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Secretary

Working Party on Rail Transport SC.2

Working Party on Transport Trends and Economics WP.5

Group of Experts on Unified Railway Law

Group of Experts on Climate Change Adaptation



UNECE

Can railways compete with maritime
transport along the
Euro Asian transport links?




Assumptions

- Facilitation on border crossings (Annex 9, AGC)
- Cooperation among the railways (time schedules, tariffs)

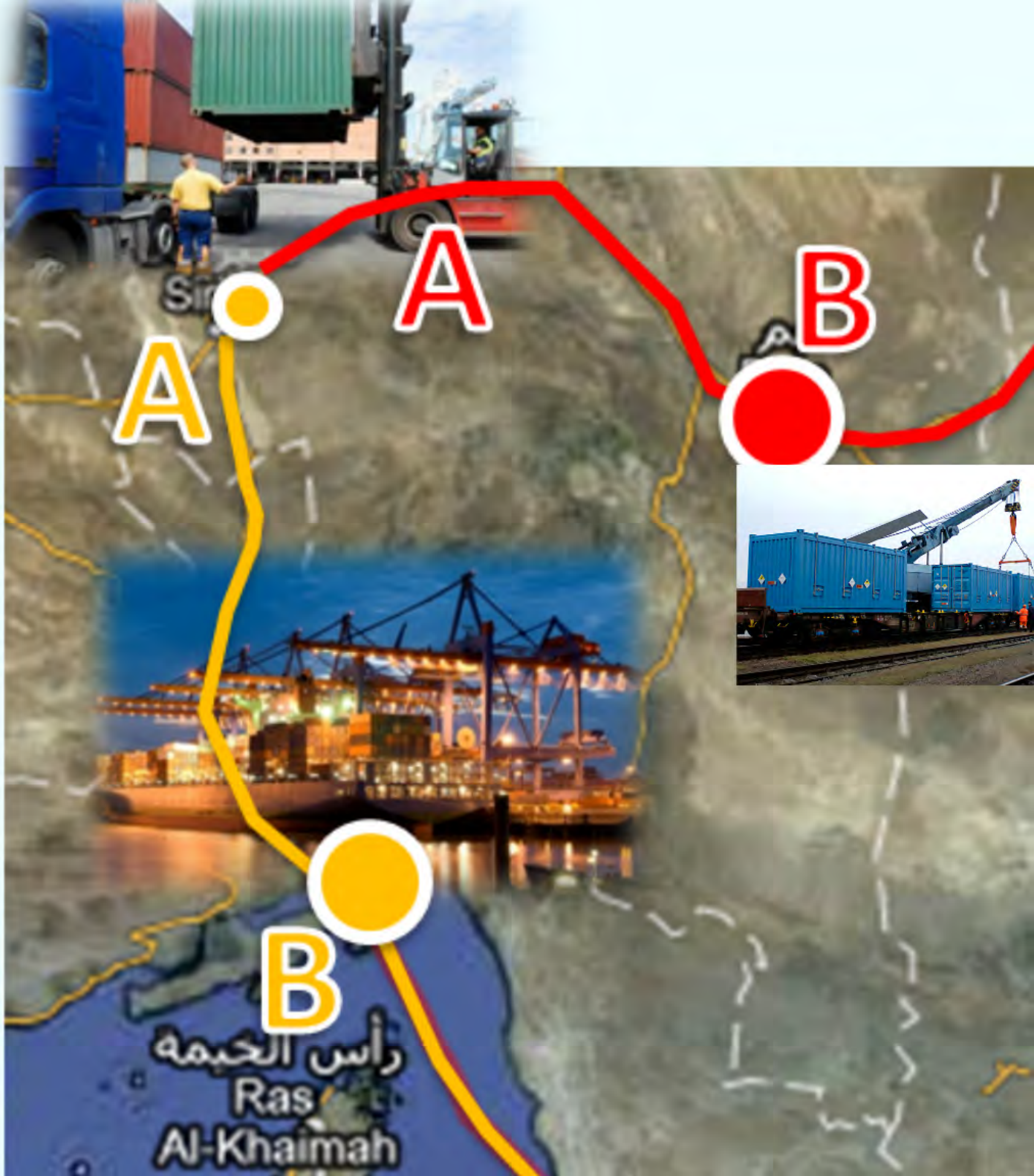


Assumptions

- Facilitation of border crossing (Annex 9)

- 
- A group of men in traditional Middle Eastern attire, including long robes and head coverings, are gathered in a dusty outdoor setting. Some are standing, while others are sitting on wooden stools. The background is a plain, light-colored wall. The text is overlaid on the right side of the image.
- Facilitation on border crossings (Annex 9, AGC)
 - Cooperation among the railways (time schedules, tariffs)





A

A

B

B

راس الخيمة
Ras
Al-Khaimah





Iranshahr

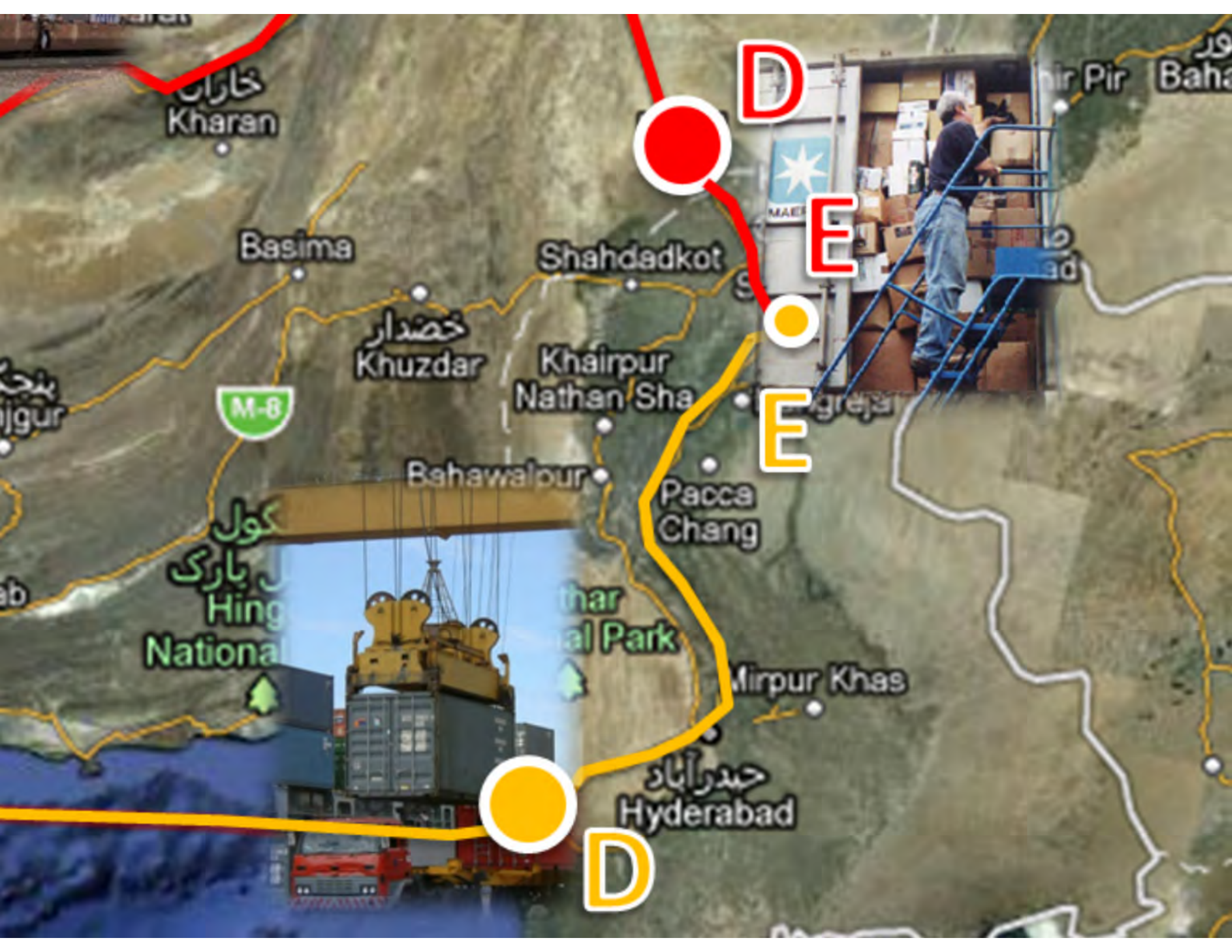
پنجگور
Panjgur

Hoehab

MSC

C

Al
a
Masqat







زاهدان
Zahedan

تافتان
Taftan

خاران
Kharan

باسیما
Basima

ارارات
Ararat

C

HAJIN

HAJIN
COSCO

HAJIN

HAJIN



Pakistan

Quetta

Multan

Pir Pir Ba

Shahdadkot

Khairpur
Nathen Sha

D

E

F





SCENARIO ANALYSIS







MARITIME TRANSPORT

A

Truck Transport

E

Truck Transport

Country	Cost of road transport (in \$)
Afghanistan	150
Armenia	140
Azerbaijan	160

Country	Cost of road transport (in \$)
Afghanistan	150
Armenia	140
Azerbaijan	160
Belarus	180
Bulgaria	195
China	100-200
Georgia	180
Germany	250-350
Greece	250
Iran	50-150
Kazakhstan	120-180
Kyrgyzstan	130
Latvia	230
Moldova	150
Mongolia	120
Poland	200-280
Romania	150-250
Russian Federation	80-200
Tajikistan	130
Turkey	180-300
Turkmenistan	130
Ukraine	150-250
Uzbekistan	100-150

B

THC – Port Costs

D

THC – Port Costs

		Shanghai		Rotterdam	
		20ft	40ft	20ft	40ft
1	Maersk/SAP	RMB 475	RMB 750	€ 185	€ 185
2	MSC	At cost	At cost	€ 175	€ 175
3	CMA CGM	RMB 1,297	RMB 1,297	€ 175	€ 175

		Shanghai	
		20ft	40ft
1	Maersk/SAP	RMB 475	RMB 750
2	MSC	At cost	At cost
3	CMA CGM	RMB 1,297	RMB 1,297
4	Evergreen	RMB 370	RMB 560
5	Hapag Lloyd	RMB 460	RMB 720
6	COSCO	RMB 374	RMB 564
7	APL	RMB 476	RMB 750
8	China Shipping		
9	NYK	RMB 890	RMB 1,300
10	MOL	RMB 450	RMB 720

		Rotterdam	
		20ft	40ft
1	Maersk/SAP	€ 185	€ 185
2	MSC	€ 175	€ 175
3	CMA CGM	€ 160	€ 160
4	Evergreen	€ 160	€ 160
5	Hapag Lloyd	€ 200	€ 200
6	COSCO	€ 140	€ 140
7	APL	€ 190	€ 190
8	China Shipping	€ 170	€ 170
9	NYK	€ 160	€ 160
10	MOL	€ 200	€ 200

		Istanbul	
		20ft	40ft
1	Maersk/SAP		
2	MSC		
3	CMA CGM	Free in	Free in
4	Evergreen		
5	Hapag Lloyd	\$ 219	\$ 219
6	COSCO		
7	APL	\$ 100	
8	China Shipping	FIO	FIO
9	NYK		
10	MOL	Free in	Free in

		ST. Petersburg	
		20ft	40ft
1	Maersk/SAP	\$ 290	\$ 290
2	MSC		
3	CMA CGM	\$ 370	\$ 370
4	Evergreen	\$ 250	\$ 250
5	Hapag Lloyd	\$ 220	\$ 220
6	COSCO	\$ 200	\$ 200
7	APL	\$ 300	\$ 300
8	China Shipping	\$ 300	\$ 300
9	NYK	\$ 250	\$ 250
10	MOL	\$ 220	\$ 220

Maritime Time Schedules

Shanghai

Distance:

Duration:

Shanghai - Istanbul

Distance: 8,003 nm

Duration: 33.35 days





C

Maritime Transport



FROM

Xingang / Qingdao / Dalian [China] (USD\$)

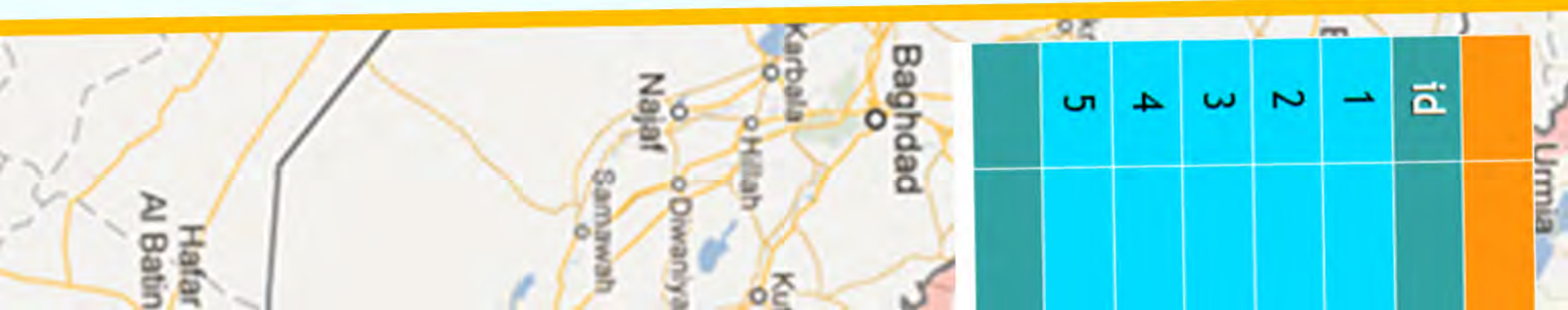
TO

Middle East	20` / 40/ 40`HC		20` / 40/ 40`HC
DUBAI / JEBEL ALI	1,500/2,400/2,400	B.ABBAS	1,600/2,500/2,500
ABU DHABI	1,700/2,800/2,800	SHARJAH	1,700/2,800/2,800
DAMMAM	1,600/2,500/2,500	RIYADH	1,800/2,900/2,900
BAHRAIN	1,800/2,900/2,900	DOHA	1,900/3,100/3,100
KUWAIT	1,700/2,800/2,800	MUSCAT	1,800/2,900/2,900
UM QUASER	2,300/3,700/3,700		

A construction worker in a desert landscape stands on a gravel bed between concrete blocks, with a mountain in the background. The worker is wearing a light-colored uniform and a cap, and is holding a long tool. The gravel bed is composed of small, light-colored stones. The concrete blocks are arranged in a line, forming a boundary for the gravel. The background shows a dry, hilly landscape with a large mountain in the distance.

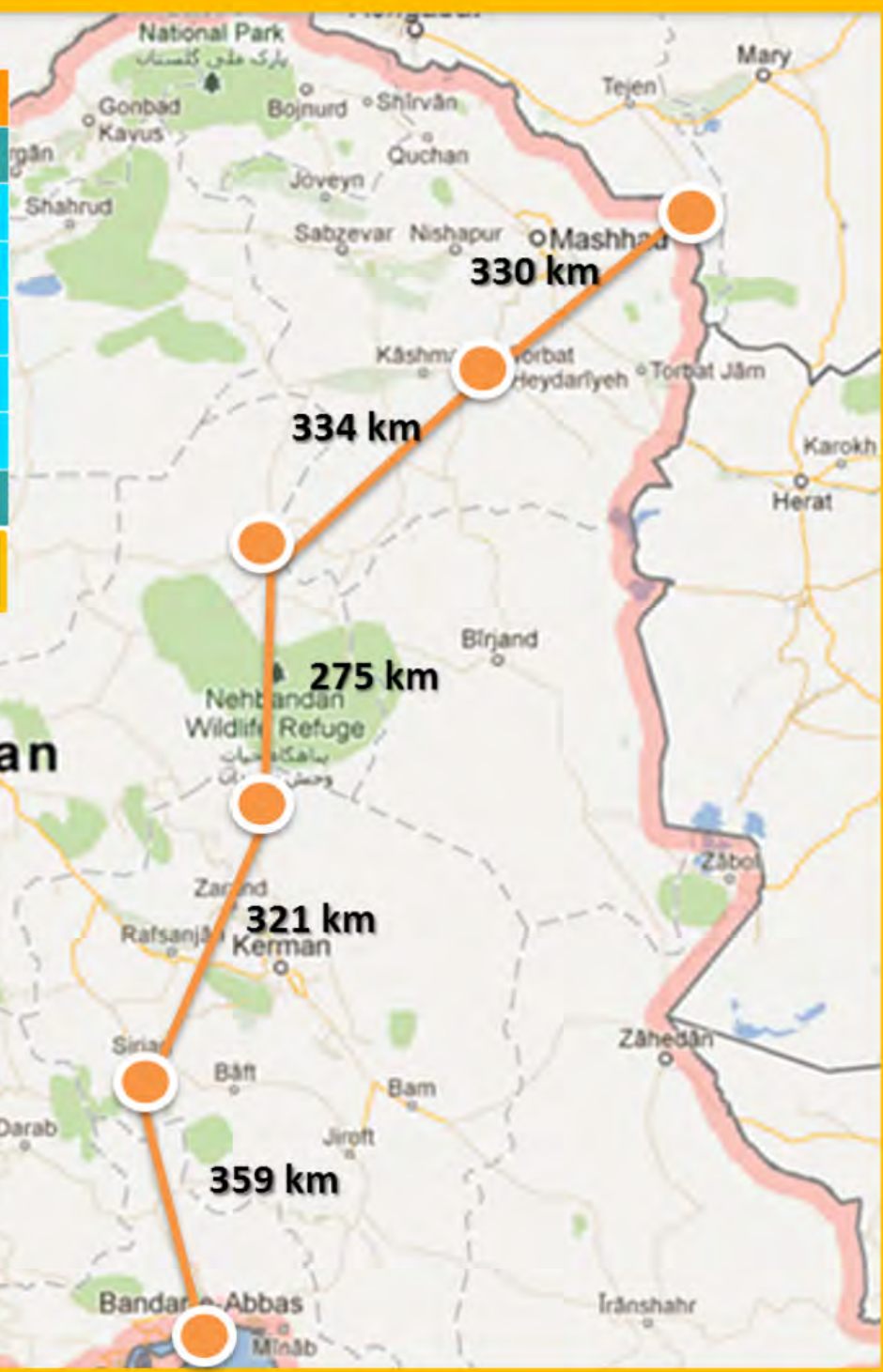
RAIL TRANSPORT - BLOCK TRAINS


Block Trains Time Schedules



id	Route	Distance	Time
1	Bandar Abbas - Sirjan	359	8
2	Sirjan - Mobarakeh	321	13
3	Mobarakeh - Tabas	275	14
4	Tabas - Torbat Heydarieh	334	10
5	Torbat Heydarieh - Sarakhs	330	7
Total		1,619	52

31 km / hour





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	Total	1,619	52



31 km / hour

330

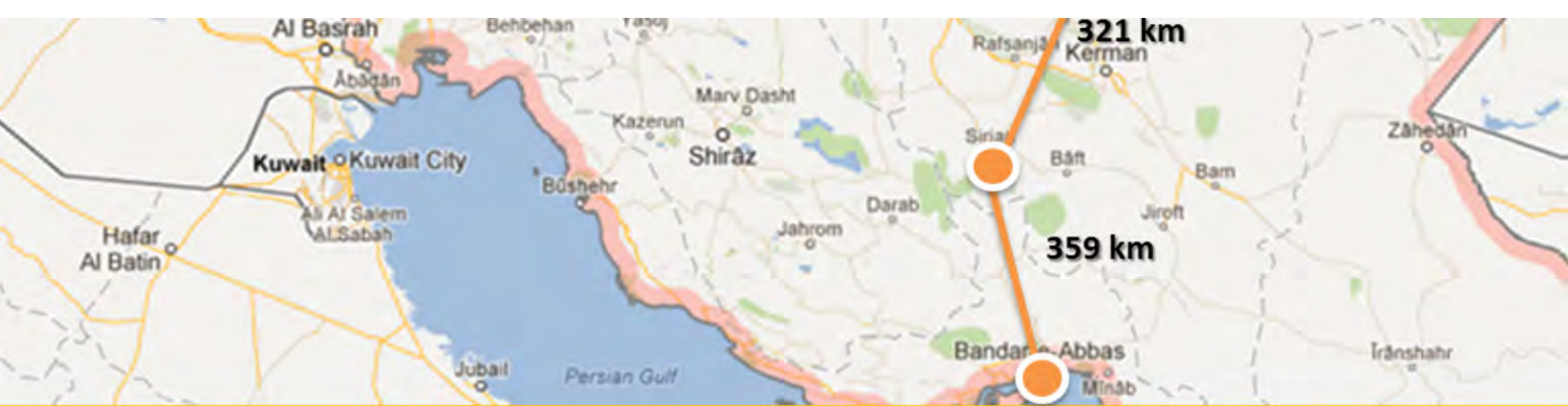
7

1,619

52

31 km / hour

Jafābād o Isfahan



EU

Asia

CIS

26 km/hour

21 km/hour

34 km/hour

FARE LIST کسرا یہ نامہ

STATRAI		اسٹیشن
NURAI		نور علی
VIETTA		ویٹا
NGR KIRAI		نگر کیری
TAFTAN CHITTA		تافتان چیتا

کارلوں کی آمدورفت

کارٹی نمبر برماہ آمد روانگی

۲۲-۱۵	۲۱-۲۰	۲۱/۲۰	۲۰-۱۹
۲-۱۵	۱-۲۰	۲	۲-۱۵
۲۲-۱۵	۲۱-۲۰	۲۱/۲۰	۲۰-۱۹
۲-۱۵	۱-۲۰	۲	۲-۱۵

Block Train Tarifs

	20" full container (per container)	40" full container (per container)	20" full container (per km)	40" full container (per km)	20" empty container (per km)	40" empty container (per km)
Afghanistan			-	-		
Armenia			0.52	0.64		
Azerbaijan			0.52	0.64		
Belarus			0.48	0.55		
Bulgaria			0.75	0.85		
China			0.40	0.50		
Georgia			0.48	0.55		
Germany			0.75	0.85		
Greece			0.75	0.85		
Iran	747	1,093	0.46	0.68	0.23	0.34
Kazakhstan	614	989	0.64	1.03	0.31	0.48
Kyrgyzstan			0.48	0.55		
Latvia			0.75	0.85		

Results of the Comparison Study



Scenarios	Route	Rail		Maritime		Best Result	
		Cost (\$)	Time (hrs)	Cost (\$)	Time (hrs)	Cost	Time
Scenario 1: EATL Route 1	Khabarovsk (Russia) to Potsdam (Germany)]	<u>6,967</u>	<u>341</u>	<u>6,533</u>	<u>589</u>	<u>Maritime</u>	<u>Rail</u>
Scenario 2: EATL Route 2	Hangzhou (China) to Kaluga (Russia Fed.)	<u>4,714.65</u>	<u>277</u>	<u>6,786</u>	<u>624</u>	<u>Rail</u>	<u>Rail</u>
Scenario 3: EATL Route 3	Tashkent (Uzbekistan) to Varna (Bulgaria)	<u>5,946</u>	<u>165</u>	<u>7,550</u>	<u>529</u>	<u>Rail</u>	<u>Rail</u>
Scenario 4: EATL Route 4	Almaty (Kazakhstan) to Istanbul (Turkey)	<u>5,881</u>	<u>250</u>	<u>4,970</u>	<u>672</u>	<u>Maritime</u>	<u>Rail</u>
Scenario 5: EATL Route 5	Morvarid (Iran) to Pushkin (Russia)	<u>6,390.5</u>	<u>256</u>	<u>3,310</u>	<u>374</u>	<u>Maritime</u>	<u>Rail</u>
Scenario 6: EATL Route 6	Ussuriysk (Russia) to Kiev (Ukraine)	<u>5,857</u>	<u>289</u>	<u>6,290</u>	<u>463</u>	<u>Rail</u>	<u>Rail</u>
Scenario 7: EATL Route 7	Shanghai (China) to Warsaw (Poland)	<u>8,937</u>	<u>446</u>	<u>6,300</u>	<u>569</u>	<u>Maritime</u>	<u>Rail</u>
Scenario 8: EATL Route 8	Krasnodar (Russia) to Kalinigrad (Russia)	<u>1,595</u>	<u>70</u>	<u>5,050</u>	<u>225.2</u>	<u>Rail</u>	<u>Rail</u>
Case Study /Car Manufacturer	Vesoul (France) to Kaluga (Russia)	<u>2,107</u>	<u>101</u>	<u>6,300</u>	<u>163</u>	<u>Rail</u>	<u>Rail</u>



Thank You!