Enhancement of Containerisation in Asia

Mukul Saran Mathur
Head UIC Asia Regional Office,
New Delhi
ms.mathur@gmail.com
mathur@uic.org
GRFC-2010.St Petersburg

Growth of Asian Economies

INTERNATIONAL UNION OF RAILWAYS

unity, solidarity, universality

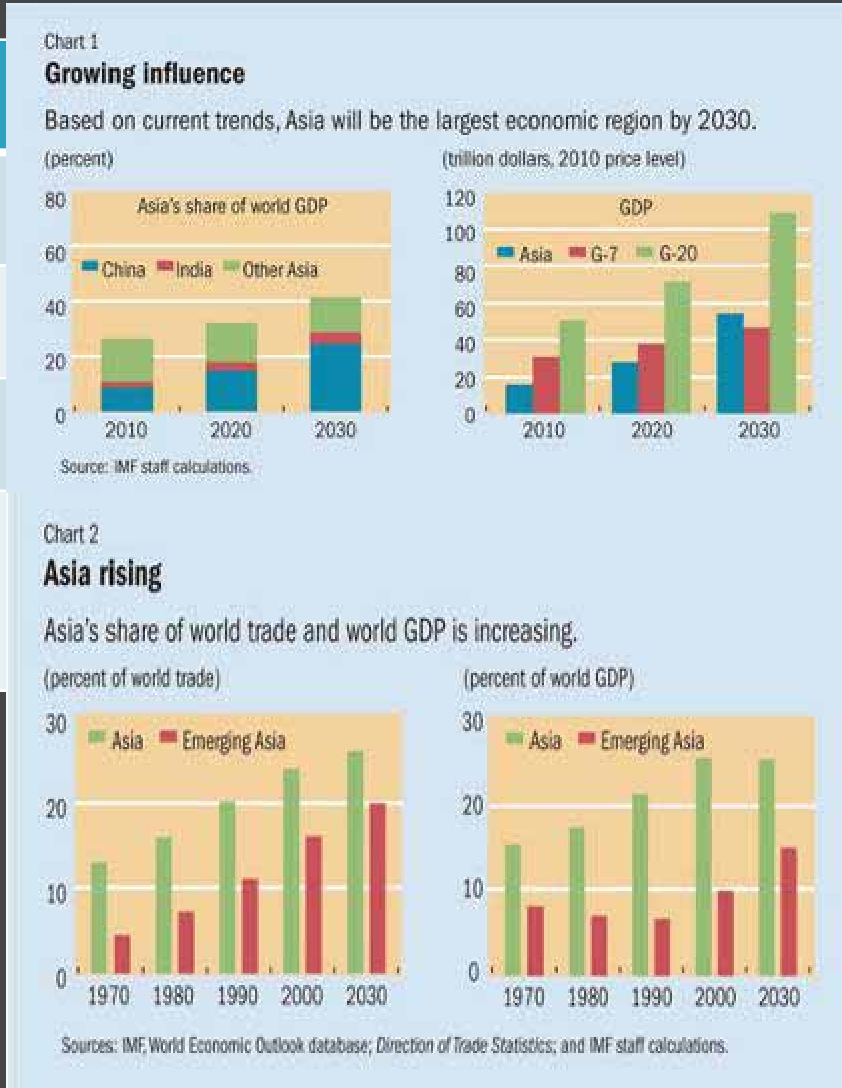
ADB Asian Development Outlook 2010

Region	2009	2010	2011
Central Asia	2.7	4.7	5.9
East Asia	5.9	8.3	7.7
South Asia	6.5	7.4	8.0
South East Asia	1.2	5.1	5.3

IMF latest projections indicate :

•Within 5 years Asian economies will be 50% larger and will account for one third of Global output comparable to US and Europe economies

•By 2030 Asia GDP will exceed G7



Increasing Trade

INTERNATIONAL UNION OF RAILWAYS

unity, solidarity, universality

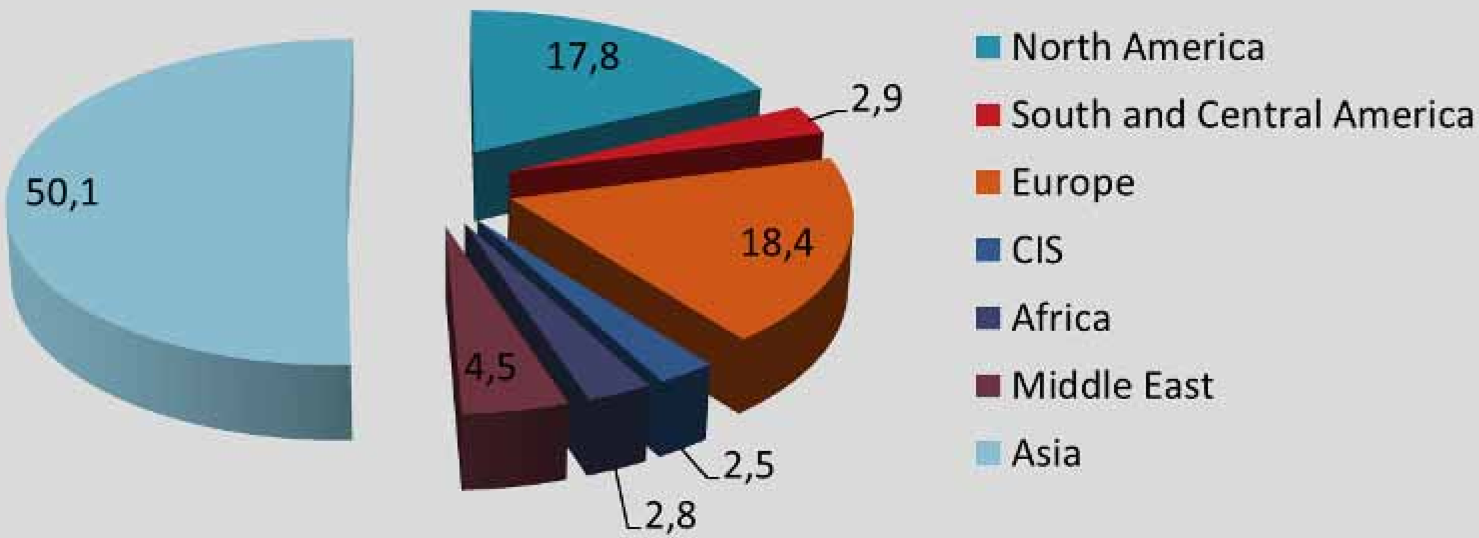
- Asia's Share in world merchandise grew from 21% in 1990 to 36% in 2007
- Bilateral Trade between China –India grew from US$2.3 billion in 2000 to US $ 56 billion by 2008
- China-ASEAN trade grew at 22% from US$ 40 billion in 2000 to US $ 230 billion in 2008
- India –ASEAN trade since 1998 grew at 27% from US$ 6billion to US $ 38.4 billion

Regional Share in Asian Exports

INTERNATIONAL UNION OF RAILWAYS

unity, solidarity, universality

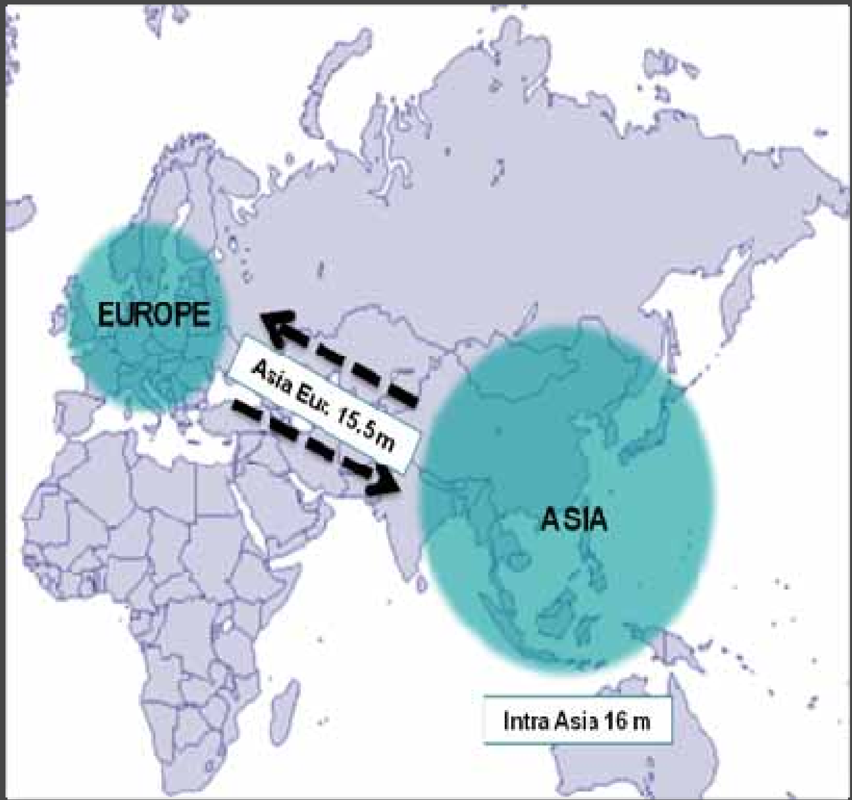
WTO Statistics 2008



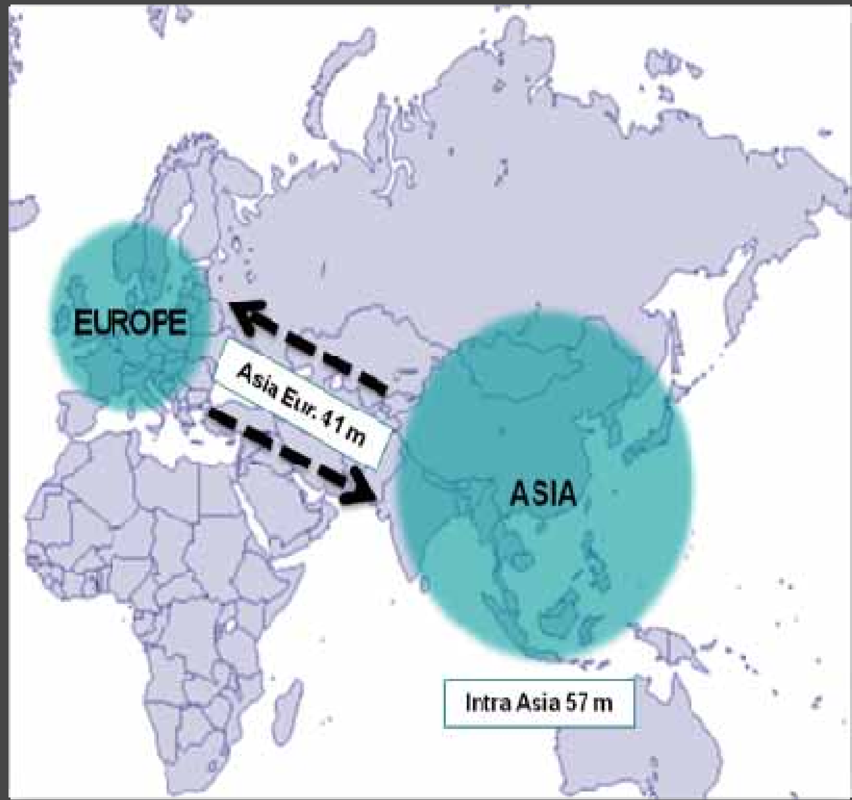
Potential of Container Traffic on Asia – Europe and Intra-Asia routes

INTERNATIONAL UNION OF RAILWAYS

unity, solidarity, universality



Container traffic flows 2007 (TEUs) 15.5 million/16 million

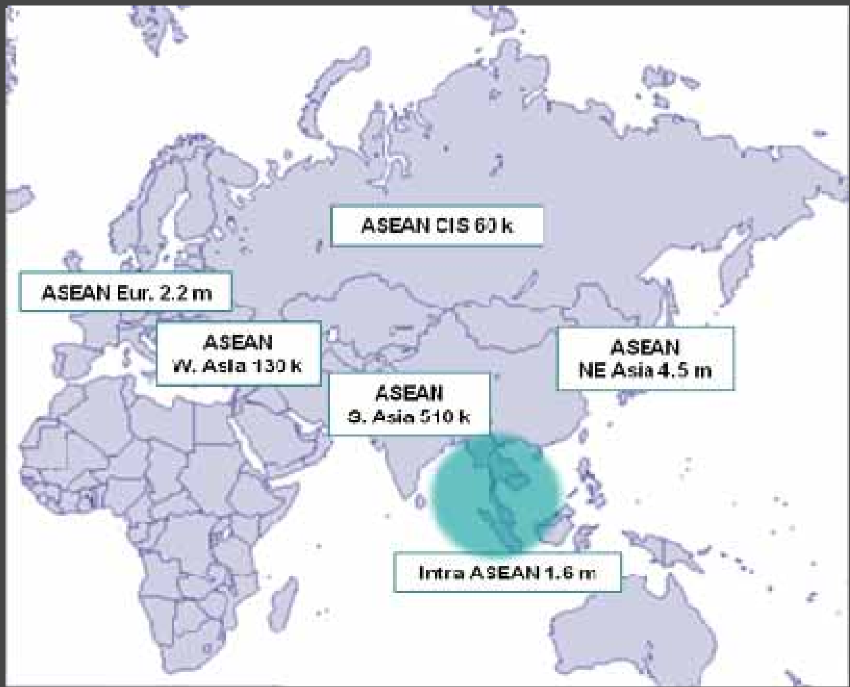


Container traffic flows 2025 (TEUs) 41million/57 million

Potential of Container Traffic on ASEAN

INTERNATIONAL UNION OF RAILWAYS

unity, solidarity, universality



Container traffic flows 2007 (TEUs)

8.9 million TEU

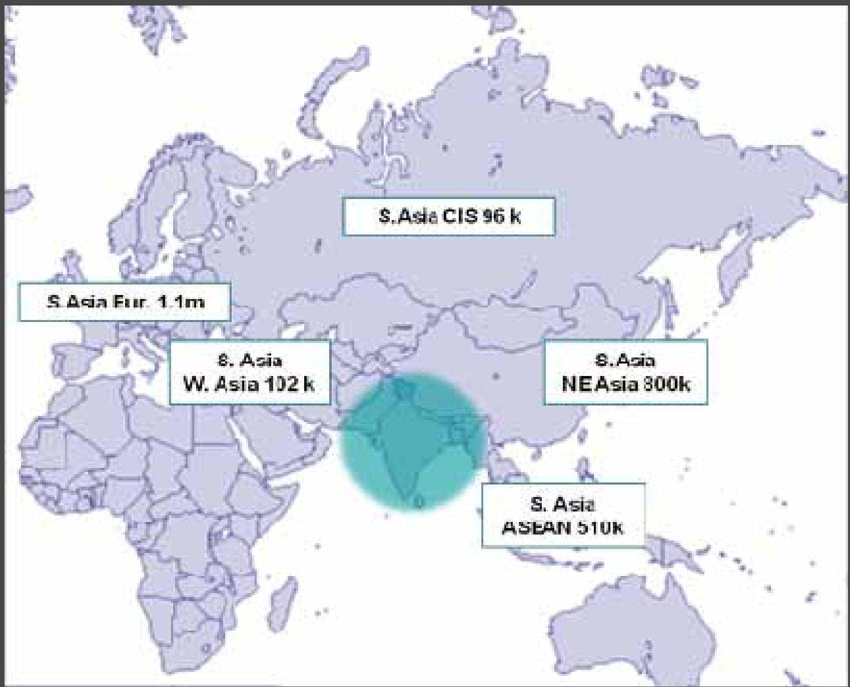
Container traffic flows 2025 (TEUs)

22.8 million TEU

Potential of Container Traffic on South Asia

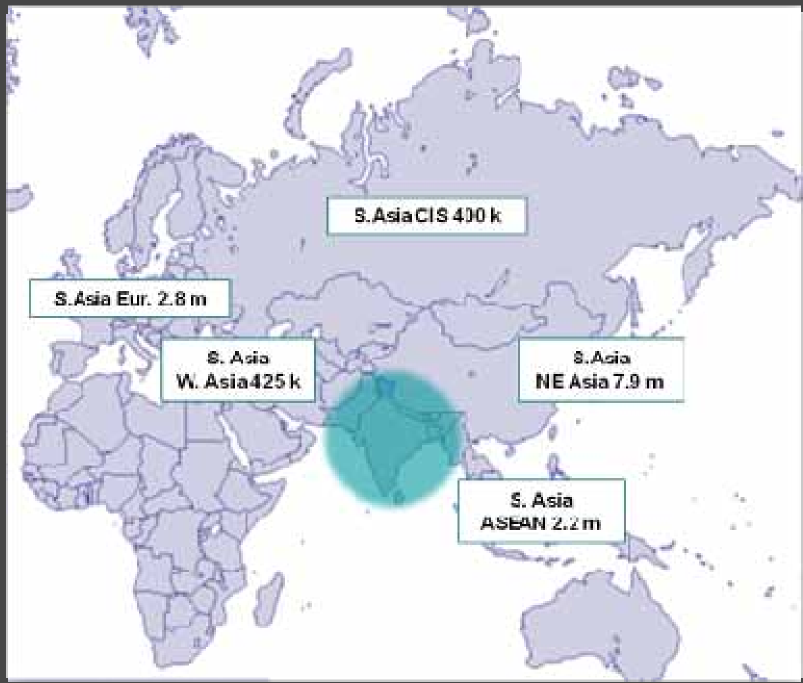
INTERNATIONAL UNION OF RAILWAYS

unity, solidarity, universality



Container traffic flows 2007 (TEUs)

2.5 million TEU



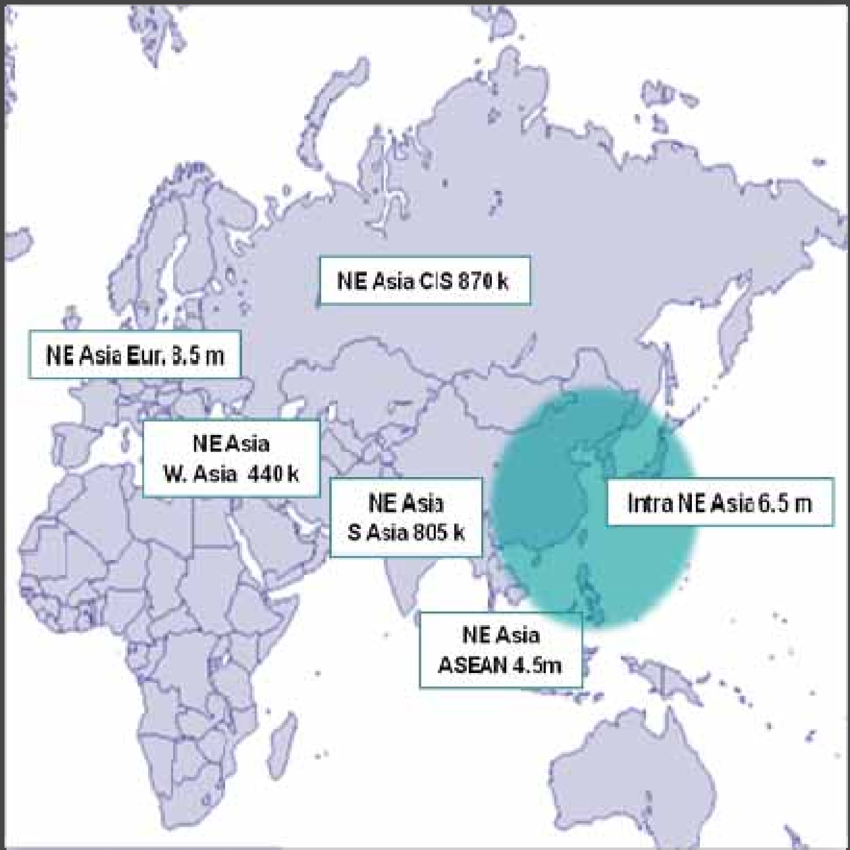
Container traffic flows 2025 (TEUs)

13.8 million TEU

Potential of Container Traffic on North East Asia

INTERNATIONAL UNION OF RAILWAYS

unity, solidarity, universality



Container traffic flows 2007 (TEUs)

21.5 million TEU

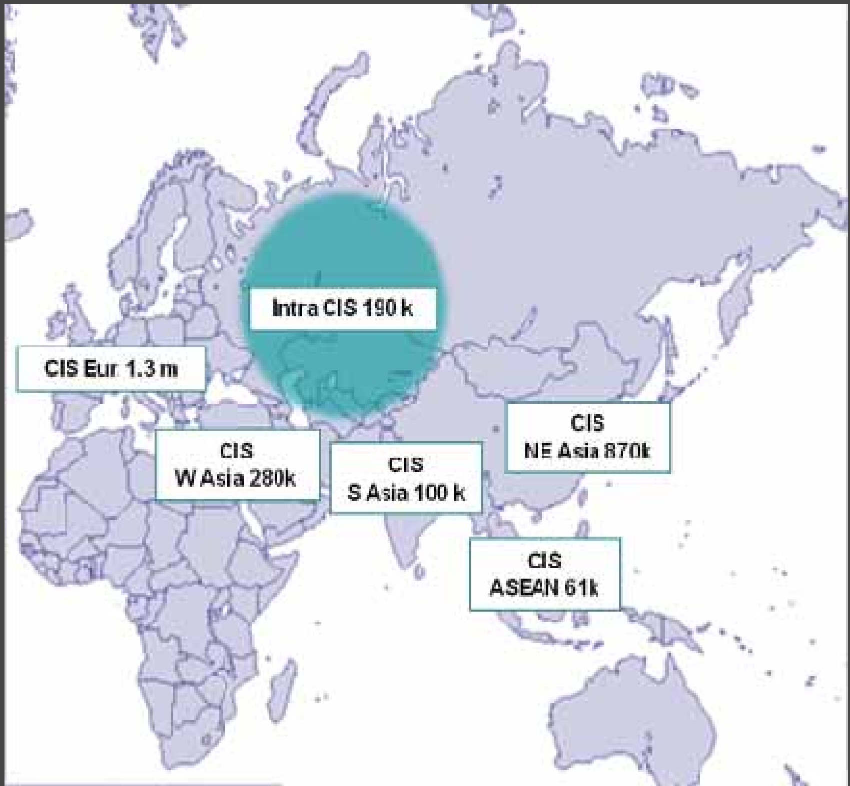
Container traffic flows 2025 (TEUs)

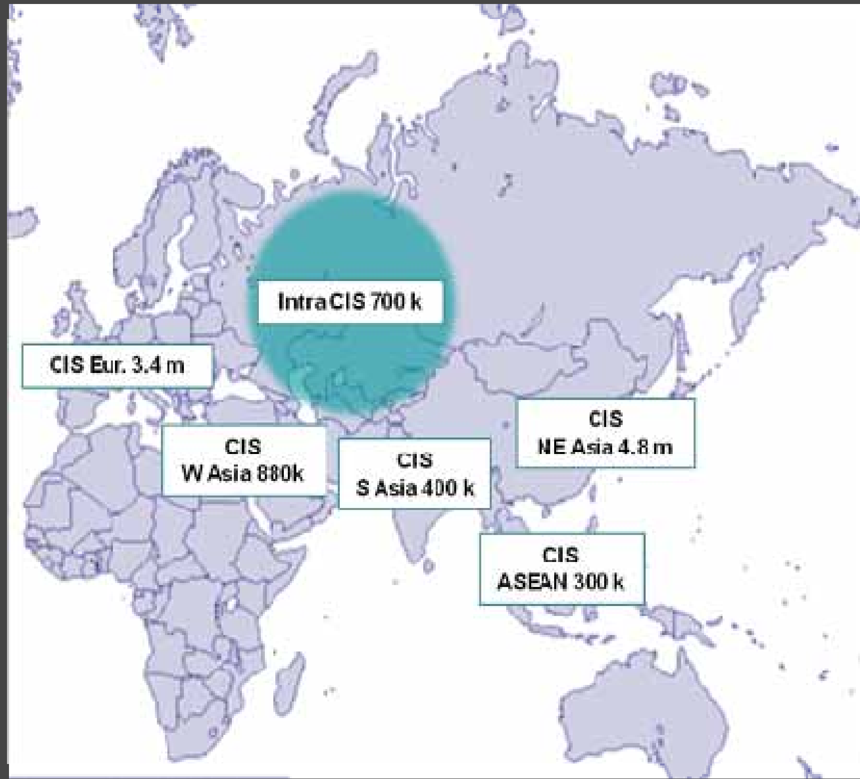
73.1 million TEU

Potential Traffic Growth on CIS

INTERNATIONAL UNION OF RAILWAYS

unity, solidarity, universality





Container traffic flows 2007 (TEUs)

2.8 million TEU

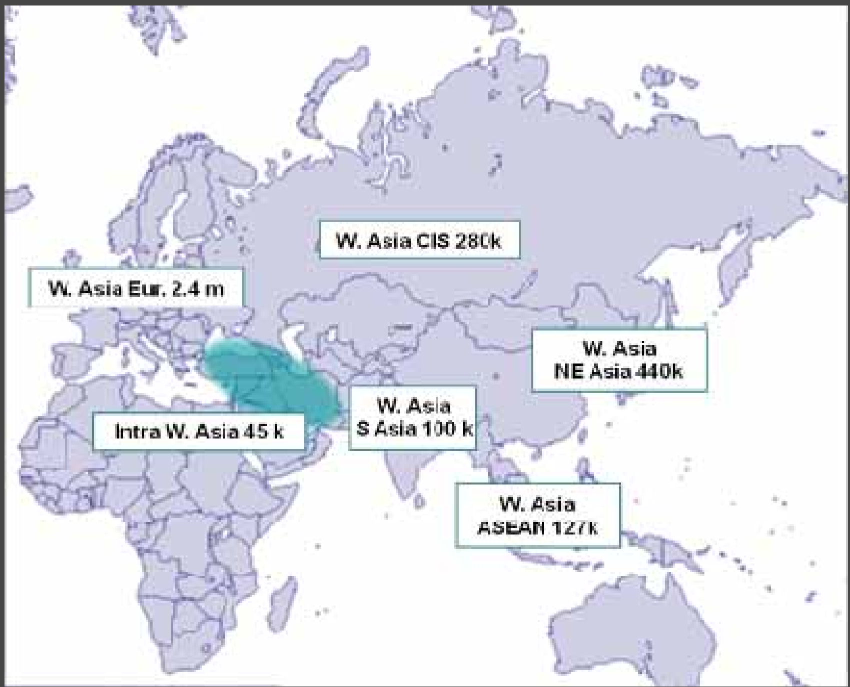
Container traffic flows 2025 (TEUs)

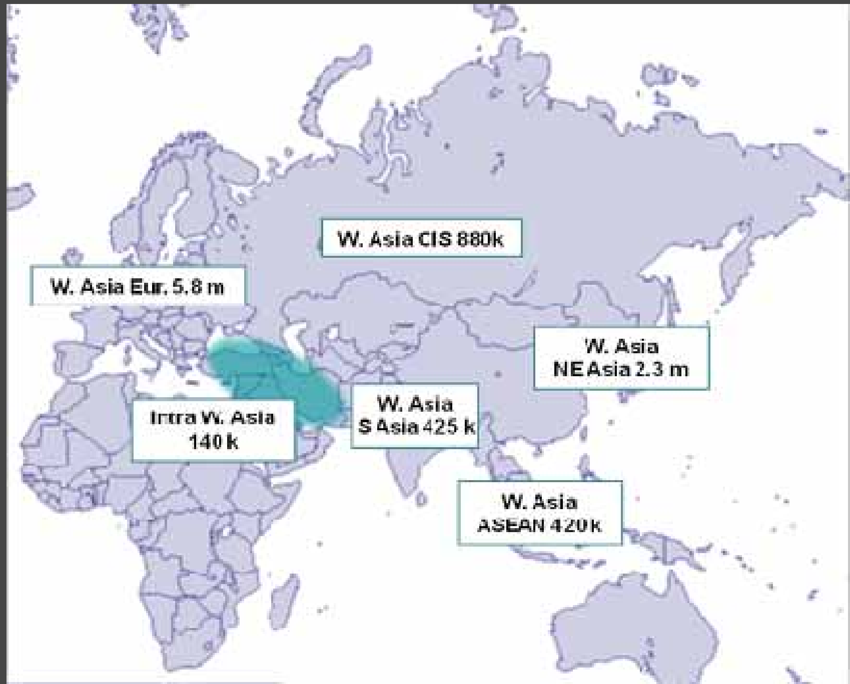
10.6 million TEU

Potential of Container Traffic on West Asia

INTERNATIONAL UNION OF RAILWAYS

unity, solidarity, universality





Container traffic flows 2007 (TEUs)

3.4 million TEU

Container traffic flows 2025 (TEUs)

9.8 million TEU

Projections 2025

INTERNATIONAL UNION OF RAILWAYS

unity, solidarity, universality

International container traffic with Europe and other Asian regions (including intra-regional trade)							
Regions	2007 (million TEUs)	2025 (million TEUs)	CAGR				Level of containerisation (%) 2007
			2008-13	2014-19	2020-25	2007-25	
ASEAN	8.9	22.8	3.85%	7.42%	4.72%	5.36%	60
South Asia	2.5	13.8	7.81%	12.88%	9.09%	**9.89%**	**80**
North-East Asia	21.5	73.1	4.71%	9.62%	6.90%	7.03%	73
CIS	2.8	10.6	5.34%	10.70%	6.93%	**7.75%**	**25**
West Asia	3.4	9.8	4.39%	7.99%	5.62%	6.02%	75

Projections 2025

INTERNATIONAL UNION OF RAILWAYS

unity, solidarity, universality

Inter-regional & Intra-regional expected container traffic in '000 TEUs amongst Asian sub-regions

	ASEAN		South Asia		North-east Asia		CIS		West Asia	
	2007	2025	2007	2025	2007	2025	2007	2025	2007	2025
ASEAN	1,549	3,793	489	2,244	4,485	12,409	62	297	127	419
South Asia	-	-	-	-	750	7,928	96	402	102	425
North-east Asia	-	-	-	-	6,457	20,487	871	4,890	440	2,274
CIS	-	-	-	-	-	-	187	702	278	878
West Asia	-	-	-	-	-	-	-	-	46	142

Container traffic flows in '000 TEUs between Asian and European sub-regions

	ASEAN		South Asia		North-east Asia		CIS		West Asia	
	2007	2025	2007	2025	2007	2025	2007	2025	2007	2025
Western Europe	1,928	3,142	907	2,137	7,131	17,306	714	1,968	1,830	3,985
Eastern Europe	87	203	56	186	472	2,211	146	352	340	1,080
Northern Europe	135	274	76	269	687	1,848	161	334	114	267
Europe (Former USSR)	39	94	51	215	223	3,971	448	758	140	445

Additional Containerisation

INTERNATIONAL UNION OF RAILWAYS

unity, solidarity, universality

	2007	2025 (Base)	2025 (Base with additional containerisation)	CAGR for 2007-25 (Base)	CAGR for 2007-25 (Base with additional containerisation)
Intra Asia Trade	15.9	57.0	77.9	7.78%	9.81%
Asia's Trade with Europe	15.5	41.0	59.1	5.90%	8.22%
ASEAN Trade with Europe & Asia	8.3	22.9	32.6	6.18%	8.44%
S. Asia Trade with Europe & Asia	1.4	11.0	13.0	12.67%	13.84%
NE Asia Trade with Europe & Asia	19.5	68.3	88.8	7.67%	9.35%
CIS Trade with Europe & Asia	1.7	7.6	16.0	9.28%	14.20%
W Asia Trade with Europe & Asia	1.0	4.2	5.5	8.57%	10.58%

Future Trade lanes

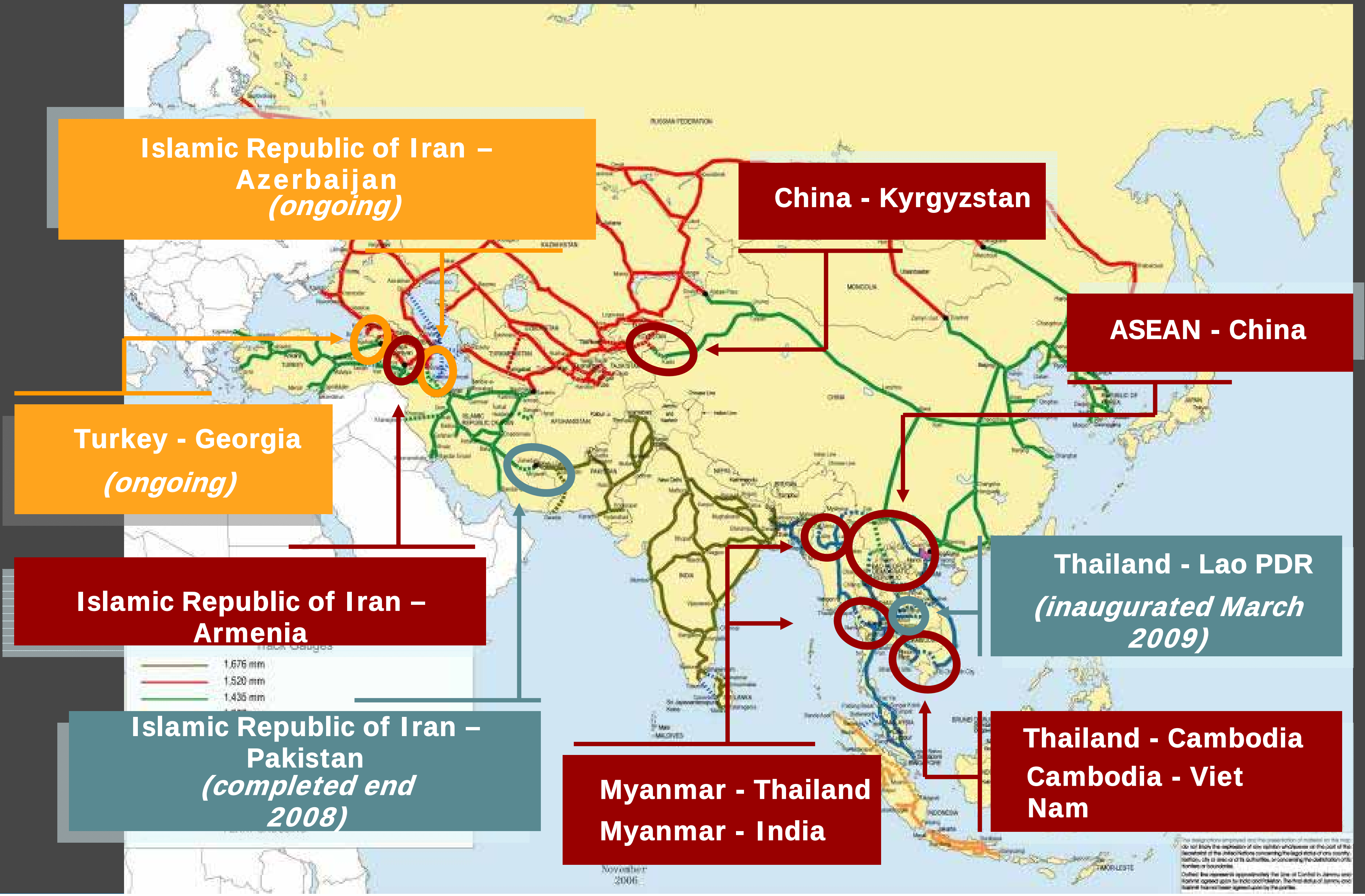
INTERNATIONAL UNION OF RAILWAYS

unity, solidarity, universality

- Europe to North East Asia and South Asia
- Trans Siberian line for carrying traffic of approximately 3.9 million TEU by 2025 between Europe –Russia and North East Asia
- West Asia and East Europe for carrying 1 million TEU by 2025
- ASEAN-North East Asia
- ASEAN-South Asia
- China-India
- TAR: 106000 km with 8300 missing links and gauge changes at more than 10 locations

Missing Link on TAR

Source: UNESCAP



Enhancement in Containerisation – Key Enablers

INTERNATIONAL UNION OF RAILWAYS

unity, solidarity, universality

Technological developments

- Development of Standard Container dimensions and specifications
- Development of Container Ships

Development of institutional arrangements

- Customs : Shift from enforcement to trade facilitation
- Liability regime : Lack of uniform liability instrument
- Information Exchange : schedules/tariff/booking/tracking/documentation
- Security: Cargo/ documentation

Development of infrastructure

- Development of Ports
- Development of Railways
- Development of Roads and Highways
- Inland Multimodal Terminals

Challenges for Enhancing Railways Role

INTERNATIONAL UNION OF RAILWAYS

unity, solidarity, universality

- Construction of Missing links
  - Encouraging participation of multilateral financial institutions, shipping lines and local industry
  - Development of container Transhipment facilities
- Availability of suitable rolling stock
  - Ownership issues need to be addressed for cross border movement
  - Development of wagon lease market
- Operational Issues
  - Common standards
  - Staffing and Inspection issues

Challenges for Enhancing Railways Role

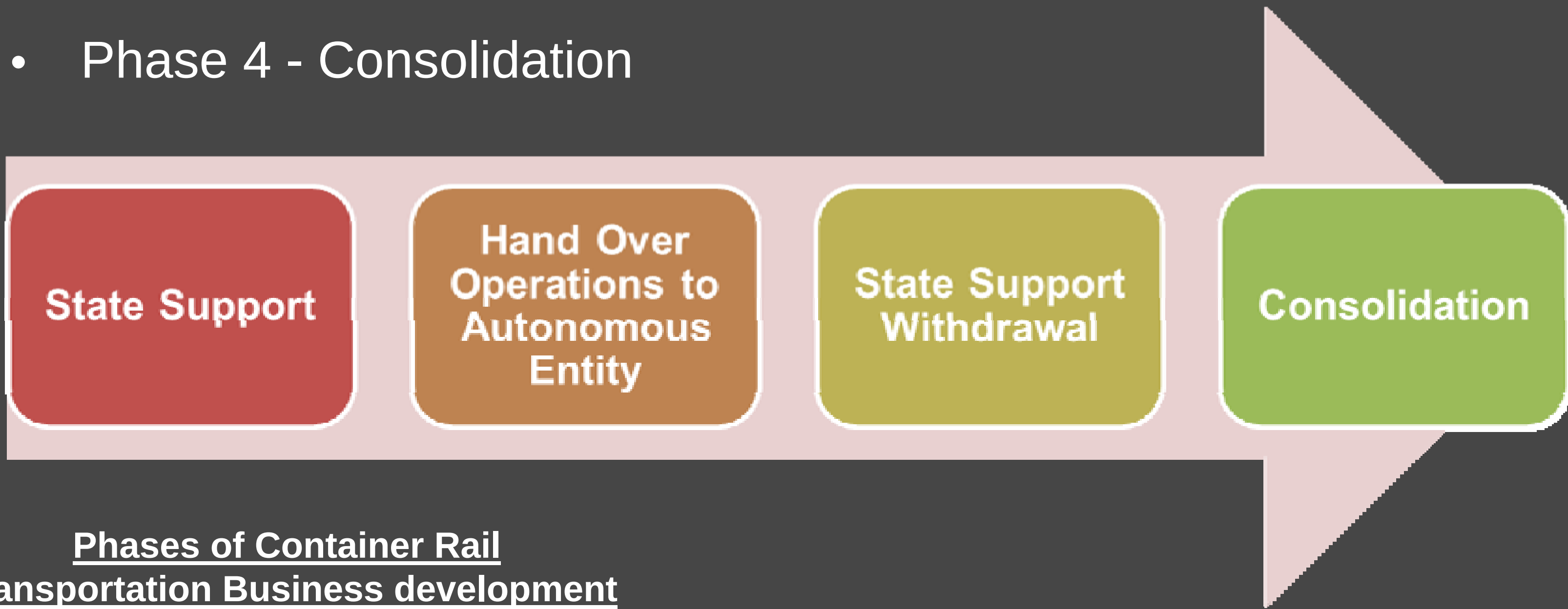
- Pricing and marketing
  - Uniform Tariff on the international corridor
  - Single agency marketing the corridor
  - Reduce cost through double stacking /long haul
- Coordinating and Regulating Agency for international traffic
- Specialised agency for handling container business

Phases of Container Rail Transportation Business development

INTERNATIONAL UNION OF RAILWAYS

unity, solidarity, universality

- Phase 1 - State Support
- Phase 2 - Hand Over Operations to Autonomous Entity
- Phase 3 - State Support Withdrawal
- Phase 4 - Consolidation



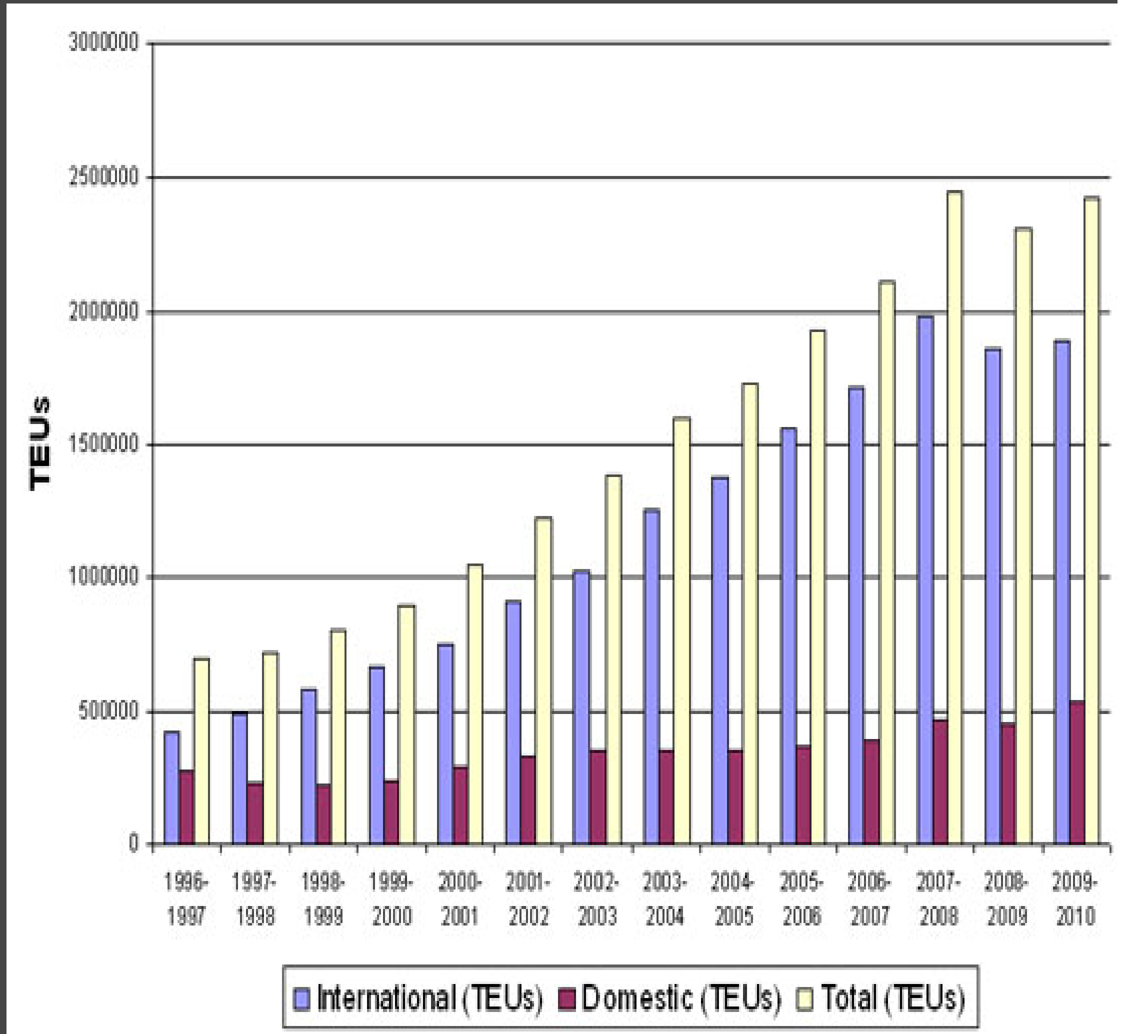
Phases of Container Rail Transportation Business development

CONCOR : IR Success

INTERNATIONAL UNION OF RAILWAYS

unity, solidarity, universality

- Formed in 1988 by IR for handling container business
- Initial support by IR : land on lease / rolling stock /manpower
- CONCOR gave haulage charges to IR and charged from customers its own tariff
- CONCOR procured own wagons and build its own small terminals
- In 2006 IR permitted other operators(15) in business
- Traffic handled grew from 0.9million TEU in 199-2000 to 2.42 million in 2009-10
- 59 terminals



INTERNATIONAL UNION
OF RAILWAYS

unity, solidarity, universality

Thanks

ms.mathur@gmail.com
mathur@uic.org