators

Indicative operational data are as follows:

Checkpoint	Estimated Daily Freight Volume	Average Processing Time	Source
Khorgos	Approximately 2,000 trucks	3.7 hours	ADB CPMM 2023
Gisht Kuprik	Approximately 1,200 trucks	5.2 hours	Uzbekistan Customs 2024
Dustlik	Approximately 300 vehicles	4.5 hours	GIZ Field Survey
Oybek	Approximately 400 vehicles	4.0 hours	CAREC Monitoring Unit
Alat – Farab	Approximately 600 trucks	3.9 hours	ESCAP Regional Data 2023

5. Private Sector Engagement

The pilot model has been developed through a private-sector initiative and comprises:

- GS1 Uzbekistan, supporting EPCIS standards implementation for shipment tracking

- Logistics companies engaged in testing API interoperability and protocol alignment

- Small and medium enterprises (SMEs), proposed to be engaged within controlled test environments, drawing upon frameworks supported by GIZ, UNDP, and ITC

This approach aligns with ongoing SME digitalization efforts in the region and is designed to respect national data governance policies. Participation of private sector entities remains subject to approval by relevant national regulatory authorities.

6. Timeline and Budget

The initial pilot phase is projected to span 18 months, with an estimated budget of USD 5.5 million, allocated as follows:

- Development of digital infrastructure and API integration: USD 2 million

- Capacity building and training programs: USD 1.5 million

- Legal harmonization support and advisory services: USD 1 million

- Independent monitoring and evaluation: USD 1 million

Funding is expected from development partners such as ADB, EBRD, GIZ, IFC, and national innovation grants. While ongoing regional initiatives address elements like digital infrastructure, capacity building, legal harmonization, and monitoring, this pilot emphasizes a unified, sovereign-led framework tailored for Central Asia. The budget reflects a strategic investment to harmonize and scale digital trade facilitation efforts regionally. A post-pilot scaling phase of 24 to 30 months, with an estimated budget of USD 15 million, aligns with similar regional projects.
Integration with existing programs is possible to maximize efficiency and avoid duplication.

7. Legal Harmonization

Legal harmonization efforts will be anchored by:

- Adoption and alignment with the UNCITRAL Model Law on Electronic Transferable Records

- Implementation of pilot regulatory sandboxes in partnership with UNDP and GIZ

- Coordination via national interagency working groups to ensure consistency and compliance

8. Governance Model

Governance is designed to maintain national sovereignty while enabling coordinated multi-stakeholder engagement, comprising:

- Technical Working Group responsible for API standards, identity management, and security protocols

- Legal Harmonization Group overseeing regulatory alignment and legislative adaptation

- Private Sector Platform facilitating SME, GS1, and logistics sector involvement

- Institutional coordination through relevant national ministries and customs authorities

This governance structure supports effective coordination with international development partners while preserving sovereign oversight.

9. Conclusion

This Annex outlines a pragmatic, scalable, and standards-compliant model for cross-border digital data exchange in Central Asia, distinguished by:

- Strategic selection of high-traffic checkpoints and key transit corridors

- Full adherence to international data exchange and transport documentation standards

- A comprehensive budget and timeline for pilot implementation

- Respect for national sovereignty and data governance frameworks

- Integration of private sector participants under national regulatory frameworks

The model is poised for phased implementation and integration with broader regional and international trade facilitation initiatives.