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## Trade logistics Issues - Summary of Country Trade Logistics Studies

	Inner Mongolia Autonomous Region of the PRC	Kazakhstan	Kyrgyz Republic	Mongolia	Tajikistan	Uzbekistan	Xinjiang Uygur Autonomous Region of the PRC
need to look at road density also)		improving parts of the road along this section. A part of the road from Shymkent to Almaty crosses the border, north of Bishkek. This causes some inconvenience as drivers meet delays at border points.	accounts for 95% of cargo transit volume. Two roads, Bishkek- Naryn-Torugart and Osh- SaryTash- Ishkertam, carry 50% of total volume of road transport. (The directionals of these roads, east-west or north south, need to synchronize with the inland waterway and rail traffic as they can serve as complementary modes of transport for transit traffic. Also, need discuss the instrument to measure the unit km cost usage for goods traversing along this network, as this will help determine the best cost-time trade-off) Road network was relatively good in terms of location and density, but	90% low quality and 8% paved. Many in Ulaan Baatar are deteriorating due to old age (20 years) and poor maintenance (0.1% of GDP is spent on road development compared to 1% international average) (need to compare this systematically across the respective countries under new roads built, maintained, spending done) Large area and low population base implies that public infrastructure projects would require huge capital outlays with long payback period. (Payback period is a concern for private sector participation and requires further investigation) Gaps in road	smaller vehicles, and the journey takes less than a week South: key parts of southern roads at Kurgan-Tyube and Dusti need rehabilitation; South: width and quality of Nizhny Pyandzn road needs upgrading East: quality also poor due to high altitude, long distances and poor maintenance (If the typical distance travelled by a truck is 500-800 kms, then relying on good road transport is another of concern)	usage to supplement its current road tax system. Uzbekistan is both a member of CAREC and Eurasec, with a large number of CAREC corridors the same as Eurasec corridors. Since Eurasec is launching its planning exercise, it would be beneficial for Eurasec and CAREC to coordinate their activities. CAREC might consider sending a representative to participate in Eurasec's road planning meetings.	Perennial problem of low empty return vehicles. (determine the actual cause of the imbalance – production or low demand centres)

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			needs maintenance. Insufficient financing for maintenance leads to loss of 200km of surfaced roads per year (Ideally, the rate of new roads being built should be at par with growth economies such as China or India, or maintained as other developed countries do.) There is a shortage of specialized trailers such as refrigerators and flat bed trailers.	transport system must be quickly addressed since roads are critical in lowering transport costs and providing the last mile of distribution services that rail transport cannot address (Another unit of measure here is the cost to serve per km for bulk, boxed, cold, liquids. )			
Rail network locomotive fleet Some of the issues we to focus on subsequently include the need to measure the, reliability of the existing schedules, the connectivity of	Problems of lack of railways and shortage of railcars constrains shippers from opening new markets overseas via Qinhuangdao for bulk and Tianjin for all kinds of cargo; Waiting for rail cars is another main reason for long rail freight	Total length of railways is 14,000km. Common complaint on the railway is the long waitinjg time at railway terminals. e.g., 7 days at Dostyk, the main cause being only one railway track available. Trans-	Rail network is short and disjointed/fragme nted, and consists of 5 arteries that are linked to that of CIS countries but not within KGZ. KGZ depends heavily on CIS countries for railway maintenance, operational	Trans-Siberian route is physically shorter than the Zamyn Uud-Xinjiang route to final destinations, the time and costs are similar because it is less developed and subject to more customs and schedule delays and inflexibility	2 railway systems, North and South, are not connected Tracks are poorly maintained and require large finances to upgrade due to their age Locomotives are old and have no power to support higher speed or capacity	"Uztemityolkonte yner" of Uzbek Railways is the operator of rail terminals. It operates 25 rail yards, with 13 equipped with container lifting capability. Shoshtrans (a Uzbek-Russian- Swiss JV intermodal	Although there is spare track capacity, there is railcar shortage due to directional imbalance with large volumes moving east and limited volumes coming back. To accommodate eastbound demand, railcars have to be repositioned empty

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rail network in-country and across borders, need to understand age of locomotives and rail lines	rail transport is the preferred mode for bulk cargo but there are no loading facilities in the railway station Delays at China- Mongolia border due to change of axles from PRC standard gauge 1.4235 mm to Mongolia 1.524 mm , or transshipment of containers from one car to another (it is better for countries to have dual gauge i.e. 3 or 4 parallel rails instead of 2, and we need to handle and know where the break-of-gauge is and build load centres or mechanized facilities to facilitate flow of goods and boxes from train to train at the break of gauge to overcome this. These broad gauges are good for carrying more tonnage but are more costly to build especially in mountainous regions. Different	loading is also required due to the differences between PRC and KAZ railways gauges. To the north, a part of the railways from Aktobe to Uralsk cuts througn the Russian border at Zhaisan, which introduces customs clearance and inspection delays and fees. Compared to CARs, Kazakhstan railways equipment and maintenance capabilities are relatively stronger.	scheduling, rolling stock and development expertise. It is a dead end of the CIS network due to mountainous terrain between them and PRC. As a small railway nation, it has weak bargaining power and depends on KAZ and UZB for supply of rail cars and multimodal containers. At the same time, it is forced to manage its operations efficiently to avoid demurrage charges, hence open to reform. A most significant gap that constrains transit flow is the absence of a rail link between PRC and KGZ. Road links are via Torugart and Ishkertam but technical condition is poor, the main constraints being inefficient and	The Russia- MON-PRC international railway network goes through Zamyn Uud, from where Ulaan Baatar is reached by rail. The long-term success of MON role as transit country depends on the attractiveness of the Trans- Siberian Railway versus the New Euro-Asia Railway/Highway (which passes through KAZ). Issues of inefficiency and inflexibility exist, e.g. 30 days advance notice is required vs. 7 days advance booking for the latter Due to huge land mass, rail has become the backbone of land transport. While it offers more competitive pricing, road	Railway lines are inconvenient for domestic transport, since the north and east lines are not connected North: old rail locomotives need maintenance and upgrade; lack of funding for electric rail; high altitude of Gissar Ranges makes road transport difficult and in winter this is closed so detour is needed through UZB East: no rail transport	forwarder with Uzbek Railways) and other freight companies also operate 6 container yards. However, these facilities are either traditional rail yards with container lifting capability or traditional cargo container yards. None of them are designed from the ground up as modern multimodal cargo facilities, integrating road and rail transport.	over long distances. Moreover, available capacity must be rationed to yield maximum benefit of moving the most worthy traffic. Westbound rail routes are the backbone of Asia- Europe land bridge, and must be promoted.

gauges should not pose a problem for an there are variable gauge akes to allow trains to change gauges in a fow minutes. This is already being done between China and Central Asia by the Talgo Company.)       slow cross border procedures, poor road infrastructure, and unavailability of logistics services along the route.       transport is popularity due to monative time and unavailability of logistics services along the route.         This is already being done Edition China and Central Asia by the Talgo Company.)       silve of the route.       silve of the route.         MON Railways (MTZ) has a control of the route and the route and the route.       MON Railways (MTZ) has a control of the route and the	Inner Mo Autono Region of	mous Kazakhstan	Kyrgyz Republic	Mongolia	Tajikistan	Uzbekistan	Xinjiang Uygur Autonomous Region of the PRC
express train	gauges she pose a pro containeriz as there ar variable ga axles to all to change in a few mi This is alre being done between C Central Asi	ould not blem for red cargo auge ow trains gauges nutes. eady e hina and ia by the	border procedures, poor road infrastructure, and unavailability of logistics services along the route. Without the rail link, roads through the mountains to multimodal centers are	increasing in popularity due to more flexible schedules Transit traffic lags behind that of domestic transport in volume but it is much more lucrative, i.e. contributes more freight revenue and has higher margins MON Railways (MTZ) has monopoly over system but operates at a deficit. Lack of maintenance and increasing freight volume has led to deterioration of certain railway sections. Locomotives are also old. Railway is dominant and important mode. Major freight forwarders offer large scale container block			

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				for international freight, which are dedicated rail services on fixed schedules e.g. Mongolian vector to Europe and Friendship vector to PRC. Hence it is timely to target development of rail infrastructure such as construction of new lines or raising capacity with double track or electrification			
Air transport and airport infrastructure (We need to determine air connectivity between domestic – domestic, domestic- regional and domestic- international, number of flights for each, utilization, and types of planes e.g 757, etc, number of		Two insternational airports (Astana and Almaty) and a domestic airport in each of the major cities. Airport is continuously equipped with new facilities to handle higher service and cargo/passenger volume. (e.g. Investing in de- icing equipment at Astana Airport).	Low volume of flights, no strong national carrier and dependent on charter flights and those of international carriers, small and obsolete fleet. Air transport laws do not meet IATA requirements, driving away potential customers. Some transport and tourist companies use Manas airport. Its parge torminal	Air freight is not popular due to higher freight charges compared to land transport. Laws disallow international couriers to provide last mile transport to end destination. Thus, air express and courier companies like DHL partner with local organizations like Mongolian Postal Services to provide the	The limiting factor is the constraint at the airports – which are inefficiently operated, lack equipment and tools to handle large bulky or complicated cargo as well as shortage of storage space policies and un- harmonized procedures – clearance documents and procedures are not standardized. (Other issues that require further	Uzbekistan Airways (O'zbekiston Havo Yo'llari) is one of the strongest players in the CAREC region, with a far- flung network and a modern fleet. Despite the obvious benefits of merging Uzbekistan Airways with other airlines in the region to form a strong Pocional Air	Domestic outbound cargo is fresh produce while inbound cargo is high valued consumption goods and electronics. (investigate the relationship of local and international cargo for critical O- D pairs in the air network.)The major problem is price and dependence on belly-capacity of passenger aircraft. This reliance on using the belly of passenger planes for oarga limits the
number of world class airports,		For traveling, the international airport suffers	cargo terminal equipment is old and unable to	provide the domestic distribution (the	investigation include: the condition of the	Regional Air System, there is a strong	for cargo limits the potential of air freight.

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Airfreight terminal structure for express, pallet, (LD7), cold room facilities, cargo repair facilities (nearby MRO operations), airfield or strips (number of runways), ownership of airport and access to logistics parks nearby eg Singapore and Incheon.		one drawback as there is no transit zone in the terminal. Thus, a passenger will need a visa to transit between connecting flights even though he does not enter the city).	cope with heavy traffic. Low capacity of line haul (availability of flights and space in plane) force companies to redirect volume to Almay. (examine the degree or extent of the number of connectivity, flexibility of connectivity and time to connect are critical success factors for air hubs/ gateways, proximity to demand or supply centres are also critical) Manas is well located to serve transcontinental flights between Europe and SEAsia and should develop the capacity to provide value added services including refueling, catering and routine maintenance services. Also it can serve	latter takes over the delivery at airport to the end customer).	runway (old, smooth, suited for night flying))	reluctance to do so. Short of a merger, Uzbekistan Airways should consider building strong alliance with other airlines in the region. Such alliance should include: Coordinated traffic interchange Joint marketing Code sharing Sharing of equipment and facilities Joint training Cooperation with other airlines in the region should help Uzbekistan Airways grow both its passenger and cargo traffic. Uzbekistan Airways, as the operator of Uzbekistan's airports is building a super air cargo hub in Navoi.	Need to attract dedicated air cargo carriers, both international freight forwarders and domestic operators.

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		importers of high- tech equipment into CIS.			Phase One expansion for this cargo hub was recently concluded. This includes completion of a 4 km long runway and installation of the navigation system. The starting date for Phase Two (infrastructure for parking, hotel, catering, aircraft de-icing, fueling, luggage system) has not been set yet.	
					It is not clear if this project has received rigorous financial and marketing review and is the product of a comprehensive master plan.	
					Korean Air is in discussion about moving its cargo operations from Tashkent to Navoi. MAS Kargo is considering setting up cargo operations in	

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						Navoi. It will be less risky if Navoi Airport signed up anchor tenants prior to the hub construction and obtained advance commitments from forwarders, logistics companies, road carriers to open up in Navoi.	
logistics facilities, dry ports containerizati on multimodal transport refrigerated capacity cold storage transportation and other equipment (FTA, EPZ, SEZ and located, are there clear rules for multi- modal transport and whether govt or private sector driven; are there	Expansion at dry ports (at Erenhot and Ganqimaodao) and inland depots (at Baotou, Linhe, Jining) Equipment and facilities are inadequate and prevent full operation of logistics functions, must be expanded to increase value- added activities Public bonded warehouse in Erlian has poor facilities international dry port status is needed for yearlong logistics	Simple warehousing facilties and cargo terminals are found in major city centres. Workers move and load/unload cargoes, use of machines is low. Wholesale centres are present to serve as distribution channels, and one storeyed storage is usually located nearby. Examples are the Adem and the Al Farabi market in Almaty.	Transactions take place in pyataks or meeting places for truck drivers, where prices for domestic haulage are relatively fixed and competitive. Until 1990s, freight terminals in main industrial centers existed that served as consolidation, distribution, and maintenance centers but these were privatized and most stopped fulfilling their original role. Balykch terminal	No road links Choyr to Zamyn Uud or Ulaan Baatar, hence no intermodal transport. Zamyn Uud is an important trade location although there are no logistics facilities. Underdeveloped, no freight forwarding regulations, lack electronic fund transfer systems hence cash payments are needed for rail transactions. Issues are: -lowering of tariff	Current rail and road transport network design does not facilitate intermodal transport Integrated terminals are lacking for goods transfer between trucks and rail wagons, warehouses for temporary storage are lacking given the absence of arrival/departure schedules Lack of modern vehicles – dated vehicles, use of formerly state	Uzbekistan Airways and Korean Air jointly participate in the construction of an international logistics center at Navoi International Airport in Tashkent. The building of an international logistics center based in Navoi International Airport is rooted in the Uzbekistan government's long-term plan to make the Airport a transcontinental hub.	Container supply and service levels need improvement. Trucking is the dominant mode. Following deregulation of the trucking industry, it is still evolving, dominated by owner-operators with newly emerging large fleets. Supply adjustments are slow and plagued by overcapacity in old inefficient trucks. This is worsened by directional traffic imbalances.
integrators eg DHL, do they	functions, and this requires a signed	Generally, cold	has potential as logistics center	discounts on transit freight	owned trucks, while financing	For the logistics center, Korean	Transport terminals:

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follow the UNCTAD/IC rules for multimodal transport documentatio n)	intergovernmental agreement, infra upgrade BTICT needs an export processing area Linhe, Bayannao'er facilities are underdeveloped to support the growing demand Ganqimaodao is served by only one railway line, and lacks logistics facilities and terminals for rail and road There is critical need for facilities for building refrigerated capacity, equipment and management knowledge for refrigerating, freezing and cooling fresh food products at dry ports and inland depots; proper location of 1-2 public refrigerated warehouses must be determined; refrigerated trucks, containers (reefers) with plugs and	chain can still be developed further in the country, such as the use of cold rooms and refrigerated trucks. There are FTAs setup in Zhetigen, Taldykorgan, Kostania, Almaty, Astana, Aktau and Shymkent. The government plans to setup more in Korgas and Dostyk, as well as Pavlorda. In Ustkamenagorsk, a Science Park will be setup.	although current volume is below 5% of its capacity. Bishkek has highest potential for multimodal operations. The most obvious transit route from PRC is via Dostyk (KAZ) but delays are common. Alternative could be Kashgar (rail)- Torugart (road) – Balykchi (rail). The last has potential for multimodal operations also Osh, Kara Suu, and Jalal-Abad. Logistics centers are represented by container yard at Alamedin railway station, while 2 other stations can handle containers. The largest marketplace, Dordoi, has multimodal	<ul> <li>-restricted</li> <li>access to Ulaan</li> <li>Baatar –cargo</li> <li>trucks not</li> <li>allowed during</li> <li>working hours</li> <li>due to</li> <li>congestion,</li> <li>forcing</li> <li>companies to</li> <li>operate for long</li> <li>hours which adds</li> <li>to operations</li> <li>costs</li> <li>-lack of</li> <li>consolidation of</li> <li>logistics facilities</li> <li>– also no shared</li> <li>facilities</li> <li>High costs of</li> <li>information</li> <li>technology</li> <li>systems</li> <li>inconsistent</li> <li>performance and</li> <li>poor service</li> <li>quality –</li> <li>knowledge and</li> <li>service level are</li> <li>low, lack of</li> <li>understanding of</li> <li>INCOTERMS</li> <li>and experience</li> <li>in handling</li> <li>international</li> <li>freight</li> <li>Equipment</li> <li>deterioration –</li> <li>40% of vehicles</li> </ul>	difficulties, extended use, and poor road conditions cause deterioration; another issue is the lack of specialized transport assets such as reefer containers and refrigerated trucks Lack of modern facilities – storage and material handling equipment (forklifts, cranes and conveyors), chiller and freezer warehouses Lack of full service logistics service providers – local operators use unproductive assets due to maintenance and reinvestment limitations; unclear responsibility for insurance claims due to lack of law indicating the liabilities of operators and requiring their purchase of insurance coverage Financing difficulties – a	Air will provide technical support and know-how for the operation, as well as sales support for Uzbekistan Airways. Uzbekistan Airways, in turn, has agreed to assist in procuring necessary approvals, funds, etc to develop the logistics center at Navoi International Airport. This approach is a good model for future development of logistics centers, dry ports, multimodal hubs and refrigerated warehouses in Uzbekistan. Locations for ICD additions should include: Termez as gateway to Afghanistan Bukhara for cotton and textile Andijan for automotive, and agricultural	Truck parks are facilities where independent operators congregate to find loads. They started as open trucking markets where truckers bid for loads, and are clearing houses for freight services. The existing range of services is limited to primitive storage and warehousing but scope for expansion is large. Physical facilities are lacking and not conducive to modern logistics. Railway terminals provide similar services e.g. consolidation, cross docking and storage that is rented out, and small providers of cargo handling storage and distribution services. Trade and distribution centers: Large centers are impressive in size, diversity,

Inner Mongolia						Xinjiang Uygur
Autonomous	Kazakhstan	Kyrgyz	Mongolia	Tajikistan	Uzbekistan	Autonomous
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refrigerated railcars		containers used	are more than 10	limiting factor; high	goods	functionality, but
should coincide		as trade stalls,	years old and	cost of vehicles	Sary Tash	need to strengthen
with these		and another is in	cost much to	plus high VAT,	for China trade	merchandizing and
warehouses		Kara Suu.	upgrade	difficulties in		logistics practices
BTICT needs				applying for loans,		or they will be
refrigerated		There are no		virtually absent		vulnerable to new
warehouse.		considerable		overseas banks,		distribution patterns
Ganqimaodao		investments,		limited credit and		and direct buying
needs refrigeration		except for the		mortgage facilities		practices.
facilities (establish		construction of a		of local banks, high		
the percent of trade		logistics and		interest rates;		
that is reefer and		trade center in		absence of leasing		
how of that is		Sary-Tash, which		companies		
imported or		will be a freight				
exported)		terminal at the				
		PRC border				
Lack of intermodal		where inbound				
capacity at borders		cargo will be				
and key inland		cleared, sold,				
transport centers		and reloaded into				
shortage of		domestic trucks				
containers		for consumption				
DTIOT		or transit into CIS				
BTICT can only		countries. Cross-				
receive railway		docking of goods				
cargo, does not		will reduce road				
have enough		destruction due				
containers, nor		to lower axle load				
good connection		of KGZ trucks.				
with Xingang		Delaws and seets				
seaport, and users		Delays and costs				
lack awareness of		occur mainly at				
it		cross border				
		points, e.g. 63% of overall costs,				
		2/3 of which are				
		unofficial. (firm				
		up the facilitation				
		cost and the				
		code of				
		accepted practices for this				
		practices for this			1	

	Inner Mongolia Autonomous Region of the PRC	Kazakhstan	Kyrgyz Republic	Mongolia	Tajikistan	Uzbekistan	Xinjiang Uygur Autonomous Region of the PRC
			activity) Border agencies are guards, Customs, phytosanitary and veterinary, transport, and quarantine which require separate documents infrastructure				
			needs upgrading but there are no specifications for equipment or facilities; EurAsEc is				
			working on this import and export clearance is done not at cross-border posts but at bonded warehouses,				
			requiring guarantee and escort processes are inefficient, poorly controlled, non-transparent (investigate the feasibility of forming key green lanes for				
IT infrastructur e, and information system	there is an e-Port information system but it is for one-way communication and not interconnected		facilitation)	High cost of IT system is one constraint for the logistics industry,	No integrated information systems for customs although a proposed model	On February 2003, Uzbekistan Customs requested a US\$2 million	PRC's customs uses H2000, deployed at all provinces and border posts. H986

Inner Mongolia Autonomous Region of the Pl	Kazakhstan	Kyrgyz Republic	Mongolia	Tajikistan	Uzbekistan	Xinjiang Uygur Autonomous Region of the PRC
with Mongolia or dry ports;there is no comprehensive program or transport and logistics ICT infrastructure with common platform within IMAR and across the borde to enable stakeholders to share real-time logistics and transport informationBaotou Municipal 	n s , on or or ort		It typically costs companies about \$500 for the purchase of networking equipment, \$50 for monthly broadband access, and an average of \$650 per user license. Smaller logistics service providers thus find it hard to adopt IT improvements even if these are beneficial to their operations. (determine the number of users and the prevalence of IT).	has been approved and work has started in 2007 to design and implement the new systems. (the new systems is called UAIS – Unified Automated Information Systems) (determine if this can be the equivalent of a one stop window for clearance.)	grant from ADB for its pilot project to develop a Unified Automated Information System (UAIS) between Uzbekistan and Kyrgyzstan. The goal of UAIS is to ultimately link Uzbek Customs with the Customs of other CAREC countries. Uzbekistan Customs has recently asked for this \$2 million grant again. Since the information system concept and design is 5 years old (the equivalent of several generations in IT), the request should be carefully reviewed to ensure the original concept and design is still appropriate today.	is the X-ray systems deployed at main border posts like Alashankou for quick cargo inspection. XUAR is relatively advanced in this area compared to the region. In terms of improvements, the only gap is lack of interface for exchange of import and export data between customs with other countries. This however requires a concerted effort.

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						Also, in the last 5 years, both software and hardware cost have gone down dramatically. The \$2 million grant amount sought by Uzbek Customs should be updated to reflect today's pricing and performance capabilities.	
Policy "blue-print" institutional capabilities business climate, legal, regulations and government procedures, investment attractivene ss of the country, and (We need to investiga te if the option of a common logistics	it is important to integrate infrastructure resources among the different departments at the local,provincial and central government levels and not just from central governments so that intergovernmental agreements are implemented and transport disagreements are resolved at the borders	Lack of Chinese banks in Kazakhstan is a concern for many Chinese businessmen operating in Almaty and Astana. Banks serve many important functions such as payment processing.	KGZ has low transit potential and logistics sector is constrained mainly by adversarial business climate rather than infrastructure. Clearance always involves unofficial payments. Large firms use in- house brokers while small ones use unlicensed brokers. Main areas for improvement are simplification and standardization	Cashmere exports suffer from burdensome inspection and export documentation requirements, e.g. contract, packing list, commercial invoice, certificate of origin, quality certificate, veterinary certificate and State Specialized Inspection Agency certificate (which takes 2 weeks to process)	Non-harmonized procedures, unofficial payments, unpredictable waiting time at border posts, outdated risk management techniques, soviet model of statistics collection and control of the economy lack of national plan for transport and logistics	Uzbekistan is an important transit country. Full implementation of international conventions, reduction of policy and regulatory impediments, coupled with a transit friendly attitude will enable Uzbekistan to attract transit traffic.	Permissible truck dimensions differ in XUAr and the region. For instance, the longest truck that can be driven in XUAR is 18m, while a 18.5m truck can be driven in Kazakhstan.

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framewo rk – short term (3 years, medium term 5-7 years, long term 7- 15 years) for CAREC)			of procedures and registration and transfer of trade data, aside from development of road infrastructure. weight certification is a significant area of abuse by traffic and road police, since weighbridges are not standard; requires standardization and mutual recognition of certificates product certification is another area where technical capability of certification centers needs improvement major reason why logistics development is slow is the uncertain business environment plus high investment requirements and expensive financing	Tariff discounts on transit freight were lowered (determine the economic impact of lowering tariffs)			

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			KGZ public sector does not encourage private sector investment in long-term infrastructure. Road Strategy aims to improve key transit routes. Development of roads is a main area for improvement.				
Institutional capacity and human resource developme nt	need for specialized and structured training by all segments of logistics and transport industries, to become competent in modern Customs practices, freight forwarding and multimodal systems and international agreements such as TIR; the trade community needs information on national logistics policy, TIR, tools to measure logistics performance and data automation	There are 4-5 institutes offering transport related courses. The diploma course is not cheap, costing US\$4,000 over four years. Private sponsorship for the students is not common. There is no data on the actual demand and supply of logistics professionals. At this point, it is a fact that graduates of transport firms	logistics training can help develop the demand side of the market, e.g. LCL quantities	Industry lacks knowledge in modern logistics management practices, (examine if knowledge transfer can be expedited through mechanisms such as OJT, formalized training, LIUP programs) inconsistent performance and poor service quality – knowledge and service level are low, no understanding of INCOTERMS	Little formal education for training contemporary logistics and transport. Most training are done on the job. Executives and Managers working in MNCs like DHL are usually sent overseas (e.g. Almaty) for training. (determine if the key global integrators are willing to consider having implants to teach the locals)	There is a shortage of qualified logistics professionals in Uzbekistan. Multinationals must import trained supply chain managers from abroad. To meet this challenge, Uzbek universities must recruit faculty members capable of teaching modern logistics and offer logistics courses that address the students' needs.	For distribution centers to maintain their competitiveness in transit trade, they can either develop in-house expertise on supply chain management or use third parties whose skills can be shared by all trade centers. The principal obstacles to industrial development may not be infrastructure capacity shortages, but lack of logistics industry facilities. The challenge is to overcome

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	BTICT needs logistics and transport management training Bayannao'er needs management training and organization of the trucking industry organization of logistics and trucking industries into professional associations to distinguish companies offering end to end goods management from basic trucking companies is lacking that would help them consolidate and open up to competition; lack of training constrains the industry from advancing into customer services such as seamless goods movement across borders and tracing shipments and specialized packaging	have good employment opportunities.		and experience in handling international freight		logistics industry management should also be trained in modern supply chain management concepts.	operational problems and develop logistics industry's knowledge base, professional expertise, and management capacity, together with information systems – hence an industry capacity development strategy with emphasis on soft elements to build enterprise capacity.
Customs and other trade facilitation deficiencies	non-harmonized documentation, information systems and inspections at	On documentation, KAZ and PRC Customs classify products		Cashmere exports suffer from burdensome inspection and	Poor road condition from Dushanbe to Jirgatal to Karamik (on KGZ border) need upgrading of	Uzbekistan adopts a policy of near 100% cargo inspection. This is a significant	Cross border problem due to unharmonized procedures (e.g. the same item are

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Region of the PRCborders non-harmonized product descriptions, classifications, and valuation lists; translation errors due to variety of languages used hence papers are rewritten;Mongolia uses a different tariff system from PRC and there are too many documents in Zamyn Uud 	differently, which gives different interpretation to the invoice value when crossing border, resulting in delays. The rule for truck dimenstions is also different in KAZ and PRC. Maximum allowable length is 18m in PRC, but 20m in KAZ (including the towhead.) Thus KAZ trucks are not allowed into PRC territory. (Note: This will be an issue for PRC accession to TIR). Unofficial payments such as the need for escort arises. This issue is less prevalent in PRC, but common in CARs. Chinese companies register common cases of cargo that need escort but are not		export documentation requirements, e.g. contract, packing list, commercial invoice, certificate of origin, quality certificate, veterinary certificate and State Specialized Inspection Agency certificate (which takes 2 weeks to process)	border post in Karamik e.g. warehouses for temporary storage, telecommunication s equipment for better control, inspection equipment Kulma Pass, a key gateway to PRC, effectively operates 3 months a year – this was doubled after 2006 Excessively strict border inspection of 80-100% of goods, so that only 5-7 trucks pass daily Long average processing time to export of 72 days due mainly to documents preparation; cost to export is \$4300/TEU or 1.6 times the average, due to document preparation, inland transport and handling, Customs clearance, technical handling Average import processing time is 44 days and cost to	impediment to trade and can be reduce through commonly accepted risk management techniques. Periodic unscheduled, and unannounced border closure should be reduced to facilitate trade and movement of people. Uzbekistan is seriously considering accession of the Kyoto Convention provided its neighbors will also participate. This will ultimately lead to Single Window and greatly reduce impediments to trade. With TAJ and KGZ working together to implement Single Window on a pilot basis,	
	carrying DG (Dangerious			import is \$3550 due to document	Uzbekistan's accession will	

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w b h e a P a s s in b c c q D s s T d l c o M o c c c c c	not used due to risk with Mongolian panks; Mongolia has no foreign exchange administration; PRC yuan is used as currency of settlement on mports so local panks cannot change US dollars quickly Dry ports' financial services are poor There is no dialogue between local governments of IMAR and Mongolia, and lack of central-local coordination of communications and policies	Cargoes) nor Dutiable Goods. Unofficial payments in the form of bribes to traffic authorities are also needed to move on the road, or to Customs to expedite goods clearance. Little exchange of data on imports and exports information with other border posts. Feedback from private sector is that Customs laws do not change as frequently. For instance, the last amendment was recently done in April 2008.			preparation, Customs clearance and technical control cumbersome Customs procedures – 16 plus documents, high costs (e.g. VAT, duties and excise payments constitute 40% of total cost of goods) informal payments; need to obtain certificate of quantity from Customs and certificate of quality from Tajikgosstandart for imported goods, requiring inspection; unharmonized procedures, documentation and valuation. Long delays at border crossing – long time and uncertainty, due to primitive methods of complete vehicle checks, etc. limited Customs facilities – inspection equipment and	help accelerate the customs reform movement in CAREC region.	

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				facilities to increase		
				productivity are		
				needed such as		
				conveyors and		
				detection systems,		
				sufficient storage		
				for temporary		
				quarantine		
				fees for escorts -		
				decree number 34		
				requires incoming		
				transport vehicles		
				to be escorted from		
				the border to the		
				destination, and		
				fees are charged,		
				\$65/hour for high value items and		
				\$12/hour for		
				dangerous or bulky		
				ones obstacles posed by		
				UZB – unofficial		
				blockade, e.g.		
				mined passages,		
				\$100 border		
				payments for Tajik		
				drivers		
				legal changes to		
				free trade/ special		
				economic zone –		
				Customs arbitrarily		
				restricts quantity of		
				exports; export		
				quotas on tobacco		
				alcohol and related		
				goods, no export		
				credit or counter		
				trade, no free trade		
				or special		
				economic zone		

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Regional							
cooperation							
0	The real constraints are transport, physical infrastructure and institutional in particular on the Mongolian side of the border. the overarching constraint is the non-implementation of the bilateral road transport agreement, which contributes to unstable trucking traffic transit agreement still under negotiation between PRC, Mongolia, and Russia signed border agreements need review and amendment to		Relatively liberal environment for trade and transit, with Presidential Decree 464 of 2007 (to simplify and standardize trade and transit procedures and customs fees, set and equip those cross-border points that enforce full inspection, coordinate inspection authorities, establish a National Committee for Trade and Logistics Facilitation, define a Single Window concept, and develop a database of trading entities)	driving up to Tavan Tolgoi which is more than 260km away from the border, a violation of the bilateral transport agreement which MON has raised to the government MON has road transport agreement with PRC in 1991 but MON trucks are not allowed into	presence of many enclaves and landlocked nature compounds transit problems despite agreement with UZB on eternal friendship, the latter maintains a stance of undeclared blockade of TAJ, i.e. mined borders, Tajik drivers are frequently checked and cargo unloaded, \$100 fee at each checkpoint in UZB, visa restrictions PRC passenger coaches from Kashgar can only drive up to Murgab and must use Tajik- operated buses to Khorog or Dushanbe which ply once a week	UZB has bilateral agreements with other CAREC members but they are not always implemented. Periodic, unscheduled, unannounced border closure caused long delays. The requirement for customs convoy escort is not only expensive but also add days of unnecessary transit time. For example, it only takes one day for an air cargo shipment to fly from Frankfurt to Tashkent, but as much as one week moving in a customs convoy	PRC is the only country that is not a member of TIR. Thus TIR effectiveness cease at the border posts of most CARs.
	permit permanent opening and third country freight status at border		Agreement with KAZ on non- licensed carriage	PRC territory while PRC trucks ply MON routes MON also signed	Tajik traders in Pamir district must apply for visas at the PRC embassy	from Tashkent to Andijan (reported by a leading international	
	ports Mongolia does not		of cargo and passengers. KAZ also issued	trade agreement with PRC in 1992 to use 3 ports,	in Dushanbe since there is none in Khorog; PRC visa	freight forwarder).	
	have e-Port system and is not		Decree 238 that defines cross	Xingang/Tianjin, Qingdao,	costs \$40 while Tajik visa costs	For UZB to realize its vision	

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connected with PRC system which has e-Port; PRC has not acceded to TIR		border posts & that they operate on one-stop basis. However this is not followed. Agreement with KAZ allowing transit of cargo with guarantee by KGZ is one- sided since it only applies to goods passing through KAZ. Agreement with TAJ Is two-sided. Agreement with UZB allows free transit but UZB imposes transit fees of \$300 and escort fees of 50- 120 euros. CIS countries impose zero duties but trade with UZB is affected by currency restrictions. Agreement with PRC on free transit is not followed by PRC since KGZ trucks going beyond Topo and Symkana require license	QingHuangDao. Congestion at Xingang causes delays for MON exports MON and PRC railways have bilateral agreement to improve freight forwarding and reduce transit tariffs. PRC will solve customs delays at Erlian for coal trains while MON will cut tariffs on transit freight by 30-50%. MON joined Convention on Transit Trade for Landlocked States in 1965 and TIR in 2002	\$300 East: visa application problems, need to deconsolidate cargo at Khorog Transit problems: little potential since imports are for domestic market; usefulness of TIR is limited due to non- participation of PRC	of becoming the center of the "New Silk Road", it must adopt a transit friendly attitude and remove impediments to movement of goods and people.	

Auto	Mongolia nomous Kazakhstan of the PRC	Kyrgyz Republic	Mongolia	Tajikistan	Uzbekistan	Xinjiang Uygur Autonomous Region of the PRC
		border agencies of neighboring countries do not talk or share information, coordinate, and have different hours of operation; also trucks from PRC are released in batches and have to travel for 100km until KGZ border point application of TIR is limited by (a) PRC;s non- accession to TIR, (b) goods from KGZ are low value with low duties, and (c) volume of trade is low and erratic – thus TIR is costly to use; need to simplify TIR and equip posts with IT to				
		posts with 11 to enable use of electronic guarantee system				
Private Sector Participation						
operational capabilities trucking companies	There are 200 members under KazAto (a member of IRU	Privatization of transport companies resulted in a	Railway is dominant and important mode. Major freight	limited number of service providers, most offer land transportation	Uzbekistan has one of the more developed rail system in Central	Logistics industry is at very early stage of development, with little activity

companies 3" partyAssociation for TIR in KA2).small enterprises with lowlarge scale container block container block container block ABBAToperations – ABBATregarded as modern logi modern logioperators operators/ investorsThese costs. Despite provide export and import services, clearance and between logistics torsinginigh transport costs. Despite costs. Despite provide export costs. Despite to the prime cargo mover in the clearance and between logistics provide addedinigh transport costs. Despite freight, which arssport to the prime cargo mover in the schedules e.g. Mongolian vector to PRC. Hence it is ismely to target development of rain infrastructure services she between logistics provide added services like services are controlled by services are controlled by real transport and per kin is lowerservices free to PRC. Hence it rail infrastructure services are construction of rail infrastructure rail infrastructure services are construction of result and oper roal transport rail infrastructure services are construction of new lines or rail infrastructure services are construction of new lines or rail infrastructure services are construction of result result result re		Inner Mongolia Autonomous Region of the PRC	Kazakhstan	Kyrgyz Republic	Mongolia	Tajikistan	Uzbekistan	Xinjiang Uygur Autonomous Region of the PRC
transport offers greater flexibility and reliability for distances within players. Trucks forwarders, import players. Trucks documentation, d	companies 3 <sup>rd</sup> party logistics operators foreign operators/ investors logistics value chain/partn erships between logistics operators Provision of logistics services across the border (WTO GATS		Association for TIR in KAZ). These companies provide export and import services, customs clearance and brokerage, intergrated logistics,, project cargoes. Some even provide value added services like insurance and sourcing. Most companies own their delivery fleet and prefer road transport over rail, although the rail per km is lower than road. Road transport offers greater flexibility and reliability for distances within 1000km. International companies operating in other CARs send some of their managers to Almaty for	small enterprises with low efficiency and high operating costs. Despite high transport rates, they are not profitable (examine if the market structure encourages free competition, since in most landlocked developing countries, freight licences are controlled by a minority and issued by governments to ensure flow of funds informally) Transport and freight forwarding is highly fragmented, consisting of many small players. Trucks are in poor condition and privately owned. Big companies formed fleets by hiring drivers with their own vehicles; these	large scale container block express train service packages for international freight, which are dedicated rail services on fixed schedules e.g. Mongolian vector to Europe and Friendship vector to PRC. Hence it is timely to target development of rail infrastructure such as construction of new lines or raising capacity with double track or electrification The major logistics players provide range of services such as multimodal transport, import and export documentation, customs brokerage, and other value added services, better facilities like cargo terminals and warehouses, and	operations – ABBAT (Association of International Road Carriers of TAJ) is the key organization, TIR guaranteeing body and de facto national representative of road transporters that manages a fleet and 7 terminals to which all incoming vehicles crossing the border, whether transit or not, are directed and their goods unloaded for temporary storage incoming trucks are required to have permits while drivers must carry visas forwarders face the issue of liability for damage, pilferage or accidents since there is no limit to the amount and no legal restriction to the use of FIATA hence they arrange for their own	Uzbekistan Railways (O'zbekiston Temir Yo'llari") is the prime cargo mover in the country. It has fairly good tracks, with the majority capable of supporting 120km/hour speed and 60 wagon long trains (almost I km long). Aside from Russia and Ukraine, Uzbekistan is the only CIS country with a factory to manufacture new wagons and to rebuild/repair old wagons. Uzbekistan Railways has completed new lines linking Kumkurgan and Tash Guzer, as well as Uchkuduk and Urgench. Except for a short stretch through TAJ in Eastern	transport; diversified distribution centers with merchandising operations and some international providers have local presence. The strongest inducement for large logistics companies to enter markets where they cannot justify their presence is through strong partners. Two large local trucking companies have the potential to offer more diversified logistics functions but need professional expertise and management

Aut	er Mongolia tonomous on of the PRC	Kazakhstan	Kyrgyz Republic	Mongolia	Tajikistan	Uzbekistan	Xinjiang Uygur Autonomous Region of the PRC
	st cc G K w P th v cr tra tra	nore developed status of the country. Generally, Kazakh drivers vill drive to the PRC border and he locals there vill take over for cross border ravel, and vice versa.	documentation, while drivers haul goods and maintain own trucks. Drivers have permits for transport of goods and are private entrepreneurs without registered legal status. Some carriers for international transport operate under TIR ((=?). Since their trucks have smaller payload, they get smaller proportion of job orders, and uncertain future orders is a disincentive to purchasing new trucks.	systems. They house small customs offices within their logistics centers, electronically linked to MON Customs system. Legal restrictions on foreign enterprises require them to form partnerships with MON providers. Industry is underdeveloped, with no freight forwarding regulations, (investigate and analyse if there are freight forwarders associations that can connect readily with their international counterparts i.e. FIATA) lacks electronic fund transfer systems hence cash payments are needed for rail transactions. There are no shared facilities (need to understand state of eCommerce		have to travel on other railway's tracks for domestic services. On the other hand, Uzbekistan does not have large national motor carriers capable of long distance, international services. Part of that is caused by heavy duties on imported vehicles and restrictive foreign exchange regime. The logistics industry is underdeveloped, with no true logistics companies – only freight forwarders. Growing this industry would require a better investment climate and availability of qualified personnel.	

	Inner Mongolia Autonomous Region of the PRC	Kazakhstan	Kyrgyz Republic	Mongolia	Tajikistan	Uzbekistan	Xinjiang Uygur Autonomous Region of the PRC
				development)			
Demand-side issues							
Regional and national forecasts Production logistics and consumption logistics, etc.		Ministry of Transport and Communications has approved a national plan up till 2015, and estimated that an investment amount of US\$26 billion will be required. The strategy aims to meet expected strong growth in cargo and passenger traffic. Currently, KAZ is underperforming in many indicators. For instance, cost of road transport is estimated to be 11% of the final cost of goods sold, while that of rail is 8%. The cost ratio in developed countries is 4.5%. The government plans to pass ownership of	KGZ is poor in natural resources relative to KAZ and UZB, and has complicated mountainous terrain. Under Soviets, industrial development was not always based on available local resources or demand. After independence, most enterprises were privatized but private businesses did not acquire financial resources or were well managed, competition level was low hence the economy is still underdeveloped, growth is slow and GDP per capita is low, investment potential is low. Borders were also put up.	Huge geography with low population density, small economy Economy not well diversified, relying on 3 main sectors Dependent on PRC for energy and minerals exports Dependent on foreign direct investment Underdeveloped infrastructure in power supply and water High interest rate Large area and low population base implies that public infrastructure projects would require huge capital outlays with long payback period.	low population density hence small market	Uzbekistan's population and economic activities are concentrated in the eastern part of the country. Uzbekistan relies heavily on cotton production as the major source of export earnings. It is now the world's second largest cotton exporter and the fifth largest producer. Other major export products include gold, oil and gas, fertilizers, ferrous and non-ferrous metals, textiles, food products, machinery and automobiles. Doubled- landlocked, the logistics costs of getting its products to international	Landlocked, distant from coast, and geographically isolated from PRC population centers Volume of transit trade through XUAR is much larger than direct imports and exports. Goods are brought to large distribution centers where the bulk of sales is to Central Asia. (investigate if this concept is workable universally as there are locational decsions that must be borne e.g. the need to consider accessibility, cost of storage and speed to market) There is also a significant volume of negotiations over goods that are shipped from elsewhere. Hence its importance as a regional transit hub for PRC trade with Central Asia

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	faciltieis such as cargo and air terminasl to private sector over a ten years period. During this period, the aim is self financing of the mode of transport. Besides public- prviate partnership, institutions like ADB, World Bank, ERDB and IDB will play crucial roles too.	Strong concentration of agric production in certain regions is good precondition for marketing centers. Agribusiness growth is constrained by small size and fragmentation of enterprises and inefficient route to markets – hence need for logistics centers and storage and distribution (investigate if the option of relying on co-operatives or clusters to manage their economy. Is workable)			markets are high. Bureaucratic barriers, trade impediments, inadequate infrastructure and high cost of capital also contribute to high logistics cost. One local source estimated Uzbekistan's logistics cost as a percentage of GDP to be around 40% (as compare to 8% to 12 % in developed countries). Therefore, logistics improvement is critical to the economic development of Uzbekistan.	Inland transport systems are not as developed as coastal ones, and capacity is limited. Also intermodal services to coastal regions are lacking or poorly coordinated, while logistics services are not developed. For light industries, products tend to be consumption items requiring elaborate distribution arrangements and logistics. Bulk logistics to serve the resource/agricultur al products shipment. Great potential for third party providers/outsource d logistics for heavy industries, which need to develop their service capacity with professional expertise and information systems and network of partners The most obvious

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						transport problem is high cost (determine the relative cost), and unavailable required capacity esp. in rail transport due to traffic imbalance. The real solution lies in more local processing to add value to products shipped, which needs further industrialization.