

Development of Trade

Logistics in CAREC

Harnessing ICT and Single Electronic Window to Improve Cross Border Trade

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Singapore



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Introduction



- This presentation is a **summary** of ADB Technical Analysis done from 2005 to 2008.
 - TA6347 REG : Transport Sector Strategy
 - TA6203 REG : Xinjiang (XUAR), PRC
 - TA6058 REG : Mongolia (MON)
 - TA6299 REG : Tajikistan (TAJ)
 - TA6299 REG : Kyrgyzstan (KYG)
- The presentation will focus on the **common key issues** on transportation/logistics, and the **proposed action plans**.

At the point of preparing this presentation, Technical Analysis on **Uzbekistan** and **Kazakhstan** are being conducted.

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Key Issues in Trade and Transportation in Central Asia



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Common Key Issues



Category	Issues
Physical Infrastructure	P1. Weak Physical Infrastructure
	P2. Enclaves and Criss-Cross of Borders
	P3. Incompatible Railway Gauges
Institutions / Policies	P4. Cumbersome Border Regulations
	P5. Border Post Problems
	P6. Non-Implementation of Agreements
	P7. Official and Unofficial Facilitation
Process / Operations	P8. Overcapacity of Service Providers with Outdated Equipment
	P9. Unorganized and Fragmented Small Enterprises
	P10. Low Productivity
	P11. Financial Constraints viz-a-viz High Capital Requirements
	P12. Shortage of Professionals and Know-How
	P13. Lack of ICT Applications
	P14. Lack of Regulations on Freight Forwarding and Insurance Liabilities

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P2. Enclaves and Criss-Cross of Border



Border crossing for this railway passes through three points from KYG, TAJ and UZB.



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P4. Cumbersome Border Regulations



1. **MON** : Meat exports are not allowed via train to Xingang in PRC, due to PRC's inspection standards.
2. **XUAR** : Customs documents are very different from KAZ standards and frequently cause unnecessary delays.
3. **TAJ** : Needs to cross Uzbekistan to reach export markets but TAJ drivers frequently encounter full cargo inspection.
4. **KYG** : Chinese trucks can travel to Bishkek and Osh, but KYG trucks can only go till Topo (104 km from Torugart) and Symkana (5km from Ishkertam).

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Internal Customs Documentation

Example : Internal Customs Issues (KAZ, TAJ)



Days

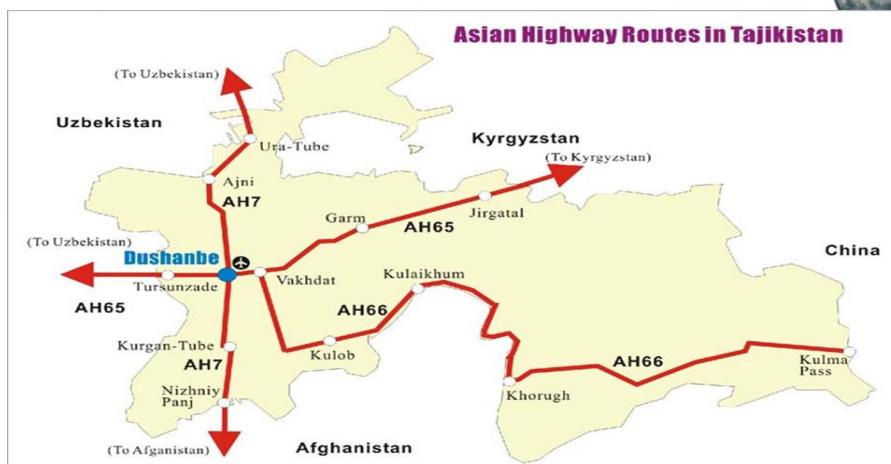
Nature of Export Procedures (2006)	TAJ	AFG	UZB	KYR	KAZ
Documents preparation	50	44	18	51	30
Inland transportation and handling	7	15	8	6	29
Customs clearance and technical control	10	2	8	6	23
Ports and terminal handling	5	5	10	3	11
Totals:	72	66	44	66	93
Nature of Import Procedures (2006)					
Documents preparation	30	49	69	56	34
Customs clearance and technical control	9	9	25	8	16
Ports and terminal handling	5	5	4	4	4
Inland transportation and handling	..	25	41	10	33
Totals:	44	88	139	78	87

Source : World Bank, 2006

It takes many days to export a TEU from Tajikistan or Kazakhstan!

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Visa Requirements



Traders from Pamir Region needs to travel to Dushanbe for visa application, and then back to Khorog and to Kulma Pass. This trip can cause delay up till ten days.

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P5. Border Post Problems



Causes

- Different Languages
- Distance between Customs
- Different Operating Hours
- No exchange of Data
- Closure of Border Points at Certain Times of the Year



Effect

More Delays!



Trucks Queuing at KYG border for weighing inspection

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Cost to Export/Import a TEU



US\$

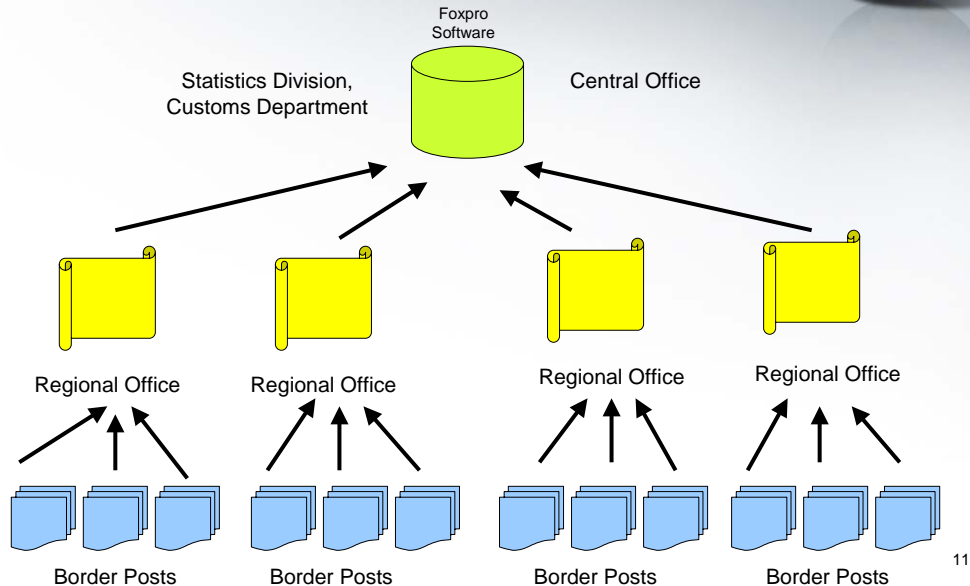
Nature of Export Procedures (2006)	TAJ	AFG	UZB	KYR	KAZ
Documents preparation	1,500	450	120	10	200
Inland transportation and handling	2,000	1,500	1,700	1,280	2,000
Customs clearance and technical control	700	450	530	10	200
Ports and terminal handling	100	100	200	120	380
Totals:	4,300	2,500	2,550	1,420	2,780
Nature of Import Procedures (2006)					
Documents preparation	1,000	250	120	10	100
Customs clearance and technical control	700	150	150	10	200
Ports and terminal handling	100	200	200	120	380
Inland transportation and handling	1,750	1,500	3,500	1,550	2,200
Totals:	3,550	2,100	3,970	1,690	2,880

Source : World Bank, 2006

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P13. Lack of ICT Applications

Example : Tajikistan's Customs Systems



P13. Lack of ICT Applications

Problems with Tajikistan's Centralized Customs Systems

1. Data transmitted through phone lines, radio modems and diskettes.
2. Customs officers who need to monitor, analyze or compile data needs to visit the Regional Offices for sighting of physical documents and verify the data with the Central Office.
3. Most computers in customs offices are old and outdated.
4. Inconsistent data elements when filling forms cause rejections at border posts, aggravating delays.
5. Customs systems not linked to private sector (e.g. customs brokers), who uses Russian software.

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Case Study

Building a Unified Automated Information Systems (UAIS) in Tajikistan



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Purpose of UAIS



- The main goal of the UAIS is to create a system that acts as a Single Electronic Window to all of Customs data and information.
- **The objectives of UAIS are:**
 - Automating of the Customs processes;
 - Increase the efficiency through transparency and up-to-date reporting;
 - Effective Customs control through risk management, profiling, and data mining;
 - Connect all stakeholders to just one system.
- **Stakeholders of the UAIS are:**
 - Trade and logistic community;
 - Customs Department personnel;
 - Other ministries and agencies in Tajikistan;
 - Foreign governments and organizations;

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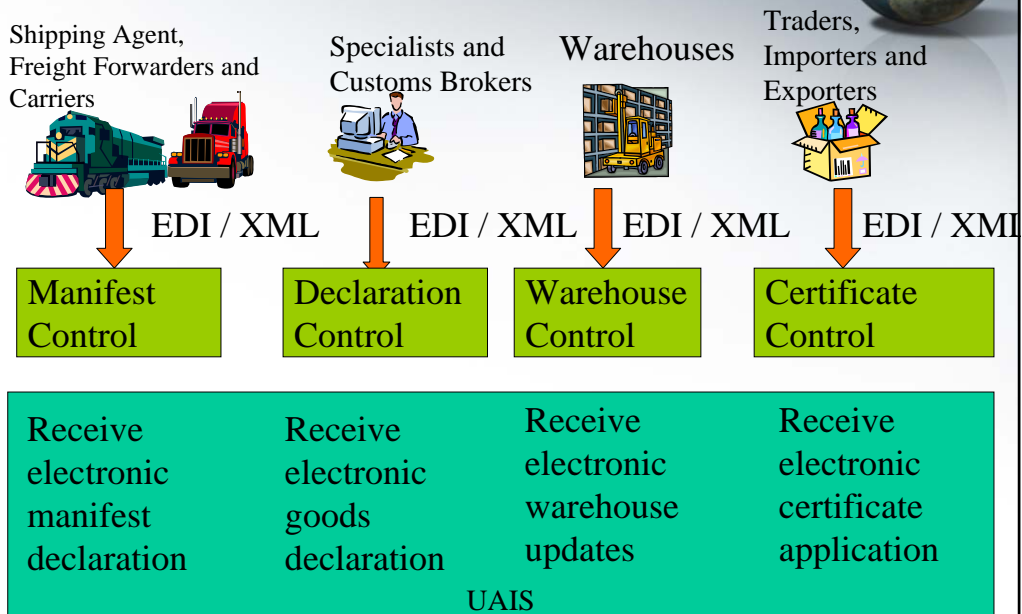
Trade and Logistics Community

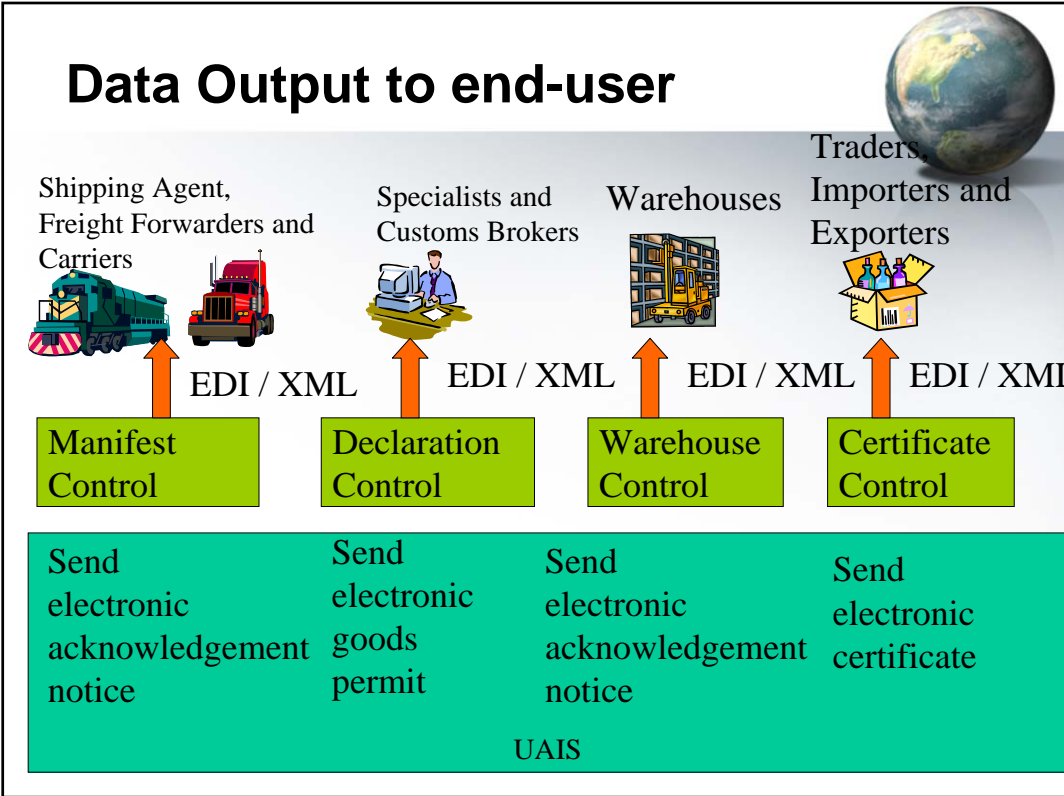


- For the UAIS to be successful, it has to be accepted and used by the trade and logistic community of Tajikistan.
- The community consist of **4 groups** of end-users:
 1. Shipping agents, freight forwarders, and carriers;
 2. Customs brokers and Customs specialists;
 3. Licensed warehouses;
 4. Traders, importers, and exporters.

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Data Input from end-user





Customs Department

- The **Customs Department** personnel will be using the UAIS as well.
- The Customs personnel consist of **2 groups of end-users** of the UAIS:
 1. Customs administrators who input data into the system;
 2. Existing or new Customs Divisions who process data and output from the system.

Data Input from Customs Administration



Customs Administrators



EDI / XML

Registration Subsystem

Register end-users

Customs Administrators



EDI / XML

Administration Subsystem

Register Customs personnel

UAIS

Data processing by Customs Divisions



Customs Control Division



Tariff Regulation and Customs Revenue Divisions



Customs Control Subsystem	Code Maintenance Subsystem	Tariff and Duty Control Subsystem	Payment and Billing Subsystem	Security Deposit Subsystem
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UAIS

Post-Clearance Subsystem	Currency Control Subsystem	Excise Control Subsystem	Risk Management and Intelligence Subsystem	Customs Statistics Subsystem
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Post Clearance and Audit Division



Anti-Smuggling and Customs Offences Division



Customs Statistics Division



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Other Ministries and Agencies



- The UAIS will need to interact with other ministries and agencies in order to exchange vital information.
- Information is exchanged using standard protocol such as **FTP, HTTPS, SMTP** etc.
- Information is exchanged using pre-defined file format between the two parties. For example XML, EDI, flat file etc.

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Data Exchange with others



Other Ministries and Agencies



EDI / XML / others

Messaging Gateway

Receive and send information

UAIS

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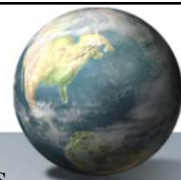
Other Countries



- The UAIS will also need to interact with other governments and organizations in order to exchange vital information.
- The Messaging Gateway is again use for information exchange.

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Data exchange with others



Other countries and organizations



EDI / XML / others

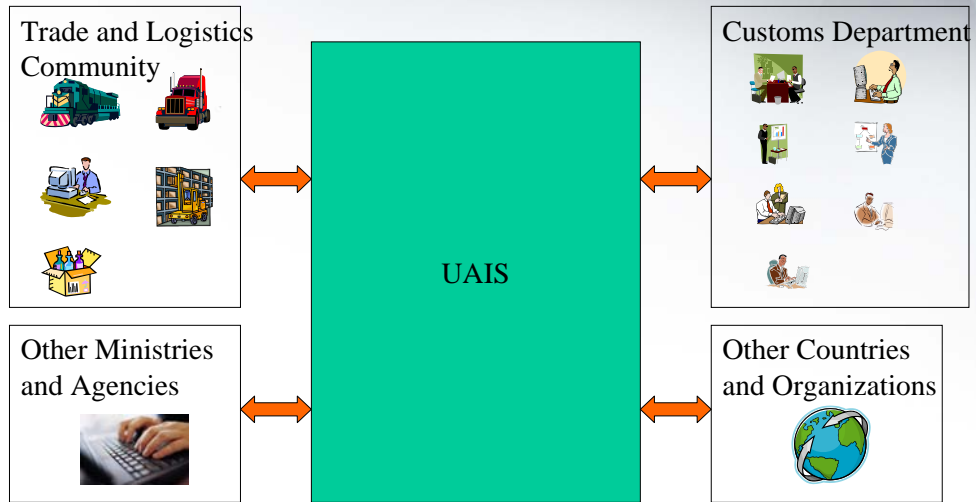
Messaging Gateway

Receive and send information

UAIS

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Single Electronic Window



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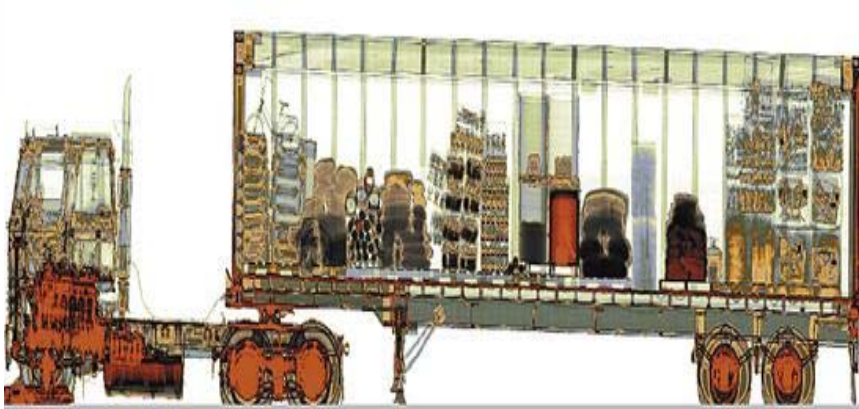


Applications of ICT in Cross Border Monitoring



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X-Ray Scanning Systems



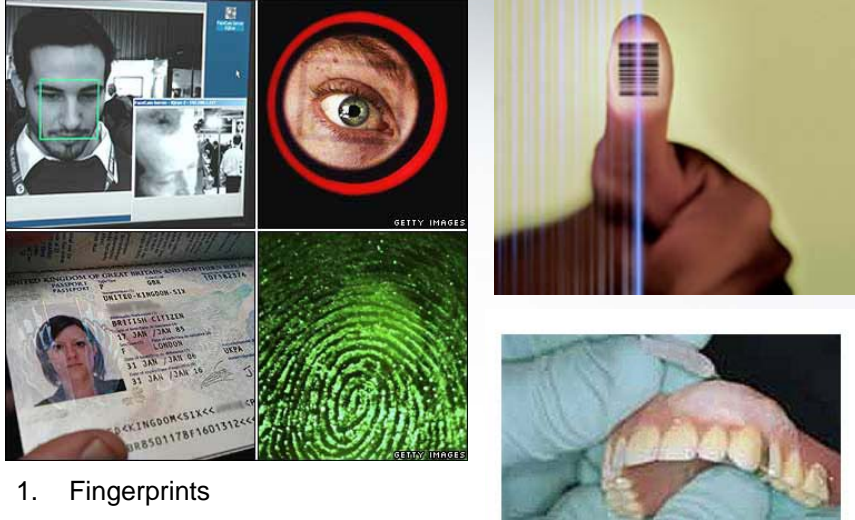
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Mobile X-Ray Scanning Systems



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Biometrics



1. Fingerprints
2. Retina
3. Dentures
4. Voice Pattern

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Surveillance Equipment



Closed Circuit TVs (CCTV) for 24 hours monitoring of facility



Portable metal detectors to scan for metallic items that could be hidden in luggages or vehicles

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Portable Equipment

Products with high risk can be classified as

- corrosive
- acidic
- radioactive
- toxic
- explosive

Standard equipment for lab test or detection of high risk products, or presence of contamination.



Intelligent Sensing Systems



Sensing Human
(Motion)



Sensing Objects
(Stationary)



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Summary



- Contemporary ICT solutions provide many possibilities to streamline workflow and increase productivity.
- Analysis shows common issues in **physical infrastructure, institutional polices** and **operational capabilities** causing cross border trade friction and inefficiency.
- There is no magic pill. An integrated solution is needed for an overall improvement.

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Will We see a New, Modern and Successful Silk Road?



“Regional Cooperation is not an option but a necessity for Central Asia.”

Mr. Tadao Chino, former ADB President

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