CPMM International Workshop
Almaty, Kazakhstan
March 1, 2013

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SOW

1. Revisit CPMM results and data
2. Some new takes on CPMM
3. Policy implications
4. Process implications
5. Procedural implications
6. Some suggested next steps
7. Q&A

Comments on Workshop Agenda

Reality:

1. Border crossings are still main impediments to free flow of trade
2. Borders are not always uniformly porous
3. NELTI-4 (2013) study reports that 40% of ground transport time lost at borders (dollar impact = ?, private sector can tell us better here!) IRU estimates freight cost of USD 4-5K depending on route.
4. worst case scenario, drivers wait for up to 138.8 hrs or 2 weeks (impact on operating cost = ?, impact on productivity = 50%, end up employing twice amount of drivers and trucks for the same freight volume delivered/mth). Average speed of vehicle drops from 52 km/h to 19 km/h. In short, a 3-day trip now takes 8 days; lost 5 days due to BCP and other delays. (NELTI-4 figures were 60 and 17.5 km/h respectively).
5. Net result, freight still gets transported albeit at higher business cost, longer than needed lead time, higher wastage for perishables, lower labour and capital productivity
6. Road transport is lifeline for landlocked developing countries
7. Do we have a model corridor (section) to benchmark against? Are there adequate ancillary road infrastructure (sub-corridors to support primary axis) for viable, cost effective, time reasonable transport without compromising on safety, speed and security?

Review of Quarterly Report Format

- Sample from CPMM Q3 2012 report

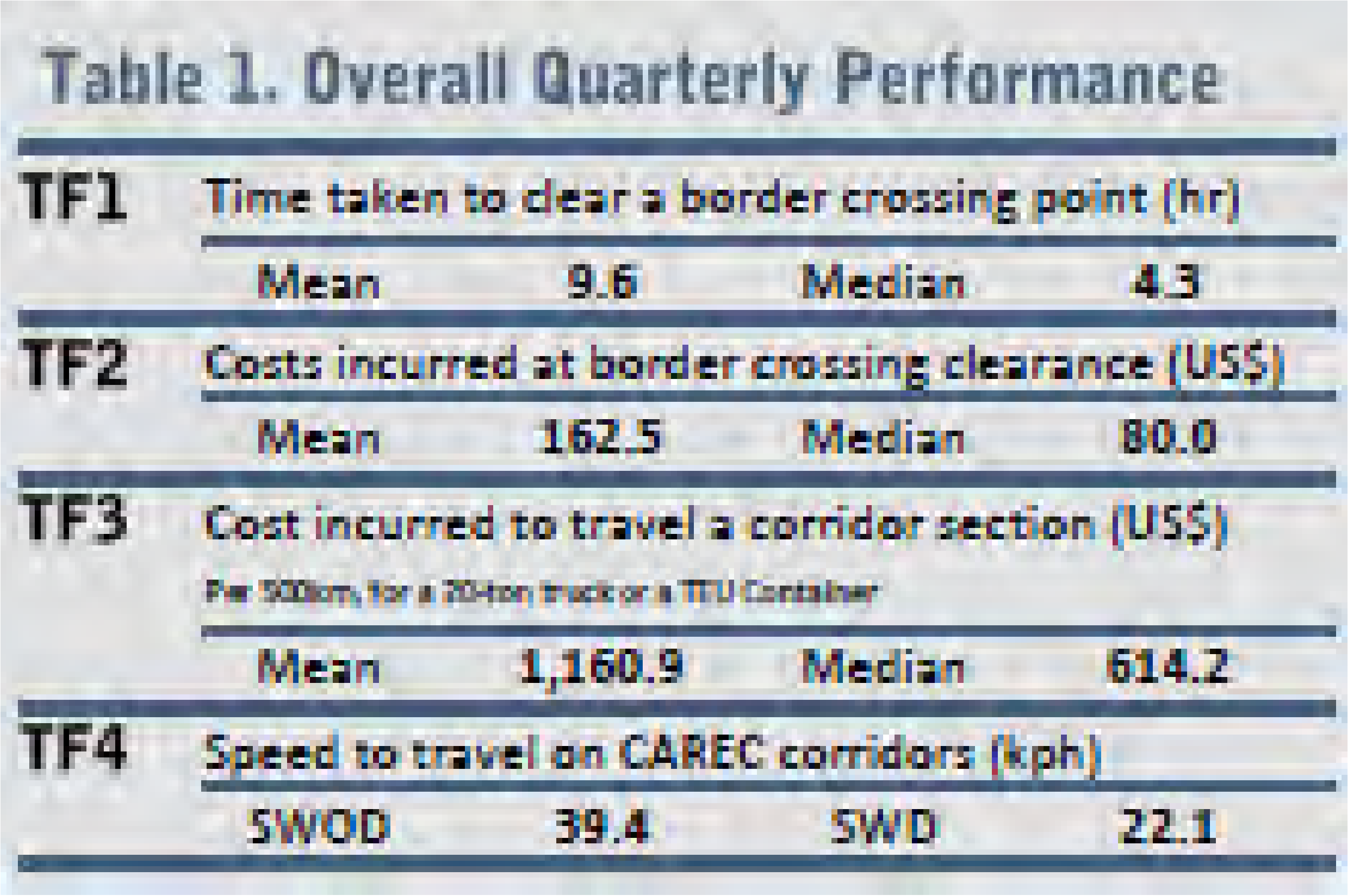
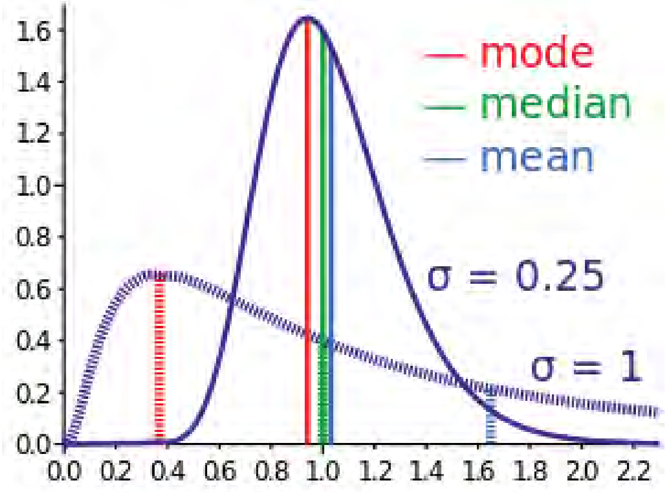


Table 1. Overall Quarterly Performance

TF1	Time taken to clear a border crossing point (hr)			
	Mean	9.6	Median	4.3
TF2	Costs incurred at border crossing clearance (US$)			
	Mean	162.5	Median	80.0
TF3	Cost incurred to travel a corridor section (US$) Per 500km, for a 20-ton truck or a TEU Container			
	Mean	1,160.9	Median	614.2
TF4	Speed to travel on CAREC corridors (kph)			
	SWOD	39.4	SWD	22.1

Clearly, mean >> median =>

1. Median is better measure
2. skewness of data distribution (positive skew; long right tail)
3. extreme values in outliers
4. Distribution is probably log-normal with very large σ



Suggestion for table reporting

Based on
2011Q3
results
R=19.6-38.8

- Table 1: Overall Quarterly Performance

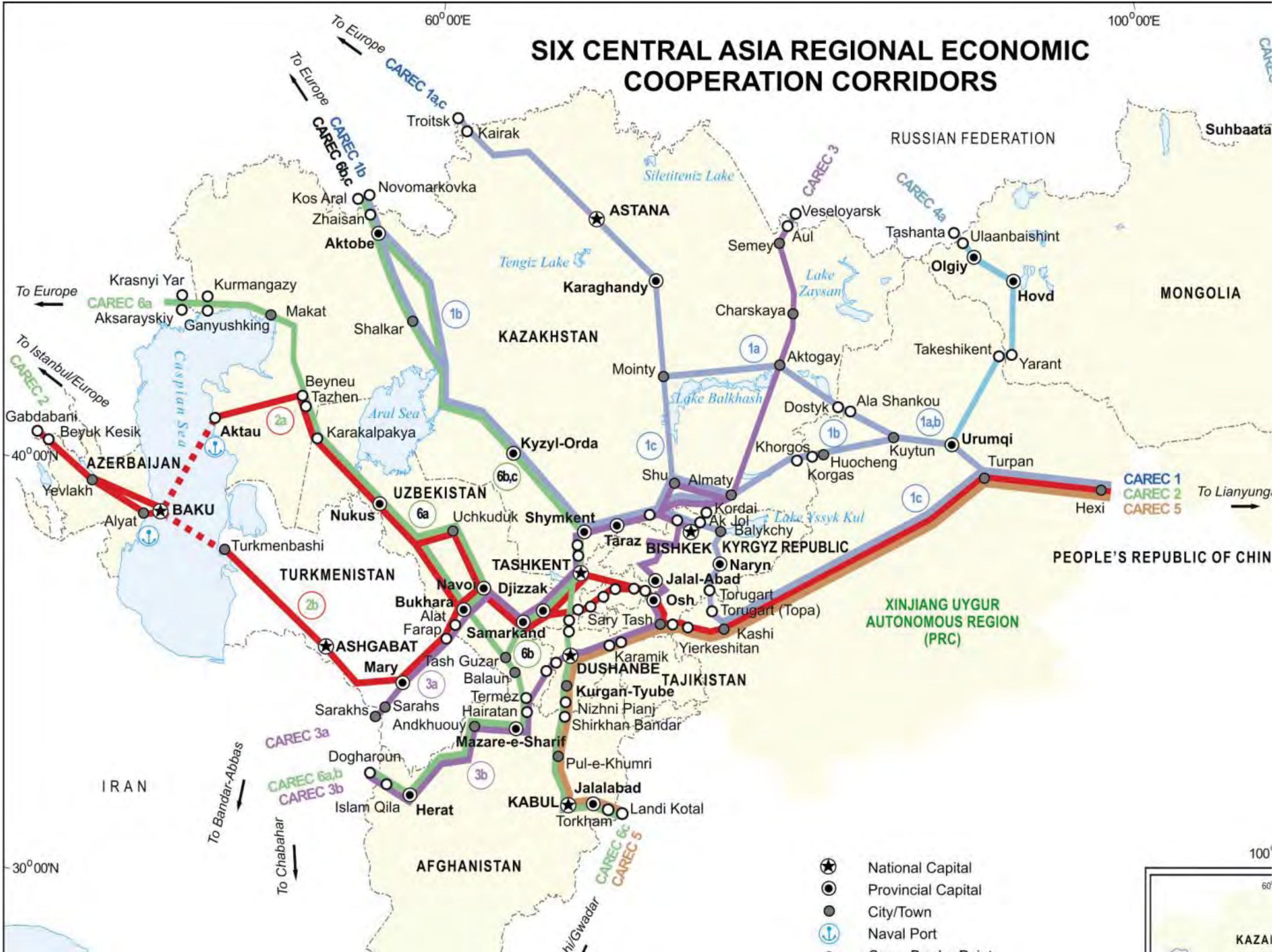
TF1	Time taken to clear BCP (hr)				New		Range of top 5%	Q-on-Q change	Q3 y-o-y change
	Mean	9.6	Median	4.3	Mode	5	19.4-75.5	2.4↓, 0.4↓	1.1↑, 0.3↑
TF2									
TF3									

TF1	Time taken to clear BCP (hr) (Mean, Median, Mode)	Range of top 5%	Q-on-Q change	Q3 y-o-y change
	(9.6, 4.3, 5)	xx-yy	(2.4↓, 0.4↓, MM)	(1.7↑, 0.2↑, MM)
TF2				
TF3				

Some questions on current assumptions

- Use of normalized per TEU per 500-km uom
  - IRU states that a model highway section may range from 800 to 1000 km.
  - Can consider normalizing to 300 or 800 km stretches for consistent comparison
  - Propose 300 km as some stretches along Corridors (1-6) are short

SIX CENTRAL ASIA REGIONAL ECONOMIC COOPERATION CORRIDORS


60°00'E
100°00'E
40°00'N
30°00'N
To Europe
CAREC 1a,c
To Europe
CAREC 1b
CAREC 6b,c
Troitsk
Kairak
RUSSIAN FEDERATION
Suhbaata
Siletiteniz Lake
CAREC 3
CAREC 4a
Novomarkovka
Kos Aral
Zhaisan
Aktobe
ASTANA
Veseloyarsk
Aul
Semey
Tashanta
Ulaanbaishint
Olgiy
Hovd
MONGOLIA
Tengiz Lake
Karaghandy
Lake Zaysan
Krasnyi Yar
Kurmangazy
To Europe
CAREC 6a
Aksarayskiy
Ganyushking
Makat
Shalkar
1b
KAZAKHSTAN
Charskaya
1a
Aktogay
Takeshikent
Yarant
Mointy
To Istanbul/Europe
CAREC 2
Caspian Sea
Beyneu
Tazhen
Aral Sea
Lake Balkhash
Dostyk
Ala Shankou
Gabdabani
Beyuk Kesik
Aktau
2a
Karakalpakya
1b
1a,b
1c
Khorgos
Huocheng
Kuytun
Urumqi
AZERBAIJAN
Kyzyl-Orda
Korgas
Turpan
Yevlakh
6b,c
Shu
Almaty
CAREC 1
CAREC 2
CAREC 5
To Lianyunga
Hexi
UZBEKISTAN
1c
BAKU
Alyat
Nukus
6a
Uchkuduk
Shymkent
Kordai
Ak Jol
Lake Yssyk Kul
Balykchy
Turkmenbashi
Taraz
BISHKEK
KYRGYZ REPUBLIC
TURKMENISTAN
TASHKENT
Naryn
PEOPLE'S REPUBLIC OF CHIN
Navoi
Djizzak
Jalal-Abad
Bukhara
Osh
Torugart
Alat
Torugart (Topa)
XINJIANG UYGUR AUTONOMOUS REGION (PRC)
2b
Farap
Samarkand
Sary Tash
Kashi
ASHGABAT
Yierkeshitan
Tash Guzar
6b
Karamik
Mary
DUSHANBE
TAJIKISTAN
3a
Balaun
Termez
Kurgan-Tyube
Sarahs
Sarakhs
Hairatan
Nizhni Pianj
Andkhuouy
Shirkhan Bandar
CAREC 3a
Mazare-e-Sharif
Pul-e-Khumri
IRAN
Dogharoun
3b
To Bandar-Abbas
CAREC 6a,b
CAREC 3b
Jalalabad
KABUL
Landi Kotal
Islam Qila
Herat
Torkham
CAREC 6c
CAREC 5
To Chabahar
AFGHANISTAN
hi/Gwadar
National Capital
Provincial Capital
City/Town
Naval Port
100°
60°
KAZA

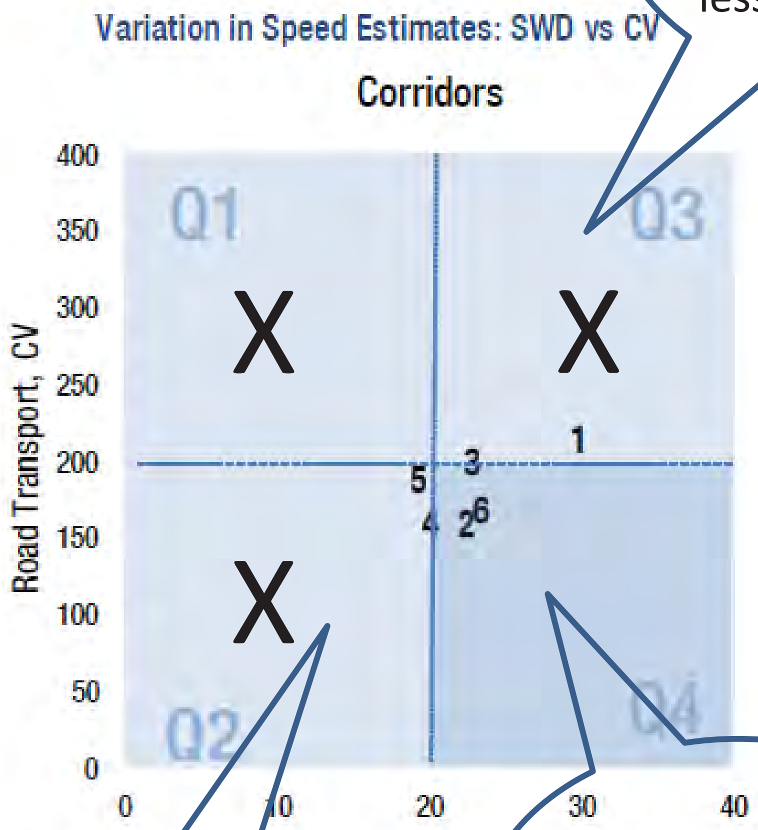
Corridor Visuals

- For each corridor, take each normalized section (/TEU/500-km) and do breakdown in terms of SWOD and SWD
- Provide table for these breakdowns for comparison and benchmarking purposes, and incidence analysis
- Update outcome of incident analysis as these affect rest of transport flow
  - Promote, develop and adopt common solutions to problems in trade facilitation

Suggestion: Sample Table for Corridor Section Reporting

	C1				**C2**			
	(SWOD, SWD) in hrs				(SWOD, SWD) in hrs			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
C1S1	(a,b)	(x,y)	…	…	…	…	…	…
C1S2	…	…	…	…	…	…	…	…

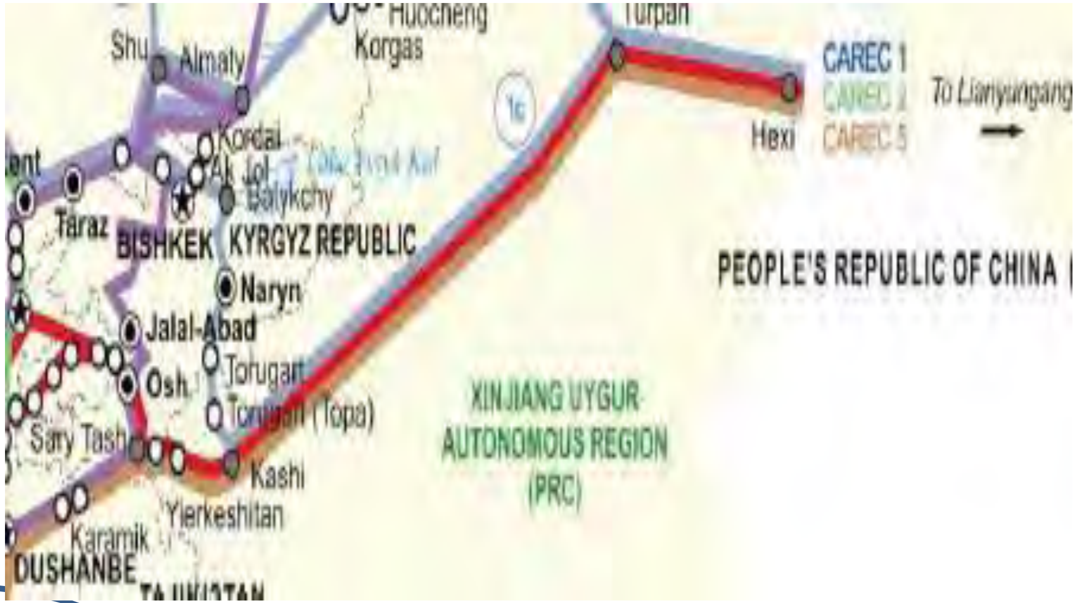
Yr 2011 results



Should not have happened, look out for random checks e.g nBCP and BCP, less congested

Identify new road section to build but where?

Identify new road section to build and support traffic


Shu
Almaty
Huocheng
Korgas
Turpan
CAREC 1
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To Lianyungang
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Kordai
Ak Jol
Balykchy
Taraz
BISHKEK
KYRGYZ REPUBLIC
PEOPLE'S REPUBLIC OF CHINA
Naryn
Jalal-Abad
Osh
Torugart
Torugart (Topa)
XINJIANG UYGUR AUTONOMOUS REGION (PRC)
Sary Tash
Kashi
Yierkeshitan
Karamik
DUSHANBE

Review of CPMM data gathering analysis procedures and implementation arrangements

- Given that median is better robust measure, may like to consider CoV using median through coefficient of dispersion (CoD)
- CoD = (mean absolute deviation)/median
  - $$CD = \frac{1}{n}\frac{\sum |m - x|}{m}$$
- Current data distribution has thick tail, so estimating centre of data through the sample mean may not be efficient (statistically we can use the asymptotic relative efficiency or ARE to confirm)

Other operational measures to consider

- Drivers’ working time (in hrs)
  - For total working time, take ‘000 hrs to be consistent with IRU on annual basis
- Time of vehicle en route (in days)
- Number of stops en route (in absolute number)
  - Only take those that consume more than 15 minutes
- Number of BCPs (in absolute number)
- Duration of stops en route (in days)
- Volume of road haulage carried on corridor (in ‘000 m.t.)
- Define clear and acceptable cutoff for stoppage at BCP (30 minutes for non-CAREC and 10 minutes for CAREC) and nBCP (15 minutes)

Other Trade Facilitation Indicators

- LPI – World Bank
  - Efficiency of the clearance process (TF1)
  - Quality of trade and transport infrastructure
  - Ease of arranging competitively priced shipments (TF2 & TF3)
  - Logistics competence and quality of logistics services
  - Ability to track and trace shipments
  - Timeliness of shipment delivery (TF4)

- Doing Business Report – World Bank

Start-up	• **Starting a business** *Minimum capital requirement, procedures, time and cost*
Expansion	• **Registering property** *Procedures, time and cost* • **Getting credit** *Credit information systems, Movable collateral laws* • **Protecting investors** *Disclosure and liability in related party transactions* • **Enforcing contracts** *Procedures, time and cost to resolve a commercial dispute*
Operations	• **Dealing with construction permits** *Procedures, time and cost* • **Paying taxes** *Payments, time and Total Tax Rate* • **Trading across borders** *Documents, time and cost* • **Getting electricity** *Procedures, time and cost* • **Employing workers**
Closing	• **Closing a business** *Time, cost and recovery rate*

What we have in CPMM is the "Ease of Moving Goods" which is an important component of doing business – see red above

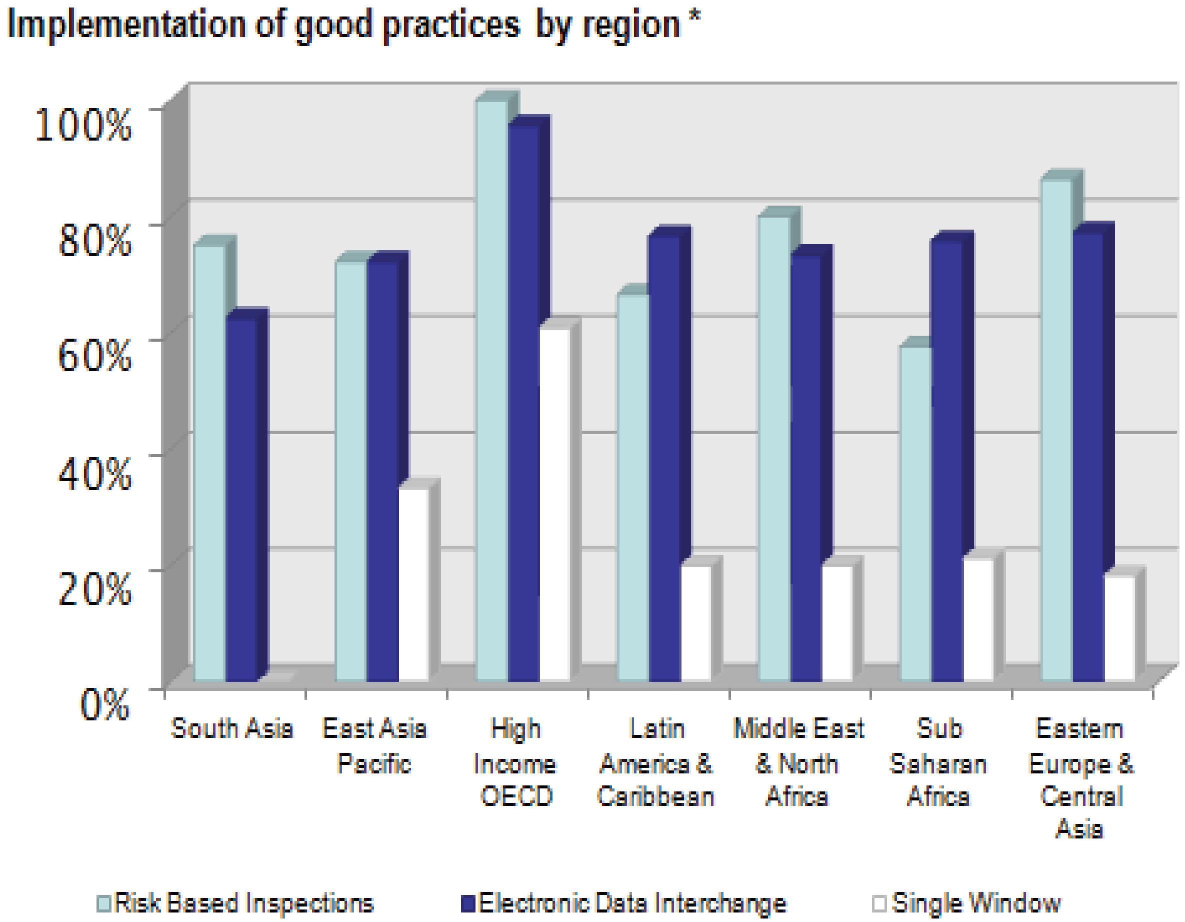
Doing Business – Trading Across Borders index What are best practices?

✓ Paper-free electronic data interchange (EDI) system

✓Risk - based inspection systems (less than 10% of cargo physically inspected)

✓Electronic Single Window for obtaining trade documents and approvals

We need to adopt and benchmark aggressively for CAREC!



Comparing LPI, DB and CPMM

	LPI	DB	CPMM
Source of data	3rd country providers of logistics services	In-country entities with knowledge of business regulations (SMEs)	ground operators from T&L sector
Concept	Performance outcomes	Analytic breakdown in component procedures	Detailed Time-Cost study
Frequency	Every 3 years since 2007	Yearly since 2003	Monthly since 2010
Significance	6 indices of logistics performance	10 (total 11) metrics of broader business regulatory environment	4 operational TFI’s
Countries	155	183	10 and 14 partner associations
Note	Separate but complementary. Both indices provide basic input for policy-makers. Neither are in-depth analysis.		In-depth follows from UNESCAP

Recall from WTO on Trade Facilitation

Under the Customs Union, Partner States should agree to initiate trade facilitation by:

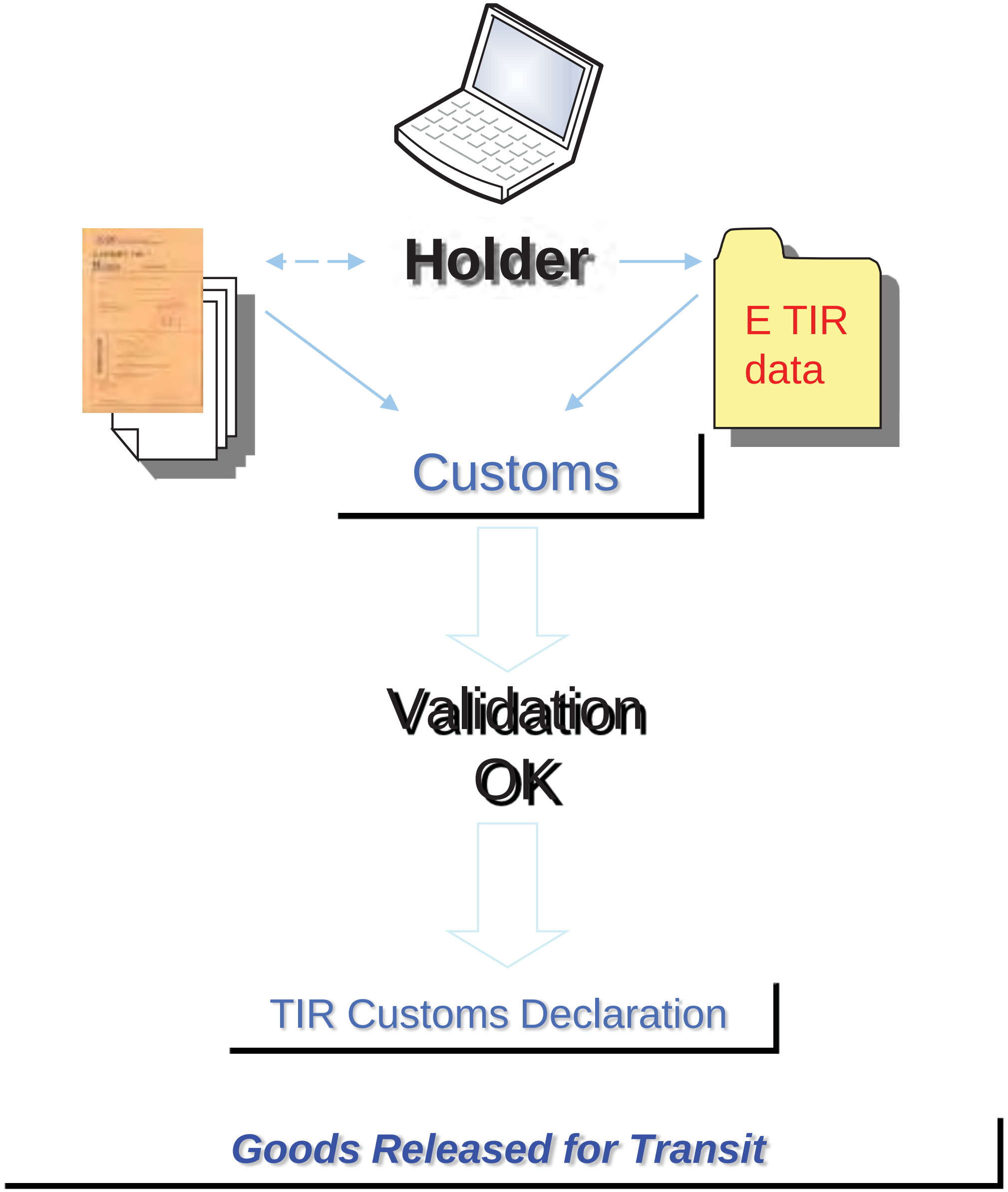
- Reducing the number and volume of documentation
- Adopting common standards of trade documentation and procedures
- Ensuring adequate co-ordination and facilitation of trade and transport activities (found in TR1-TR4)
- Periodically reviewing procedures adopted in international trade and transport facilitation in order to simplify and adopt them accordingly.

Policy Reforms for BCPs

- TIR green lanes for priority goods
  - Have to decide if perishables such as food (fruits and vegetables) are priority goods as they form only 19% of cargo by volume and they rely on road transport (79% of all cargo moved by tonnage)
  - Need to reduce lead time to improve distributional coverage of agri-produce within CAREC
- TIR electronic pre-declaration
  - Based on CPMM AR2011 p.10, only 60% of road transport used TIR which translates to about 42% for international shipments
  - Reduce waiting times, burdensome inspection, security checks, additional costs (see SafeTIR with e-seals)
- National Single Window and CAREC Single Window
  - As intra-CAREC trade forms 59% by volume, having an NSW will reduce dwell time
  - Must be used to complement TIR
- Determine main (primary) corridor
  - IRU says main corridor must cross at least 3 states or 2-3 BCPs
  - Personally, this is too restrictive a selection criteria
  - Initial analysis suggests that Corridor 1 is critical albeit less consistent travel speed (high CoV)
  - Trial TIR on C1

Single Windows

- One Stop Border Post (OSBP) to reduce delays in clearance of goods at border posts
- Enable
  - **Risk Assessment** by Customs authorities
  - **Acceleration** of border crossing procedures
  - **Security** in international trade



Holder

E TIR data

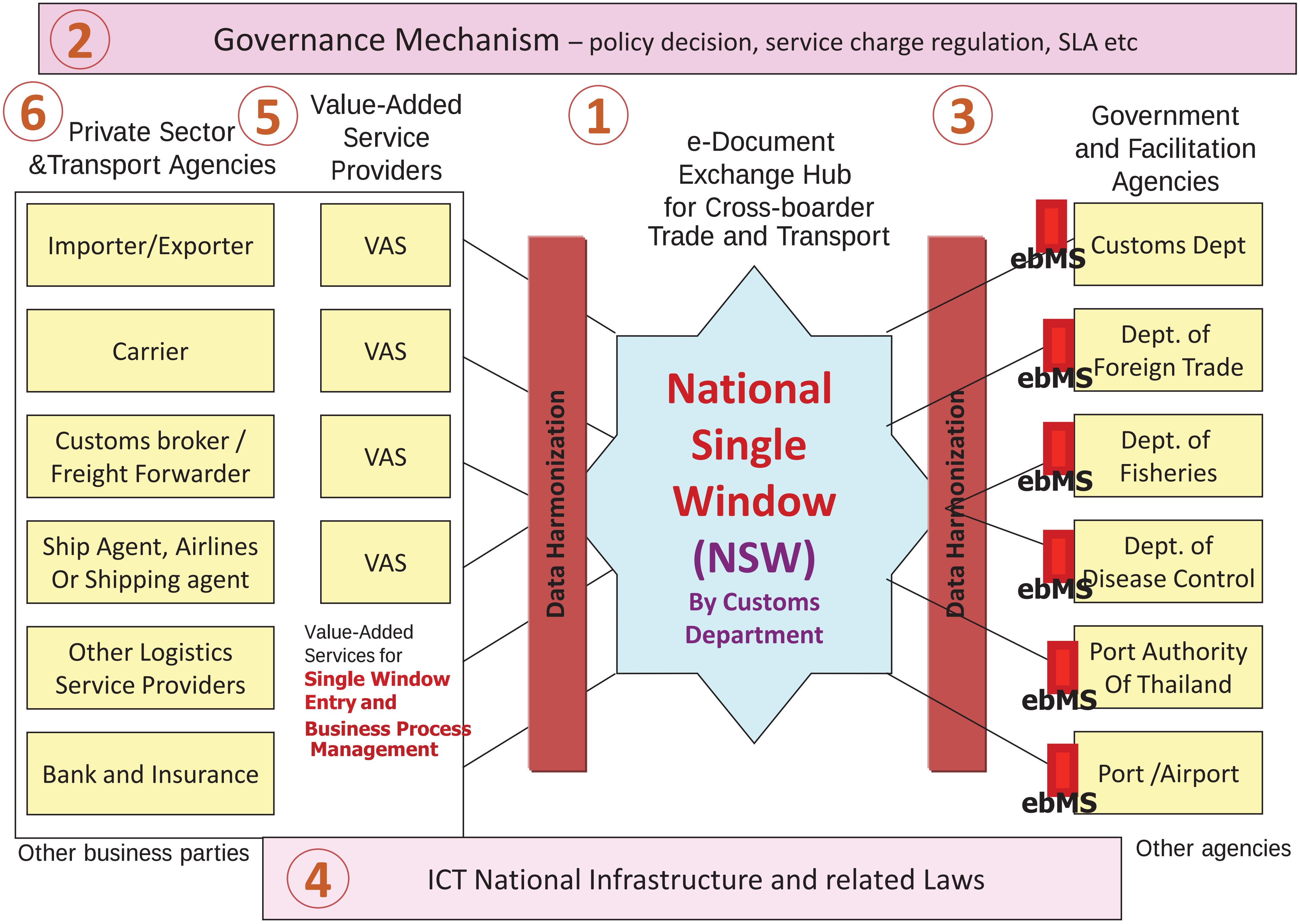
Customs

Validation OK

TIR Customs Declaration

Goods Released for Transit

National Single Window Framework



② Governance Mechanism – policy decision, service charge regulation, SLA etc

⑥ Private Sector &Transport Agencies

- Importer/Exporter
- Carrier
- Customs broker / Freight Forwarder
- Ship Agent, Airlines Or Shipping agent
- Other Logistics Service Providers
- Bank and Insurance

Other business parties

⑤ Value-Added Service Providers

- VAS
- VAS
- VAS
- VAS

Value-Added Services for **Single Window Entry and Business Process Management**

① e-Document Exchange Hub for Cross-boarder Trade and Transport

Data Harmonization

National Single Window (NSW)

By Customs Department

Data Harmonization

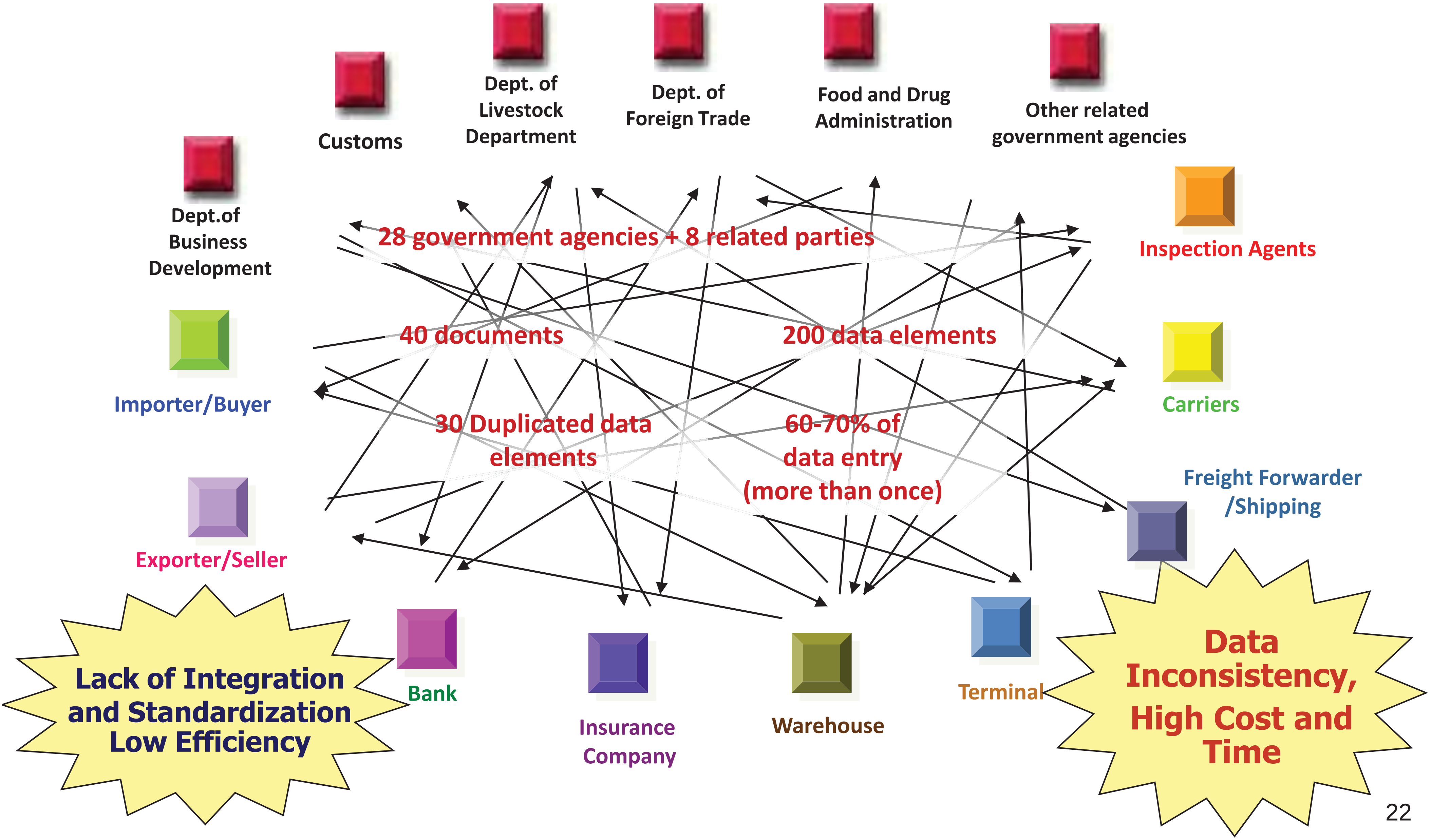
③ Government and Facilitation Agencies

- ebMS Customs Dept
- ebMS Dept. of Foreign Trade
- ebMS Dept. of Fisheries
- ebMS Dept. of Disease Control
- ebMS Port Authority Of Thailand
- ebMS Port /Airport

Other agencies

④ ICT National Infrastructure and related Laws

Needs and Requirements of Data Harmonization Project



Customs

Dept. of Livestock Department

Dept. of Foreign Trade

Food and Drug Administration

Other related government agencies

Dept.of Business Development

Inspection Agents

Importer/Buyer

Carriers

Exporter/Seller

Freight Forwarder /Shipping

Bank

Insurance Company

Warehouse

Terminal

28 government agencies + 8 related parties

40 documents

200 data elements

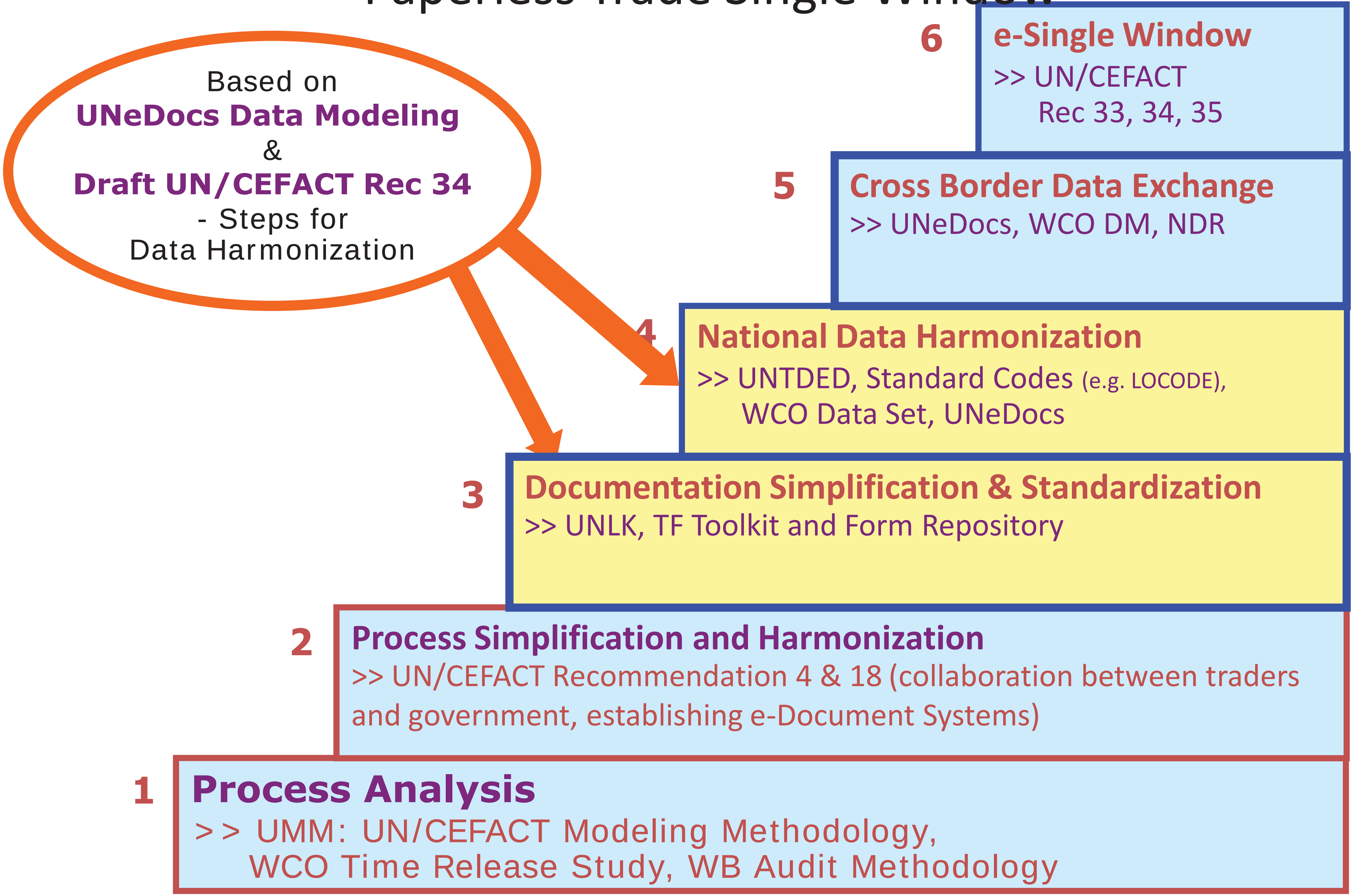
30 Duplicated data elements

60-70% of data entry (more than once)

Lack of Integration and Standardization Low Efficiency

Data Inconsistency, High Cost and Time

Scope of NSW: Step by Step Guide towards Paperless Trade Single Window



Based on
UNeDocs Data Modeling
&
Draft UN/CEFACT Rec 34
- Steps for
Data Harmonization

6 **e-Single Window**
>> UN/CEFACT
Rec 33, 34, 35

5 **Cross Border Data Exchange**
>> UNeDocs, WCO DM, NDR

4 **National Data Harmonization**
>> UNTDED, Standard Codes (e.g. LOCODE),
WCO Data Set, UNeDocs

3 **Documentation Simplification & Standardization**
>> UNLK, TF Toolkit and Form Repository

2 **Process Simplification and Harmonization**
>> UN/CEFACT Recommendation 4 & 18 (collaboration between traders and government, establishing e-Document Systems)

1 **Process Analysis**
>> UMM: UN/CEFACT Modeling Methodology,
WCO Time Release Study, WB Audit Methodology

Concluding Remarks

- Should move from land locked to land linked
- Start to benchmark, (i) by full corridor, (ii) by corridor sections, and (iii) over time (yearly and quarterly)
- This is to monitor condition of transport infrastructure (capacity building), efficiency of crossings (operations capability), trade flow intensity (ease of doing business or trade expansion)
- AIM – promote trade, increase competitiveness and economic growth

Questions