



20TH CAREC

TRANSPORT SECTOR COORDINATION COMMITTEE

MEETING

Tbilisi, Georgia
24 – 25 May, 2023

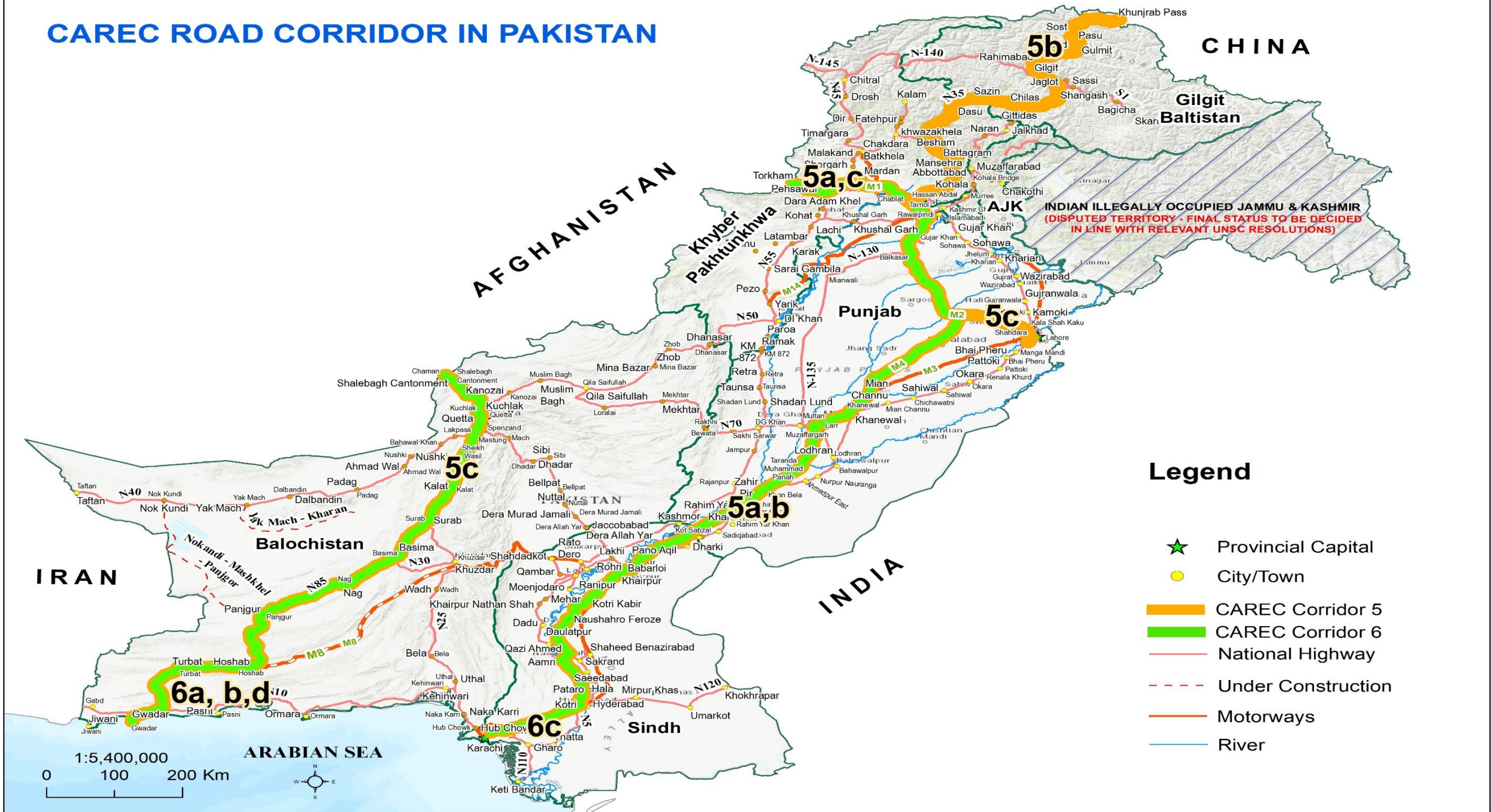
SEQUENCE

- CAREC PROGRAM IN PAKISTAN
- CAREC ROAD CORRIDOR IN PAKISTAN
- CAREC CORRIDOR DEVELOPMENT INVESTMENT PROGRAM (TRANCHES 1, 2, 3 & 4)
- ROAD ASSET MANAGEMENT
- ROAD SAFETY
- CROSS BORDER TRANSPORT FACILITATION
- CAREC RAILWAY CORRIDOR PROGRAM IN PAKISTAN
- AVIATION

CENTRAL ASIAN REGIONAL ECONOMIC COOPERATION (CAREC) PROGRAM

- ❑ The Central Asia Regional Economic Cooperation (CAREC) Program is a partnership of 11 countries and development partners working together to promote development through cooperation, leading to accelerated economic growth and poverty reduction.
- ❑ The program is conceptualized in 2001 and Pakistan joined this regional cooperation program in 2010.
- ❑ Pakistan road network is connected to CAREC CORRIDOR 5 & 6 which connects Central Asian countries and PRC with Arabian sea.
- ❑ In Pakistan, road is the most preferred mode of transport. It caters for 95% of passenger and 92% of freight traffic.
- ❑ Sustainable economic development is dependent on a robust and efficient transport and logistics sector.

CAREC ROAD CORRIDOR IN PAKISTAN



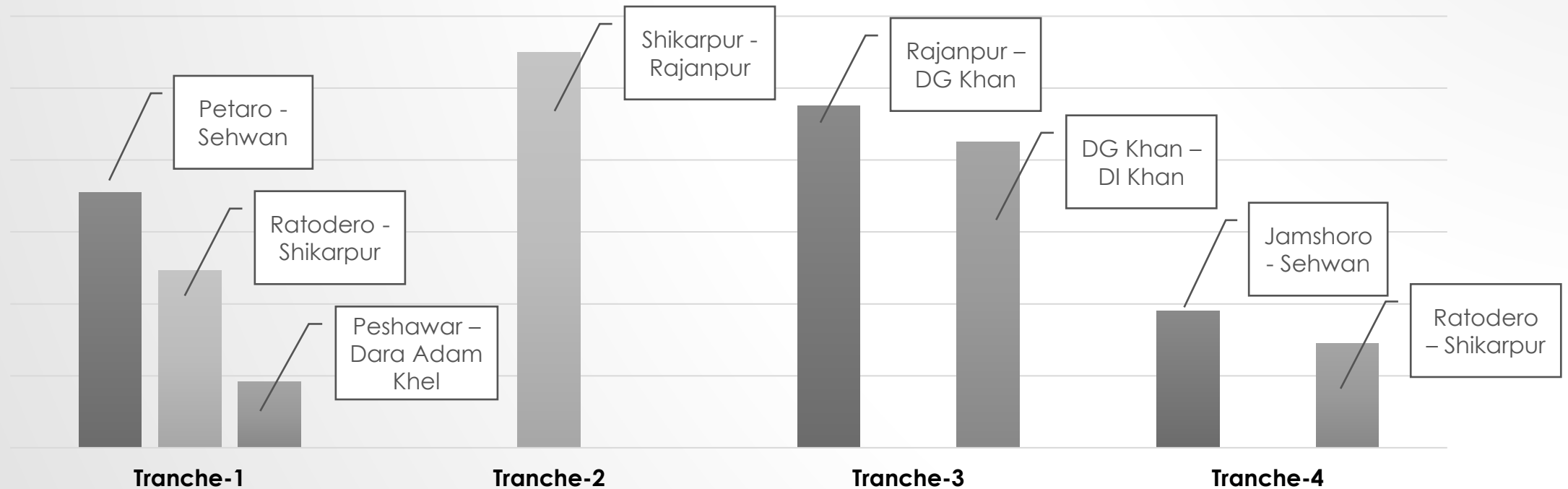
CAREC TRANSPORT STRATEGY (CTS) 2030

- The CAREC Transport Strategy 2030 builds on progress made and lessons learned from the CAREC Transport and Trade Facilitation Strategy 2020.
- It links to the overall CAREC 2030 program in the areas of enhanced connectivity and sustainability. In this strategy, trade facilitation has been separated from transport.
- The Transport Strategy is being implemented in conjunction with the CAREC Integrated Trade Agenda 2030. Each is now more strongly aligned to CAREC 2030 goals.
- Under the 2020 strategy, goals of 7,800 km of CAREC corridor roads and 1,800 km of rail track built were achieved by 2017. However, under 2030, the strategy emphasize on increasing sustainability and network quality in addition to construction and rehabilitation of transport corridors.
- In the new Transport Strategy, more emphasis is placed on multi-modal connectivity, road asset management, road safety and performance-based maintenance goals.
- CAREC Transport Strategy-2030 is based on the following five strategic pillars:
 - (i) Road Infrastructure & Road Asset Management
 - (ii) Cross Border Transport & Logistics
 - (iii) Road Safety
 - (iv) Railways
 - (v) Aviation

CAREC ROAD SECTOR PROGRAM IN PAKISTAN

- ❑ In 2015, the Asian Development Bank cleared the concept-paper for extending a Multi-Tranche Financing Facility (MFF) to the Government of Pakistan (GoP), aimed at developing CAREC Corridor in Pakistan.
- ❑ Followed by ADB's Fact Finding in 2017, this Investment Program was approved in Sept 2017.
- ❑ The MFF program focuses on improving approx. 870 km Indus Highway (N55) from Petaro to Peshawar and enhancing institutional capacity of executing agencies over a course of 10 years.
- ❑ Cost of this program was estimated as US\$ 925 Million, with 86% financing as Ordinary Capital Resource (OCR) Loan i.e. US\$ 800 Million from ADB and counterpart share of US\$ 125 Million by the GoP.
- ❑ The program was originally planned in three phases / tranches and later amended to be implemented in four tranches / phases.

CAREC IMPLEMENTATION PLAN (TRANCHES)



Tranche-1 = US\$ 120 Million
Tranche-2 = US\$ 235 Million
Tranche-3 = US\$ 330 Million
Tranche-4 = US\$ 100 Million
Total Program = US\$ 800 Million

Tranche-4 Projects are rehabilitation and improvement of Existing road sections. Tranche-4 projects will be considered depending on available funds under the MFF

CAREC PROJECTS

TRANCHE-1
Peshawar-Dara Adam Khel
(N-55) 36 km

TRANCHE-3
DG Khan-DI Khan
(N-55) 209 km

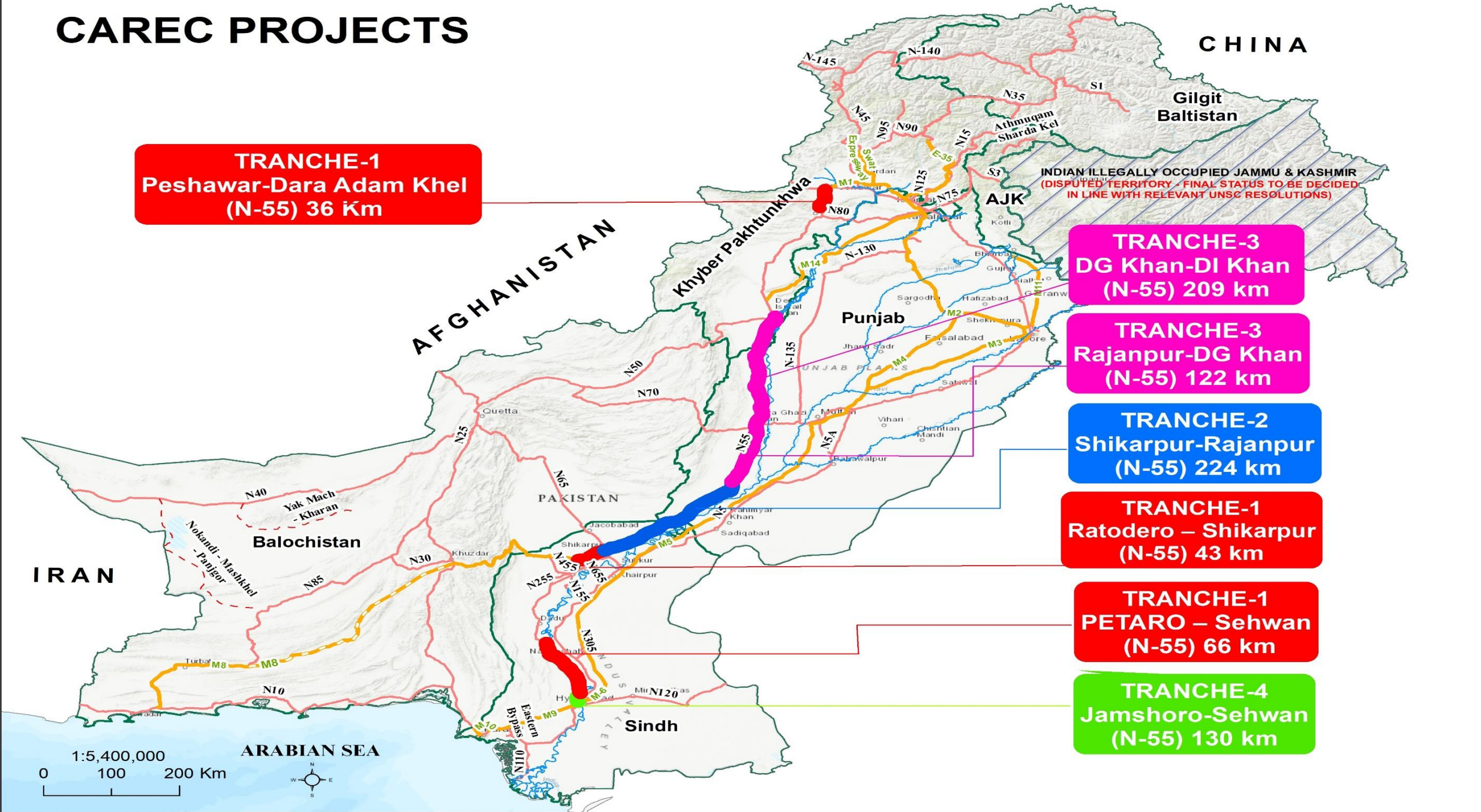
TRANCHE-3
Rajanpur-DG Khan
(N-55) 122 km

TRANCHE-2
Shikarpur-Rajanpur
(N-55) 224 km

TRANCHE-1
Ratodero – Shikarpur
(N-55) 43 km

TRANCHE-1
PETARO – Sehwan
(N-55) 66 km

TRANCHE-4
Jamshoro-Sehwan
(N-55) 130 km

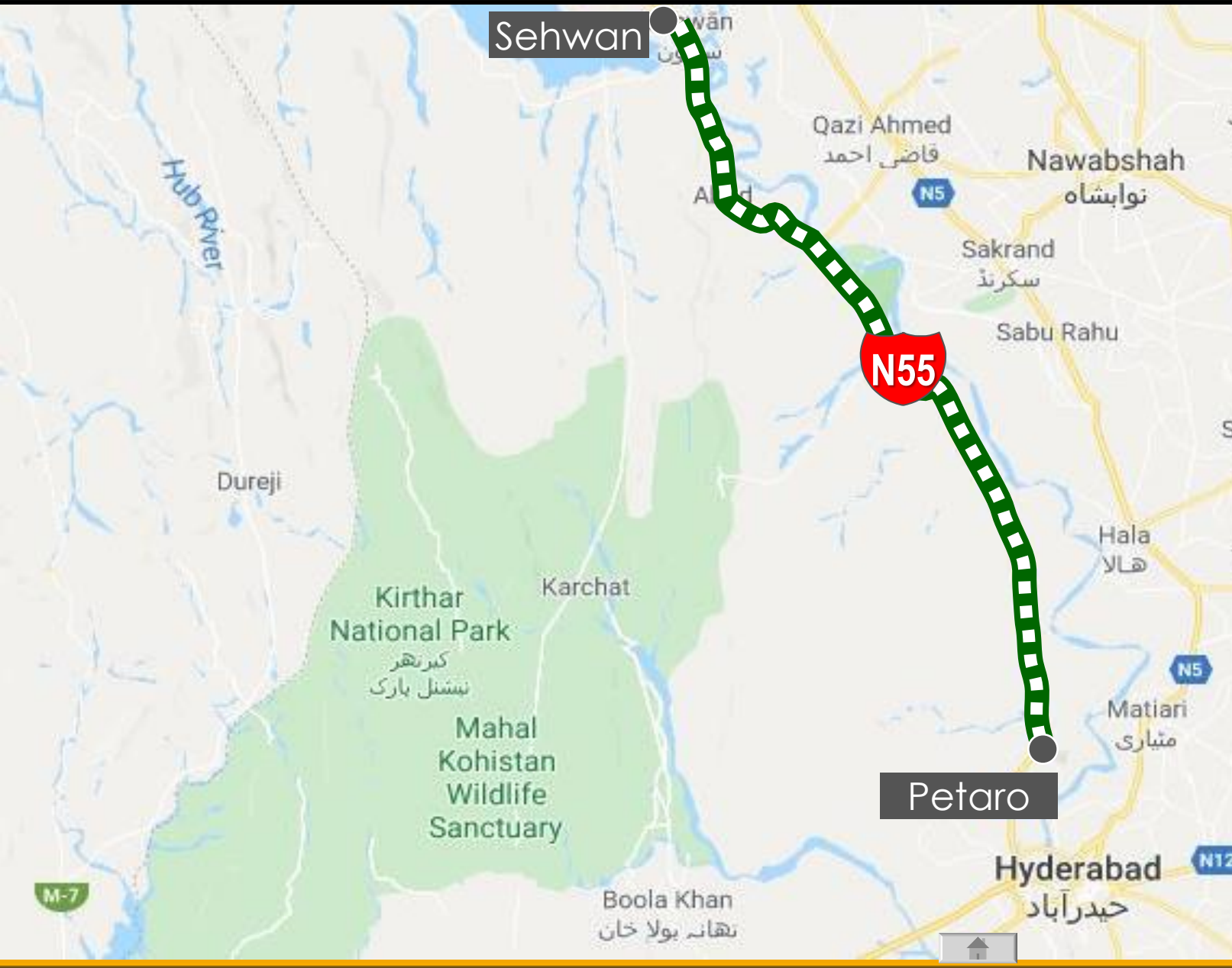


CAREC CORRIDOR DEVELOPMENT INVESTMENT PROGRAM



TRANCHE-1

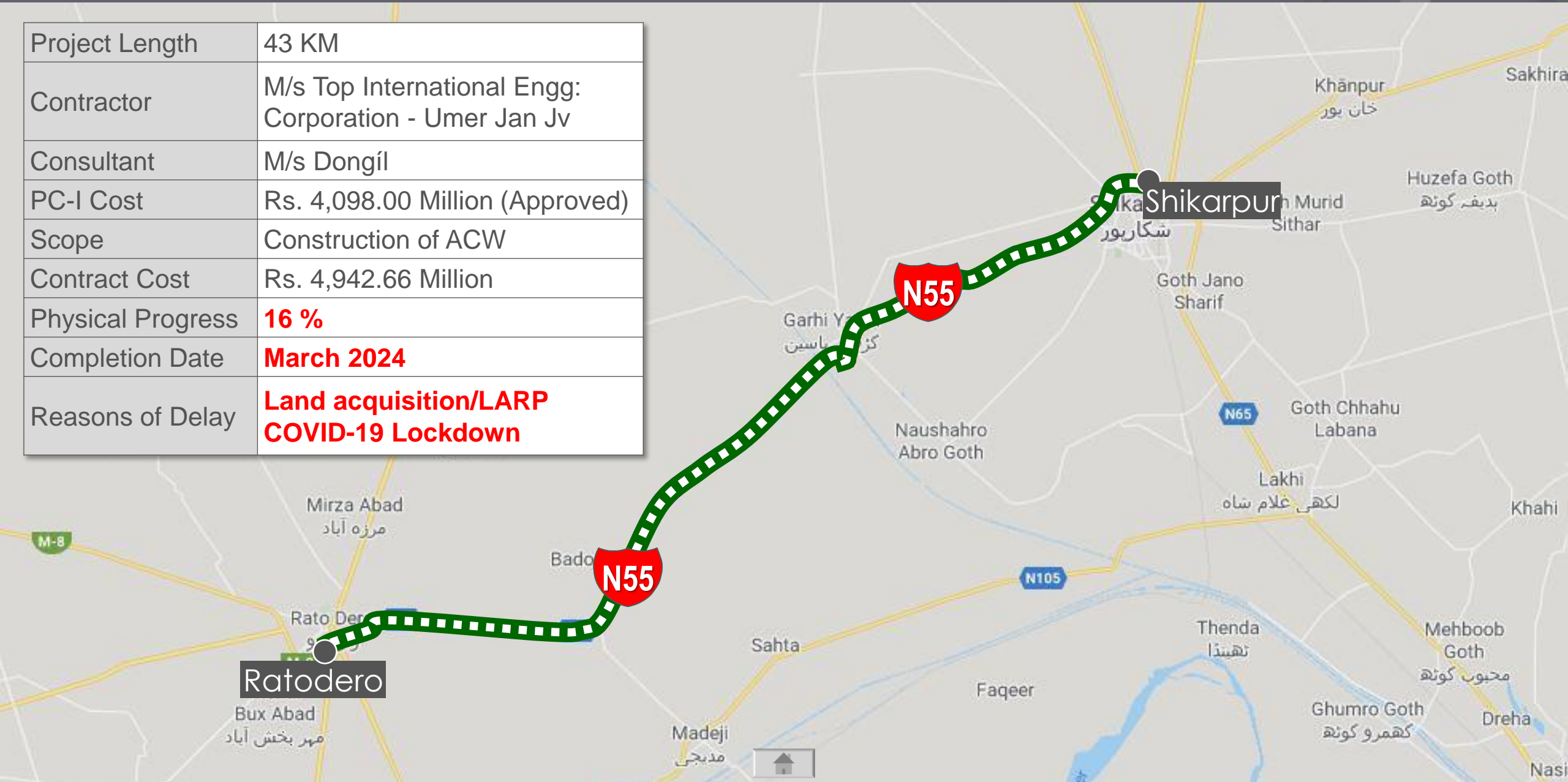
LOAN SIGNED & UNDER IMPLEMENTATION



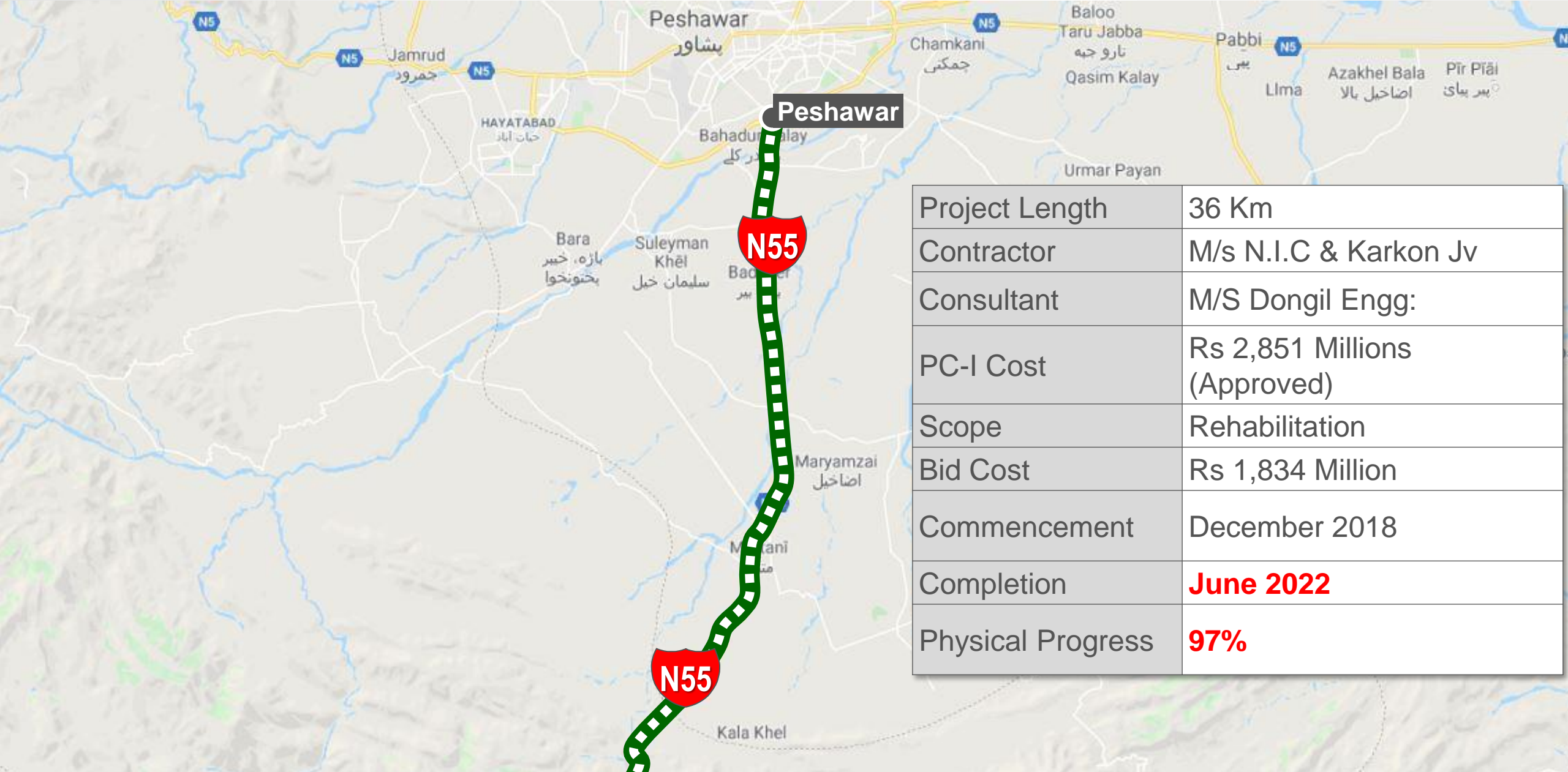
Project Length	66 Km
Contractor	M/s Xinjiang Beixin Road & Bridge Group Co. Ltd.
Consultant	M/s Dongil Engg:
PC-I Cost	Rs. 12,752 Million
Scope	Construction of ACW
Contract Cost	Rs. 7,156 Million
Commencement	January 2019
Completion	Sep 2023
Physical Progress	85 %
Financial Progress	62 %
Reasons of Delay	Land acquisition/LARP, COVID-19 Lockdown
Expected Completion	Sep 2023

RATODERO – SHIKARPUR (N-55) 43 KM

Project Length	43 KM
Contractor	M/s Top International Engg: Corporation - Umer Jan Jv
Consultant	M/s Dongil
PC-I Cost	Rs. 4,098.00 Million (Approved)
Scope	Construction of ACW
Contract Cost	Rs. 4,942.66 Million
Physical Progress	16 %
Completion Date	March 2024
Reasons of Delay	Land acquisition/LARP COVID-19 Lockdown



PESHAWAR – DARA ADAM KHEL (N-55) 36 KM



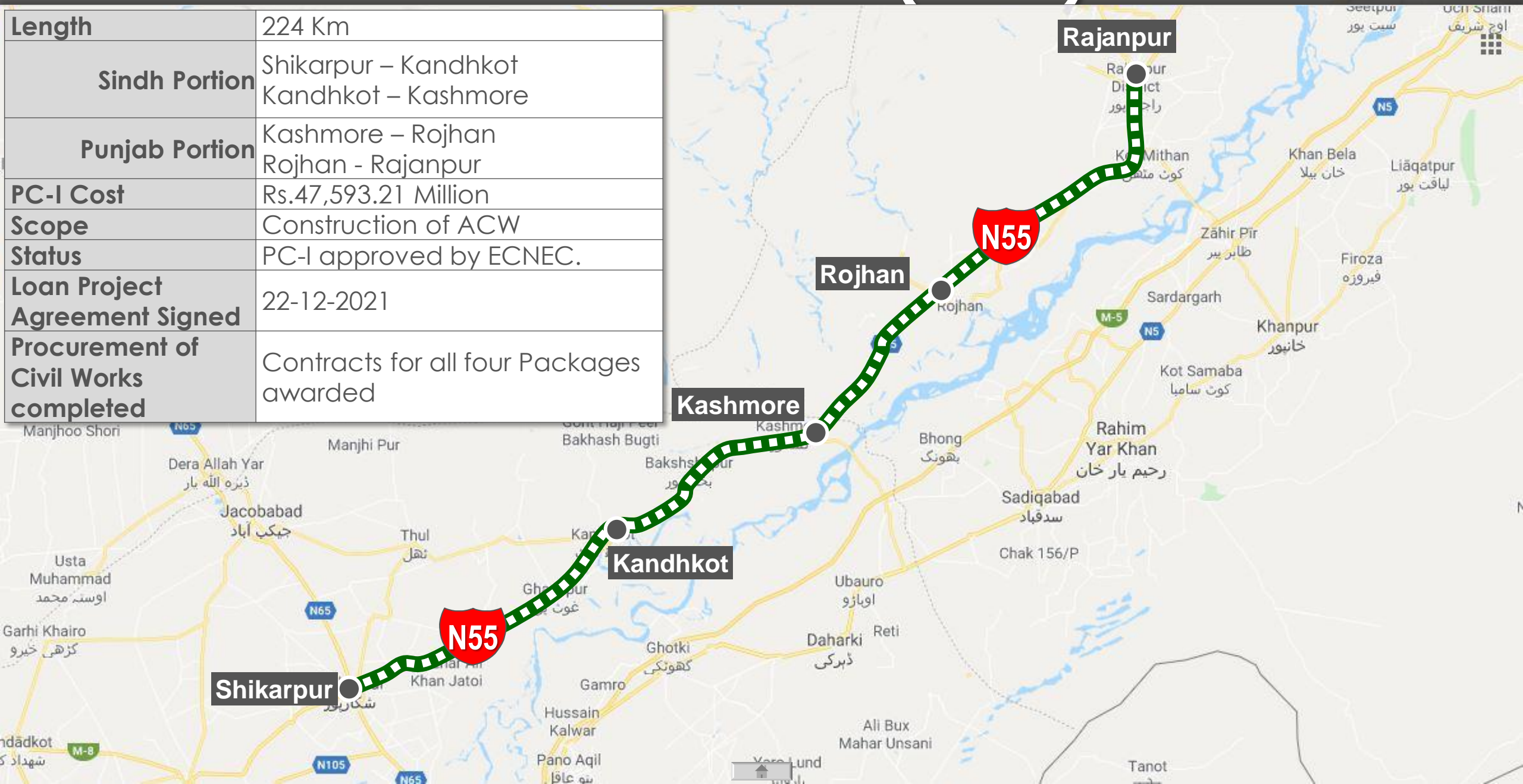
Project Length	36 Km
Contractor	M/s N.I.C & Karkon Jv
Consultant	M/S Dongil Engg:
PC-I Cost	Rs 2,851 Millions (Approved)
Scope	Rehabilitation
Bid Cost	Rs 1,834 Million
Commencement	December 2018
Completion	June 2022
Physical Progress	97%

CAREC CORRIDOR DEVELOPMENT INVESTMENT PROGRAM

TRANCHE-2

SHIKARPUR-RAJANPUR (N-55) 224 KM

Length	224 Km
Sindh Portion	Shikarpur – Kandhkot Kandhkot – Kashmore
Punjab Portion	Kashmore – Rojhan Rojhan - Rajanpur
PC-I Cost	Rs.47,593.21 Million
Scope	Construction of ACW
Status	PC-I approved by ECNEC.
Loan Project Agreement Signed	22-12-2021
Procurement of Civil Works completed	Contracts for all four Packages awarded



SHIKARPUR-RAJANPUR (N-55) 224 KM

Lot – 1	Shikarpur - Kandhkot (62.42 KMs)
Contractor	M/S ZKB
Contract Cost	Rs. 8,848 million
Contract Agreement	20.12.2022
Completion Time	24 months
Date of Commencement	Expected in Aug 2023

Lot – 3	Kashmore - Rojhan (48.90 KMs)
Contractor	M/S ZKB
Contract Cost	Rs.6,414 million
Contract Agreement	20.12.2022
Completion Time	24 months
Date of Commencement	Expected in July 2023

Lot – 2	Kandhkot Kashmore (58.78 KMs)
Contractor	M/S China Civil Engineering Construction Corporation (CCECC)
Contract Cost	Rs. 11,276 million
Contract Agreement	03.01.2023
Completion Time	24 months
Date of Commencement	Expected in Aug 2023

Lot – 4	Rojhan - Rajanpur (51.85 KMs)
Contractor	M/S ZKB
Contract Cost	Rs. 7,313 million
Contract Agreement	20.12.2022
Completion Time	24 months
Date of Commencement	Expected in July 2023

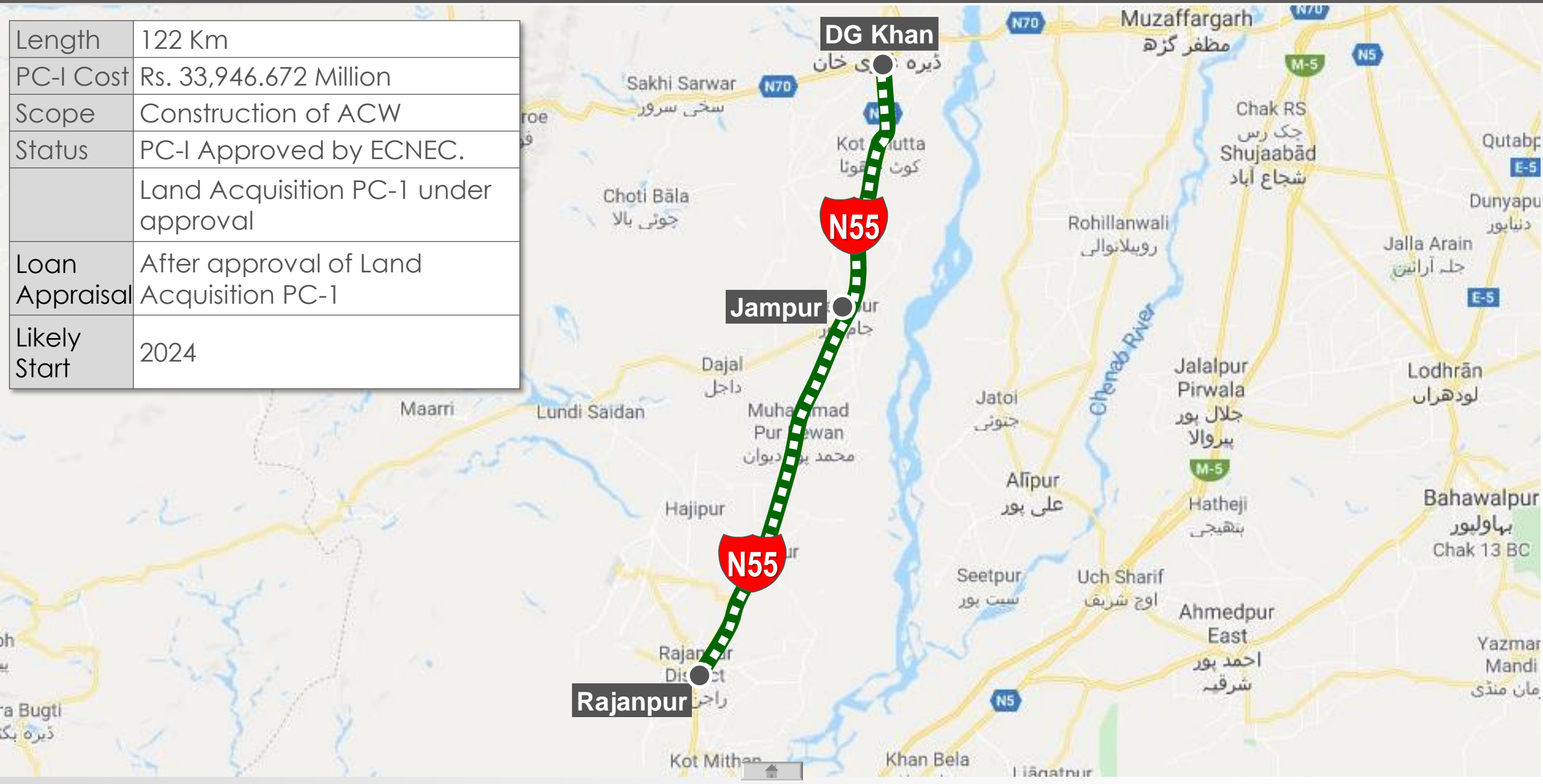
CAREC CORRIDOR DEVELOPMENT INVESTMENT PROGRAM

TRANCHE-3

DETAILED DESIGNING AND LAND
ACQUISITION TO BE CARRIED OUT

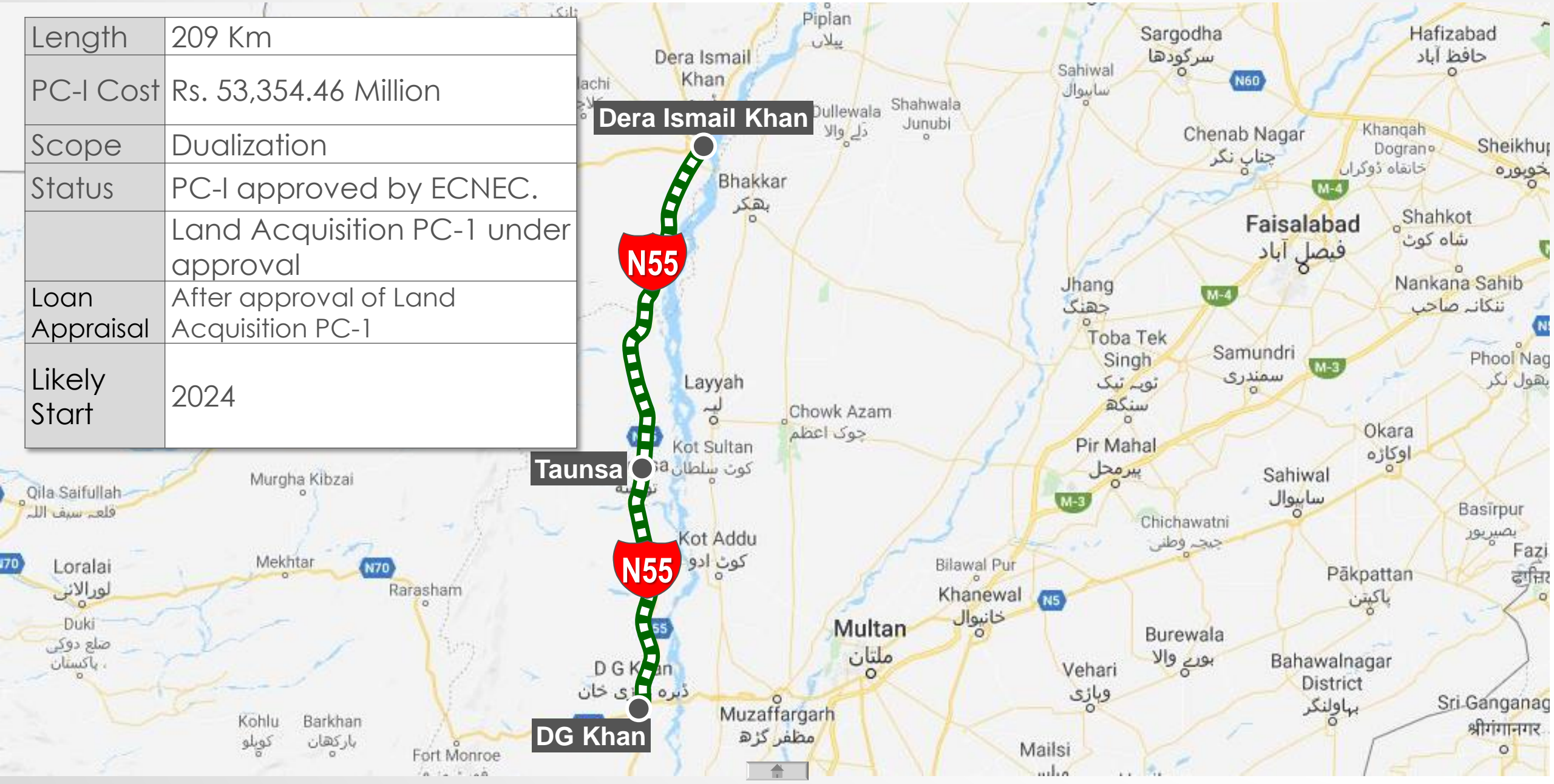
RAJANPUR-DG KHAN (N-55) 122 KM

Length	122 Km
PC-I Cost	Rs. 33,946.672 Million
Scope	Construction of ACW
Status	PC-I Approved by ECNEC.
	Land Acquisition PC-1 under approval
Loan Appraisal	After approval of Land Acquisition PC-1
Likely Start	2024



DG KHAN-DI KHAN (N-55) 209 KM

Length	209 Km
PC-I Cost	Rs. 53,354.46 Million
Scope	Dualization
Status	PC-I approved by ECNEC.
	Land Acquisition PC-1 under approval
Loan Appraisal	After approval of Land Acquisition PC-1
Likely Start	2024

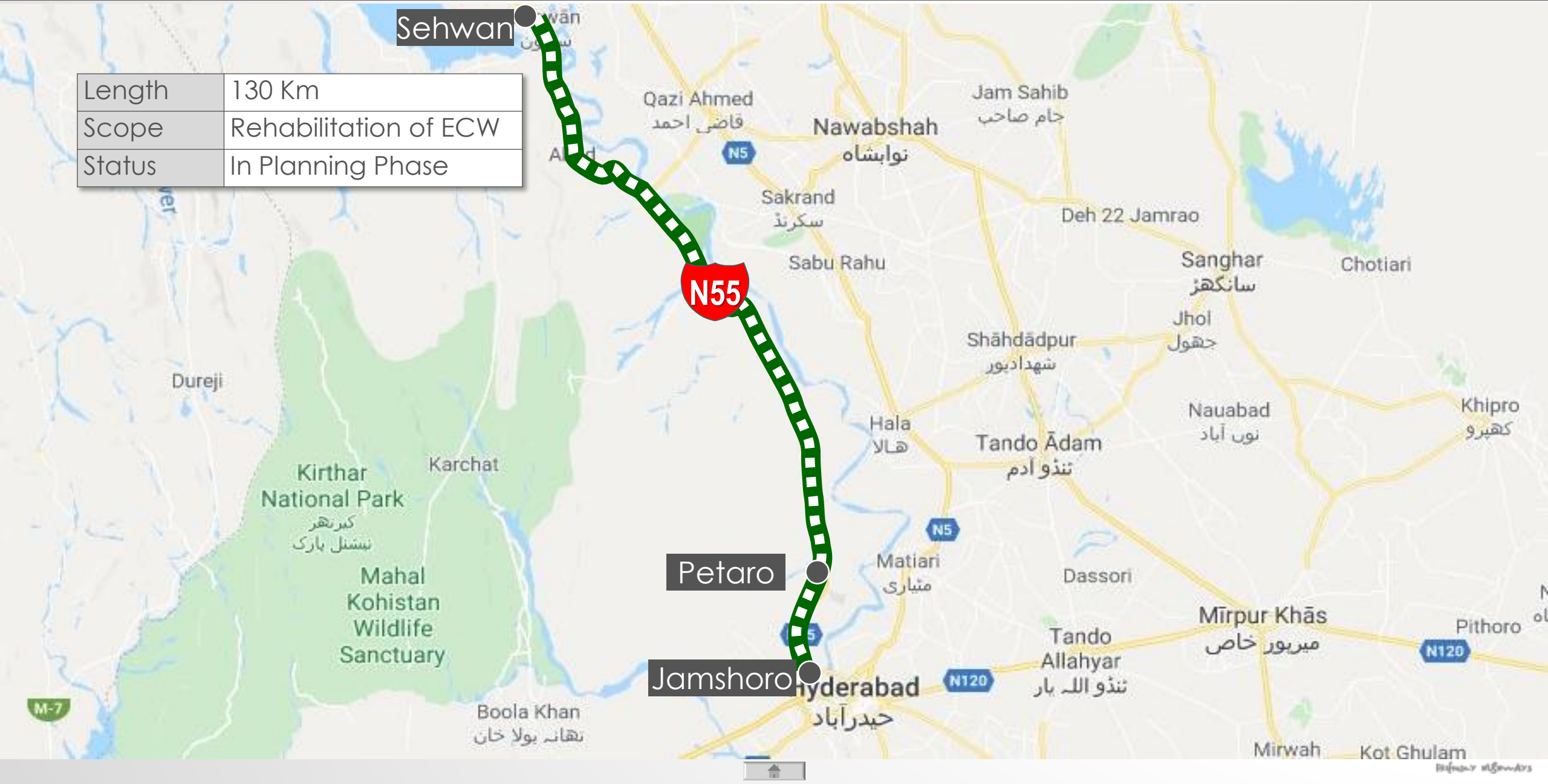


CAREC CORRIDOR DEVELOPMENT INVESTMENT PROGRAM

TRANCHE-4 PLANNING STAGE

JAMSHORO-SEHWAN (N-55) 130 KM

Length	130 Km
Scope	Rehabilitation of ECW
Status	In Planning Phase



RATODERO-SHIKARPUR (N-55) 43 KM

Length	43 Km
Scope	Rehabilitation of ECW
Status	In Planning Phase



PRIORITY ROAD SECTOR PROJECTS

- Dualization and Rehabilitation of 273 Kms of N-25**

Karachi - Kararo (232 Kms)

Wadh - Khuzdar (41 Kms)

Length	273 Km
Scope	Dualization & Rehabilitation
PC-I Cost	Rs. 74,716 million
Status	<ul style="list-style-type: none"> • PC-1 approved by ECNEC on 7-10-2022. • N-25 is RCD Highway and is the shortest connection between Karachi Sea Port and Pak / Iran border at Chaman. • The project is highly feasible for connectivity in purview of International Trade.



- Dualization and Rehabilitation of 187 Kms of N-25**

Kararo-Wadh (83 Kms)

Kuchlak-Chaman (104 Kms)

Length	187 Km
Scope	Dualization & Rehabilitation
PC-I Cost	Rs. 67,671.920 million
Status	<ul style="list-style-type: none"> • PC-1 approved by ECNEC on 7-10-2022. • N-25 is RCD Highway and is the shortest connection between Karachi Sea Port and Pak / Iran border at Chaman. • The project is highly feasible for connectivity in purview of International Trade



- The construction of additional Kohat Tunnel and access roads (30 km) on **N-55** is required to be constructed due to the increase of traffic volume and dualization of Indus Highway project. The land acquisition has been already been completed.

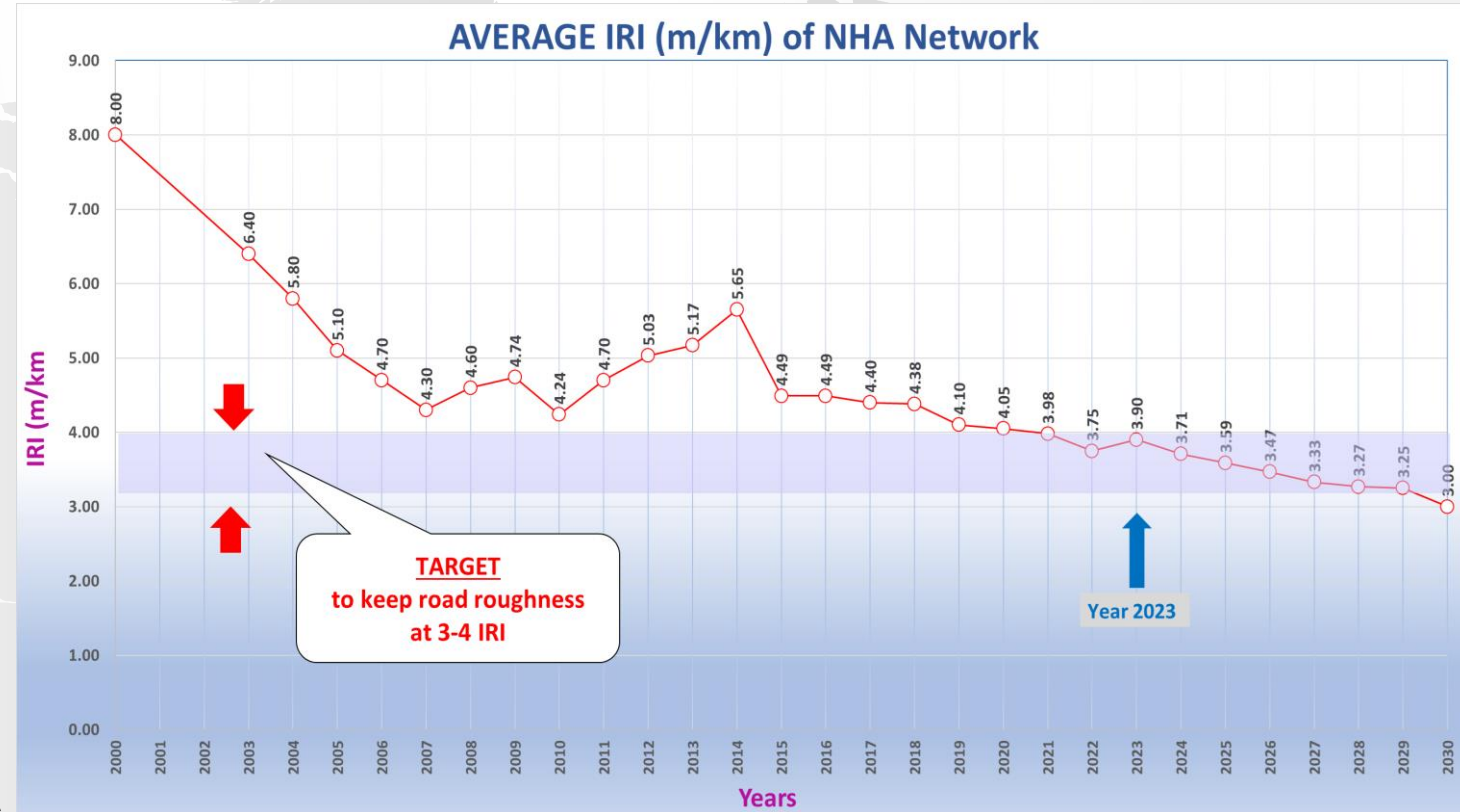
ROAD ASSET MANAGEMENT

- CAREC Transport Strategy 2030 pays high attention to establishing effective and efficient practices of **Road Asset Management (RAM)** across the CAREC region.
- The key premise of RAM is: Preventive knowledge-based maintenance extends the road asset life without capital repair.
- NHA has been continuously developing the computerized Road Asset Management Systems since 2000.



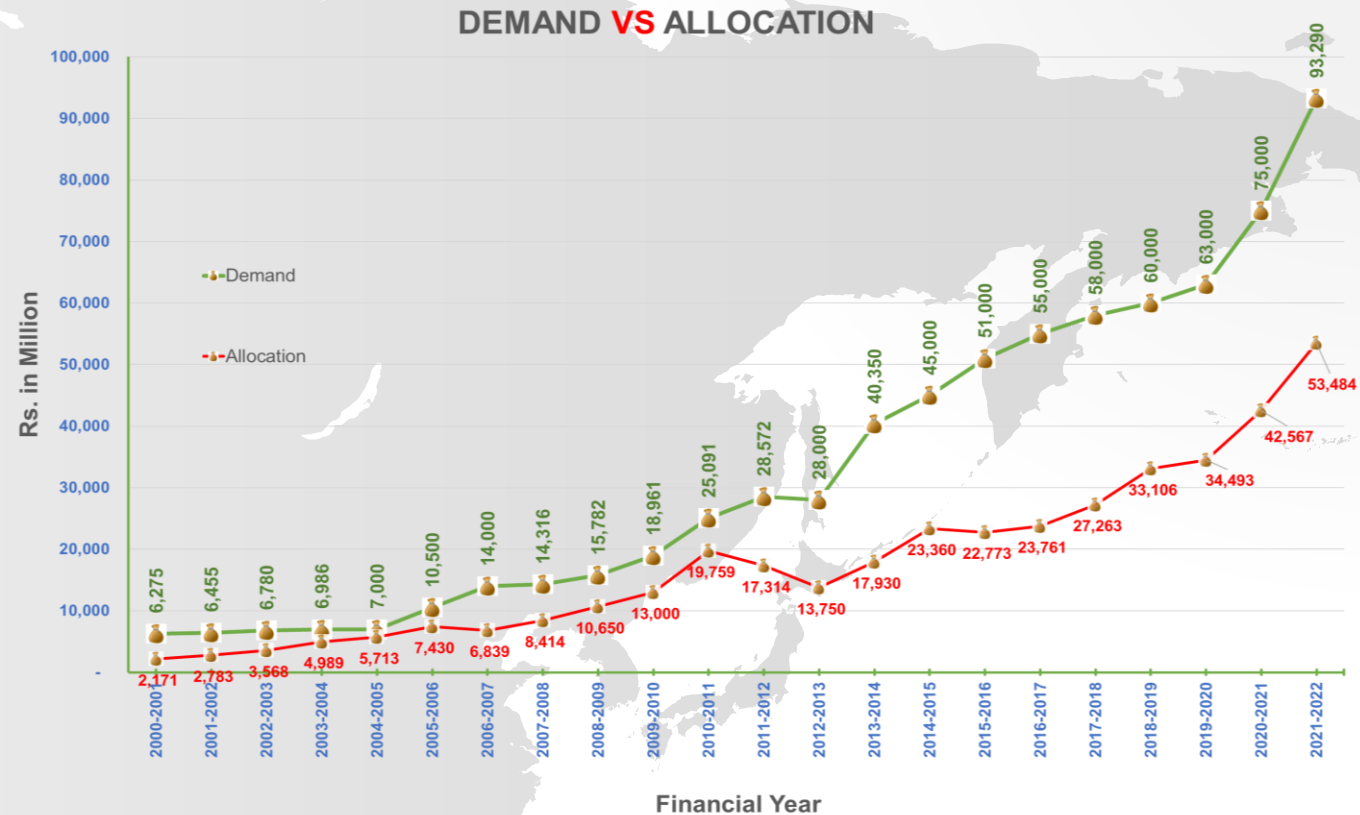
ROAD ASSET MANAGEMENT

- The Road Asset Management Division is responsible for maintenance and preservation of NHA network worth 3.4 Trillion Rupees.
- For maintenance of NHA network, RAMD prepares an Annual Maintenance Plan and budget in consultation with regional offices and various stake holders using the RAMS System described in RMA SOP.
- The planned / approved road maintenance schemes are implemented by NHA field offices in accordance with provisions in NHA Code and Public Procurement Rules.



ROAD ASSET MANAGEMENT

- ❑ The maintenance requirements are increasing due to various factors including aging, expansion of NHA network, increasing trend of heavy traffic, etc.
- ❑ The maintenance backlog is continuously increasing due to slim resource envelope.
- ❑ NHA is exploring various options to enhance the revenue generation as well as to reduce the maintenance requirements financing from RMA, such as



- Digitization of roadside amenities and development of NHA GIS.
- Collection of Charges on Commercial Use of ROW
- Introduction of Performance based maintenance contracts / Operating Concession Agreements

ROAD ASSET MANAGEMENT

- ❑ The Performance Based Maintenance Contracts on NHA network have been successfully implemented on three Motorway routes.
- ❑ For highways, a Concept Plan has been prepared. The candidate road sections have been evaluated considering the following aspects:
 - Improvement cost requirements
 - Expected Revenue potential
 - Expected revenue share of NHA from Operating Concession Contract
 - Overall impact on Road Maintenance Account
 - Determination of Performance standards for Operating Concession
- ❑ It is expected that procurement of pilot section shall be completed by the end of 2023.

STATUS OF GLOBAL ROAD SAFETY



- 8th leading cause of death
- 1st cause of death among children and young adults
- 1.35 million deaths annually
- 50 million life changing injuries
- Rate of deaths / 100,000 population

Africa	26.1
SE Asia	19.8
America	15.9
Europe	10.4
Global	18.3
Pakistan	14.3

SOURCE: WHO GLOBAL ROAD SAFETY STATUS REPORT

ROAD SAFETY

- Road safety is one of the important goals in National Transport Policy approved by the Government of Pakistan. National Road Safety Strategy 2018 – 2030 has been prepared & launched by Ministry of Communications based on the five pillars of the Global Plan of the United Nations Decade of Action.
- Road Safety Strategy 2018 – 2030 has a target to reduce fatalities by 50% from 2030 figure on CAREC routes. Ministry of Communications prepared an effective & result oriented National Road Safety Action Plan (2020 – 2024) to save precious lives with the objective to have positive impact on our society.
- A National Steering Committee with representatives from all stakeholders at the Federal and Provincial Governments Levels has been set up to steer the matters related to Road Safety in the country.
- Road Safety Audit is made part of every road development project.
- Also, a draft Road Safety Act is under consultation with stakeholders for promulgation.

ROAD SAFETY

- ❑ ADB requested under the Regional Technical Assistant (RETA) 9017 requested iRAP to assist NHA to develop the Pakistan Road Assessment Program (PakRAP). Activities included conducting road assessments of the NHA's road network and extensive capacity building training and technical support.
- ❑ iRAP engaged ChinaRAP for providing expertise and knowledge to NHA through close interaction with engineers who have significant experience in managing safety on a rapidly developing road network in a developing economy.
- ❑ The Pakistan Road Safety Assessment Program (PAKRAP) to date, made assessments of 10,666 km of the NHA's road network.

Phase	1	2	3	4
Duration	July-17 to Mar-18	April-18 to Dec-18	Jan-19 to Dec-19	Nov-20 to Oct-21
Roads	N-5	5,039 km	5,000 km	Remaining
Survey	Completed	Completed	Completed	Completed
Coding	Completed	Completed	Completed	Completed
SRIP*	Prepared	Prepared	Prepared	Prepared

STAR RATING ASSESSMENT OF NHA NETWORK

	Vehicle Occupant		Motorcyclist		Pedestrian		Bicyclist	
Star Ratings	Length (km)	Percent	Length (km)	Percent	Length (km)	Percent	Length (km)	Percent
5 Stars	37.60	0.35%	9.20	0.09%	0.00	0.00%	5.50	0.05%
4 Stars	358.60	3.36%	179.40	1.68%	3.00	0.03%	12.50	0.12%
3 Stars	2,204.00	20.66%	1,401.20	13.14%	30.10	0.28%	427.90	4.01%
2 Stars	3,110.40	29.16%	2,723.70	25.54%	219.70	2.06%	1,408.20	13.20%
1 Star	4,879.10	45.74%	5,887.00	55.19%	6,143.30	57.60%	4,517.90	42.36%
Not applicable	76.40	0.72%	465.60	4.37%	4,270.00	40.03%	4,294.10	40.26%
Totals	10,666.10	100.00%	10,666.10	100.00%	10,666.10	100.00%	10,666.10	100.00%

SAFER ROAD INVESTMENT PLAN

Based on iRAP final Project Report,

❑ Short – Term Plan (2021 – 2025)

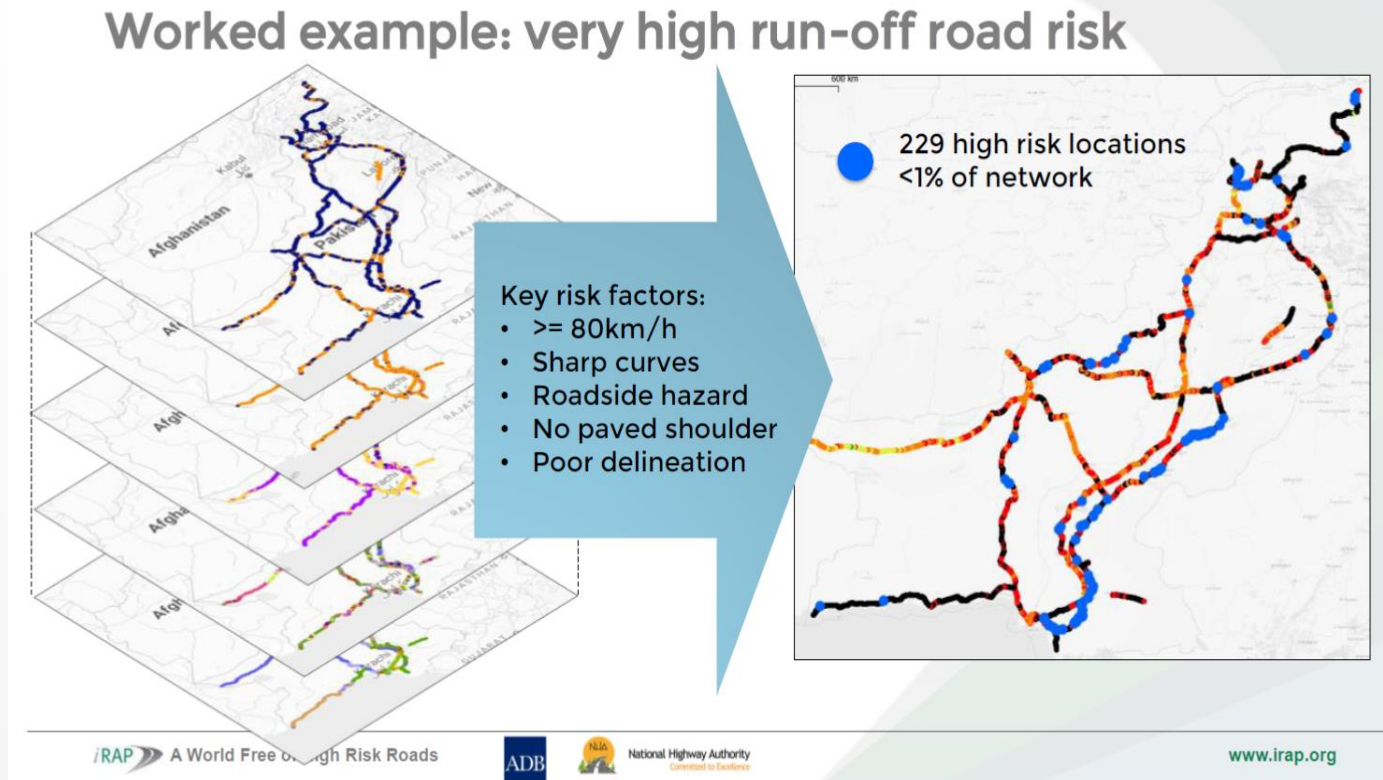
- ✓ Elimination of 1 Star Road segments
- ✓ Improvement of high risk road segments
- ✓ 5 Star & 4 Star Demonstration Corridors

❑ Mid – Term Plan (2025 – 2028)

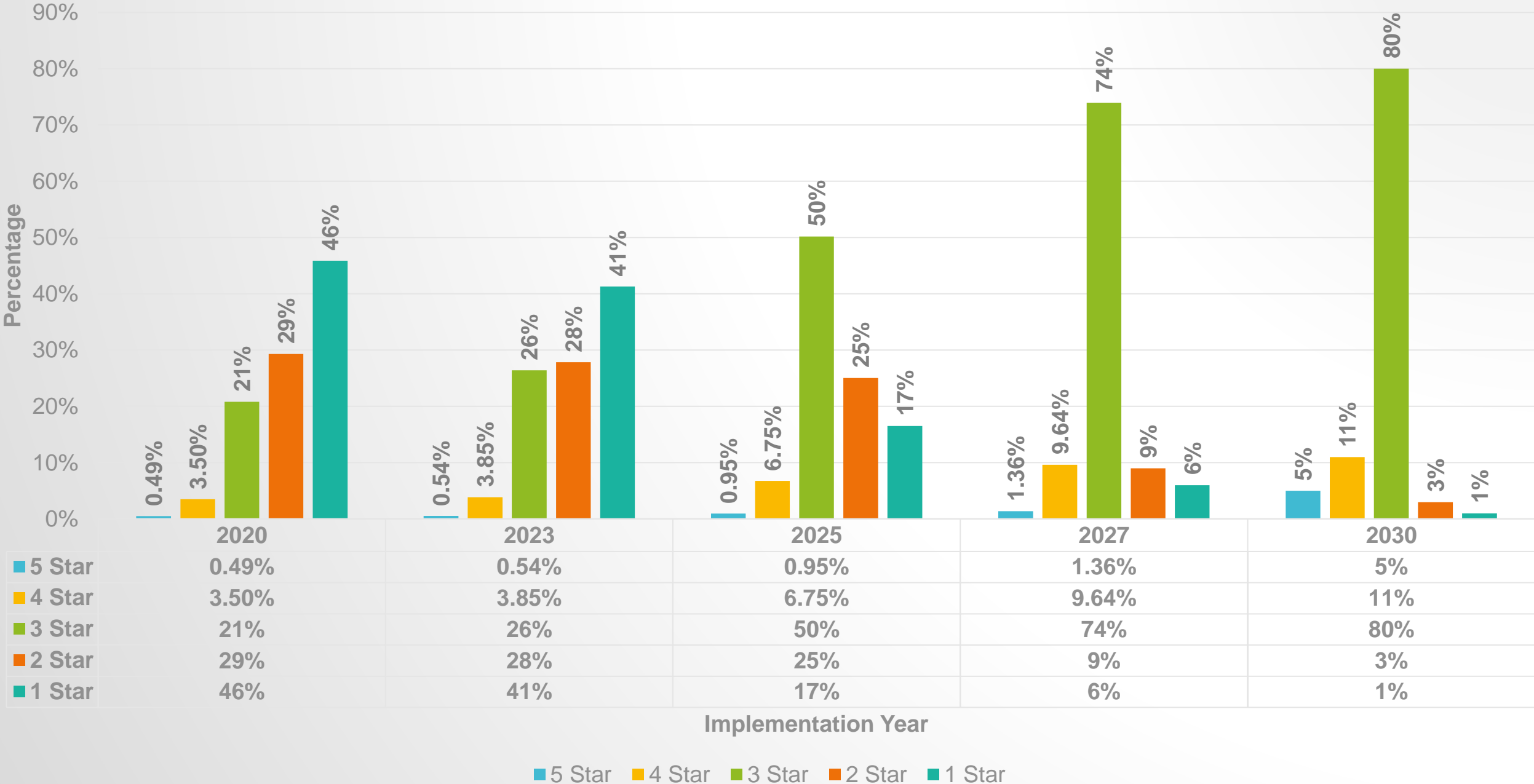
- ✓ Elimination of 2 Star Road segments
- ✓ Improvement of high risk road segments
- ✓ 5 Star & 4 Star Demonstration Corridors

❑ Long – Term Plan (2028 – 2030)

- ✓ Elimination of 3 Star Road segments
- ✓ 5 Star & 4 Star Demonstration Corridors







STAR RATING IMPROVEMENT PLAN

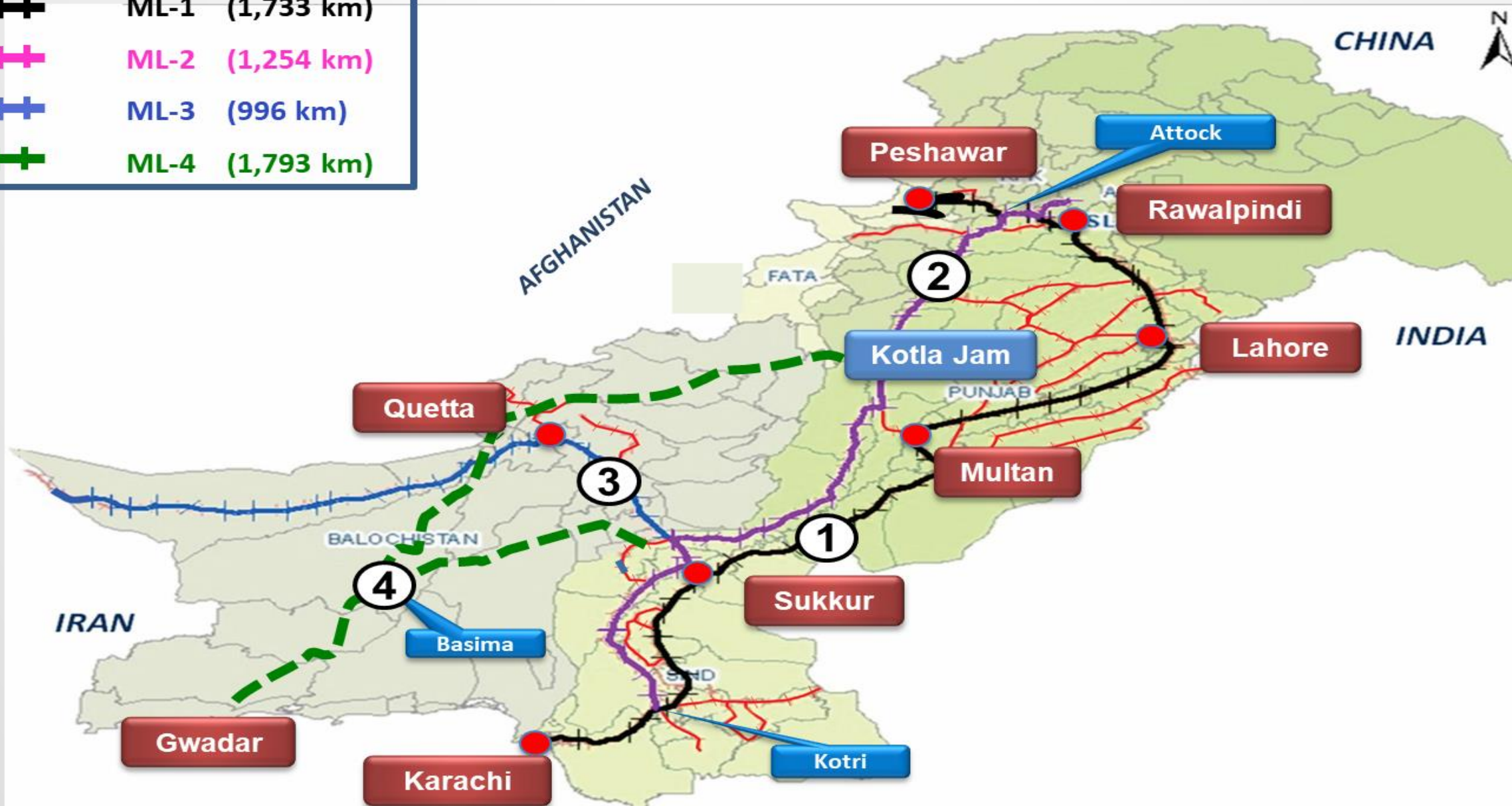


CROSS BORDER TRANSPORT FACILITATION

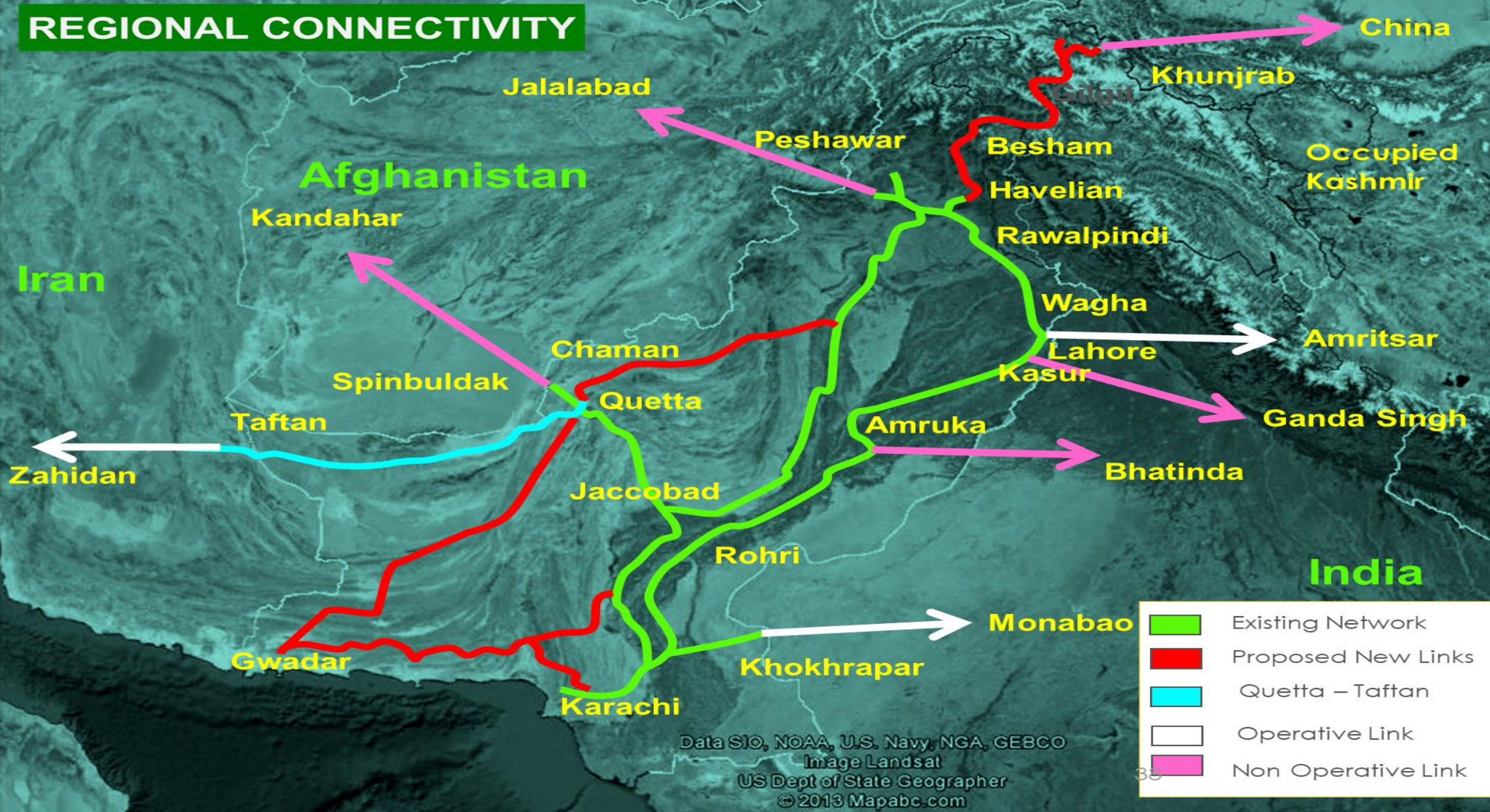
- ❑ Improvement of Border Crossing Points (Torkham & Chaman) with the funding support of ADB under Integrated Transit Trade Management System (ITTMS) Project commenced in 2016. Presently, 68% progress at Torkham and 73 % progress at Chaman has been achieved. The work is expected to complete by July 2023.
- ❑ Pakistan has operationalized TIR Transit System under TIR Conventions in Pakistan.
- ❑ Pakistan has also acceded to International CMR Convention to facilitate international transportation of goods.
- ❑ For efficient performance of the logistics and transport sector, the Cabinet approved the National Freight and Logistics Policy.
- ❑ This Policy envisages to enhance domestic and international supply chain through seamless integration of logistics via road, rail, marine, inland waterways, and aviation.

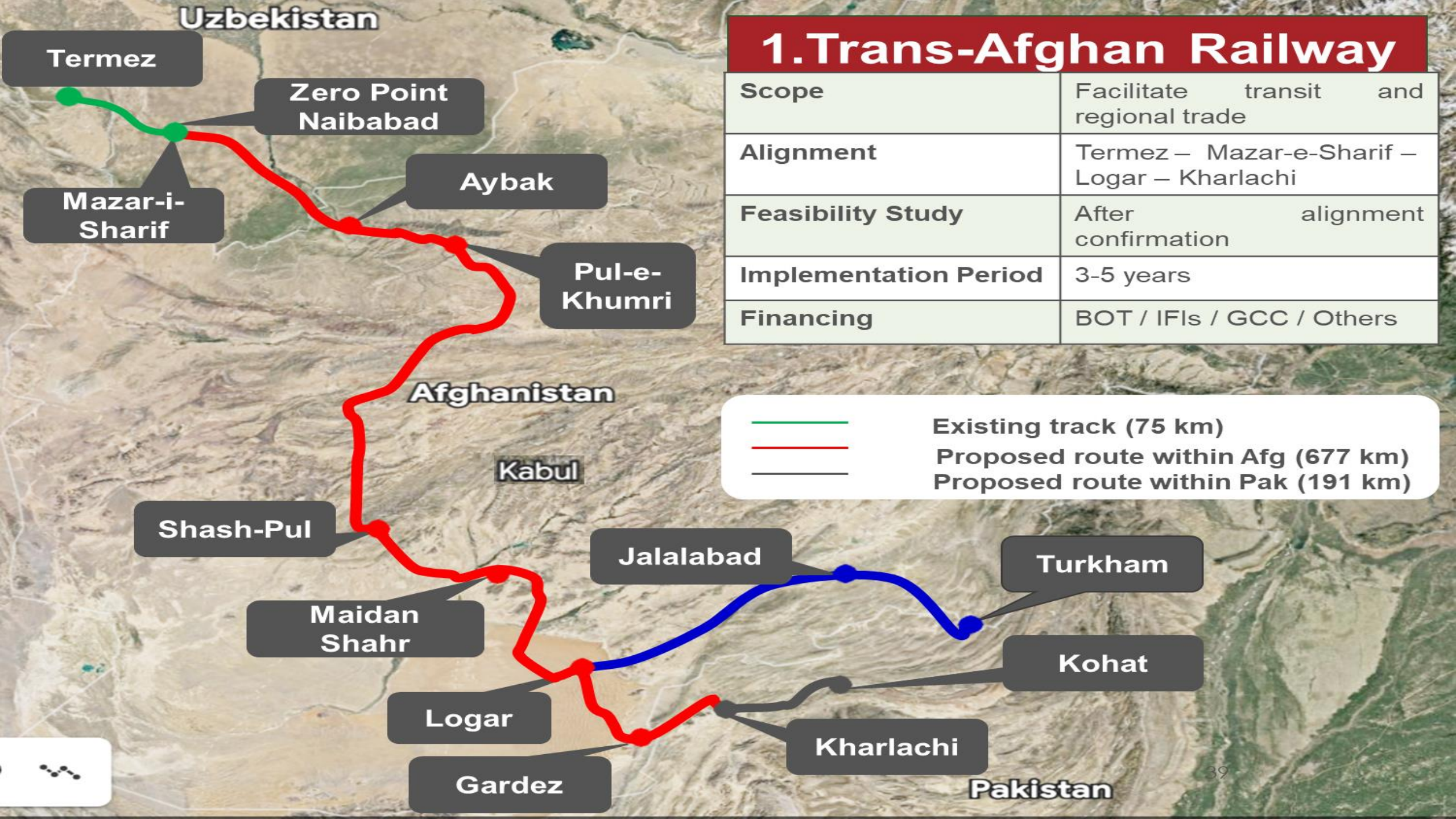
Pakistan Railways Network

	ML-1 (1,733 km)
	ML-2 (1,254 km)
	ML-3 (996 km)
	ML-4 (1,793 km)



REGIONAL CONNECTIVITY





1. Trans-Afghan Railway

Scope	Facilitate transit and regional trade
Alignment	Termez – Mazar-e-Sharif – Logar – Kharlachi
Feasibility Study	After alignment confirmation
Implementation Period	3-5 years
Financing	BOT / IFIs / GCC / Others

Existing track (75 km)
Proposed route within Afg (677 km)
Proposed route within Pak (191 km)

2. Chaman – Kandahar Railway

Scope	Chaman-Kandhar 107 Kms
PC-I	Chaman-Spin boldak (2014)
CDWP Decision	Kandhar-Spin Boldak Construction to commence first
Financing	CRRA

Afghanistan

Kandhar

Spin Boldak

Pakistan

Chaman

Quetta

— Existing Track (142 Km)
— Proposed Route (107 Km)

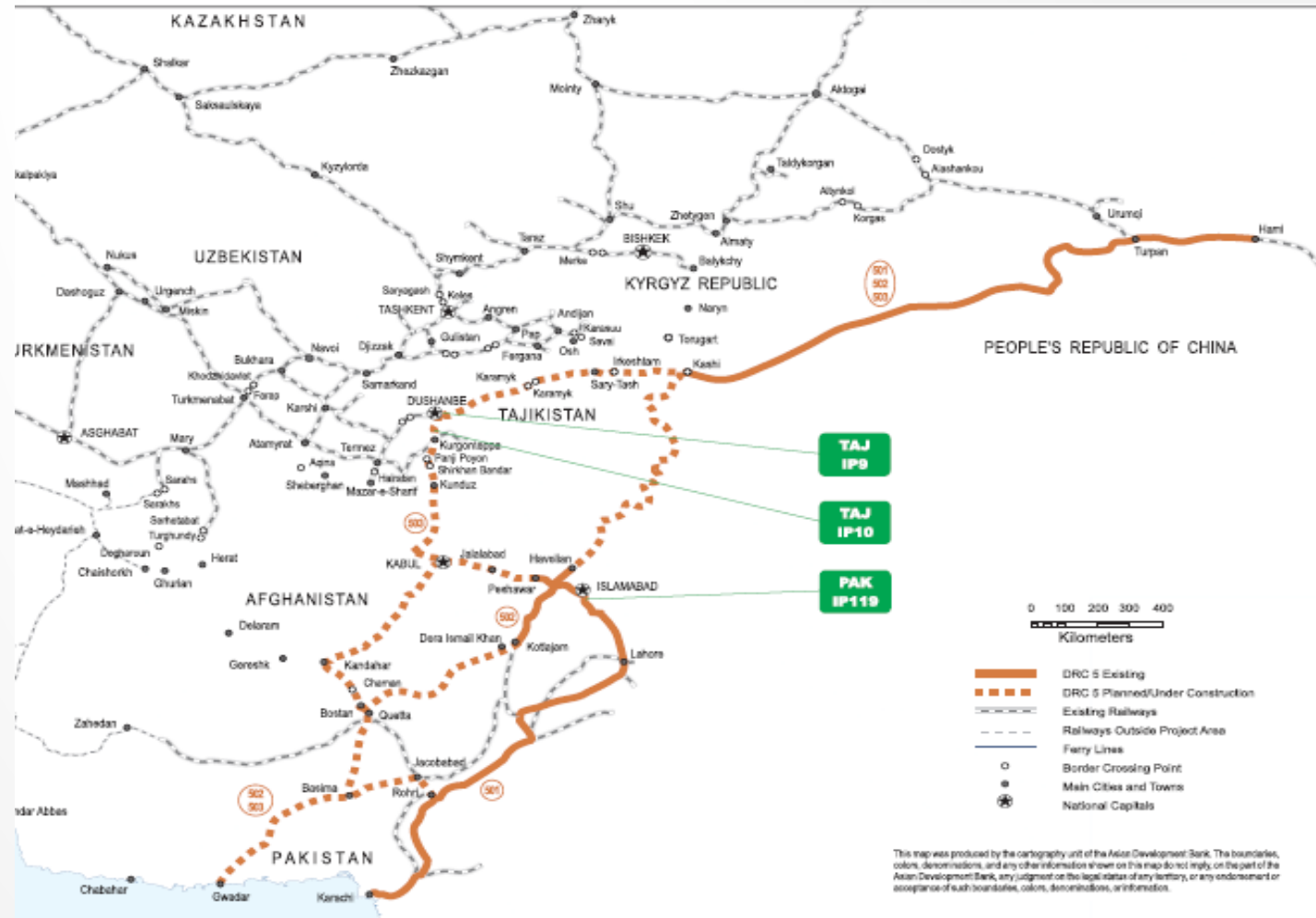
IMPLEMENTATION PROGRESS OF THE TTFS 2020 PROJECTS

- ❑ **Designated Rail Corridor (DRC) 5** is the rail corridor connecting PRC and Pakistan
- ❑ DRC 5 is aiming to link PRC and the ports of Arabian Sea such as Karachi port and Gwadar port.
- ❑ DRC 5 includes big missing links at the border of PRC and Pakistan

Havelian – Khunjrab (682 km);

or in the long section from Pakistan to Afghanistan

Peshawar – Jalalabad (145 km) &
Chaman – Kandhar (106 Km)



IMPLEMENTATION PROGRESS OF THE TTFS 2020 PROJECTS

- ❑ **DRC 6** is the rail corridor connecting Europe to Iran/Pakistan
- ❑ Connection of rail and ports of Gulf and Arabian Sea (e.g. Bandar Abbas port in Iran and Karachi port in Pakistan).
- ❑ In Pakistan, the up-gradation of ML-3 i.e.

Rehabilitation of Jacobabad – Quetta section (295 km) and

Complete Track Renewal of Quetta – Taftan section (680 Km)

is planned for improved regional / local connectivity.



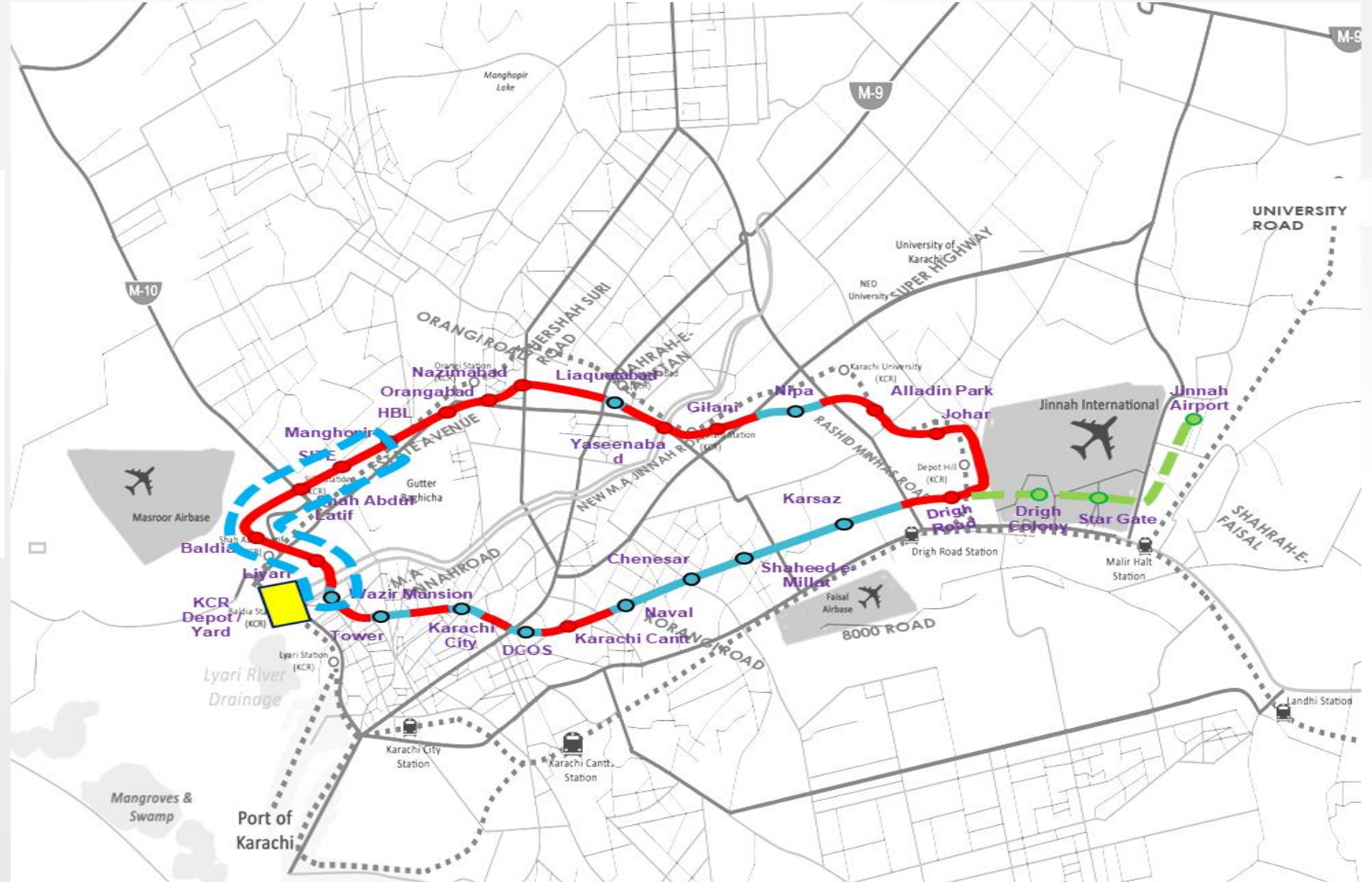
INVESTMENT POSSIBILITIES

- i. **Karachi Circular Railways (KCR)**
- ii. **Dedicated Freight Corridor (DFC)**
- iii. **Up-gradation of Main Line 2 (ML-2)**
- iv. **Up-gradation of Main Line 3 (ML-3)**

Karachi Circular Railways (KCR)

Total length: 43.22 kms

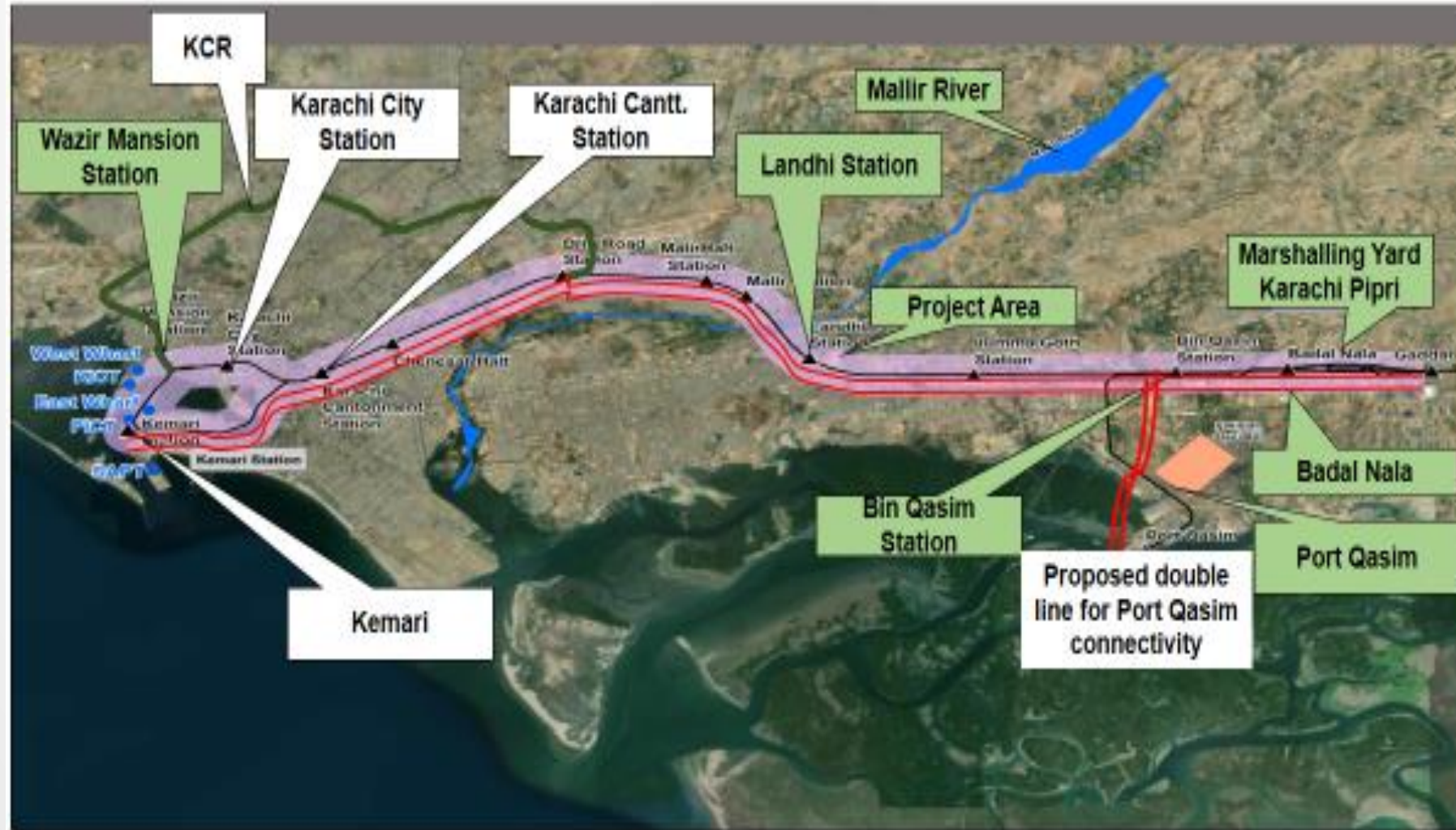
- Project Cost: US \$ 1,034 million (2022 estimates)
- IRR: 21%
- Payback period: 9 years
- Mode: Build-Operate-Transfer
- 43.22 Km dual track urban rail mass transit system



Dedicated Freight Corridor & Model Rail Terminal

Total length: 50 kms

- Project Cost: US \$ 600 million (2023 estimates)
- IRR: 19.06%
- Payback period: 6 years
- Mode: Build-Operate-Transfer
- Broad gauge, speed 80 km/h, axle load 25 Metric ton



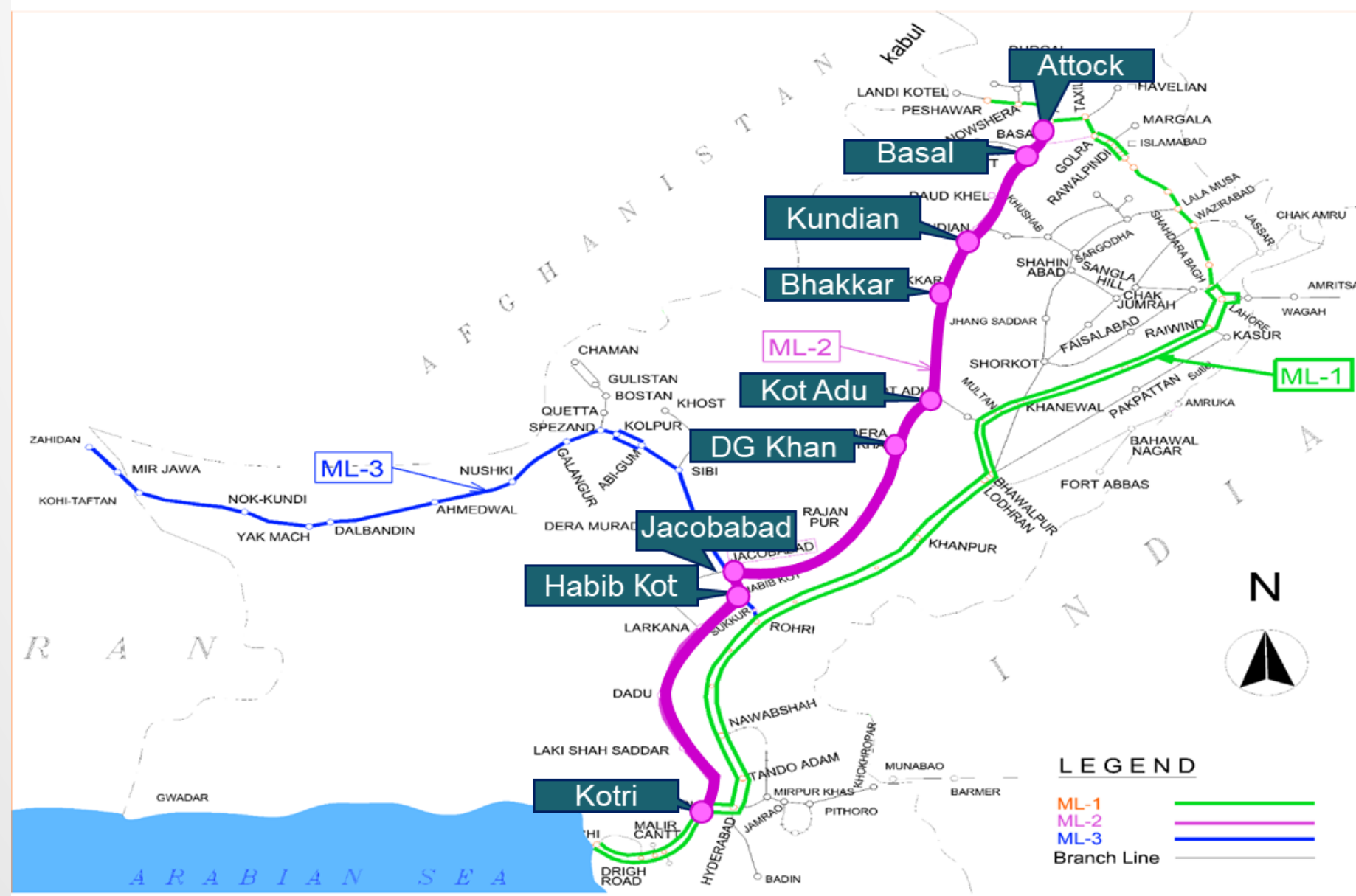
Up-gradation of Main Line-2 (1,254 kms)

Technical Parameters

Broad gauge, single track,
120 km/h freight speed, 160
km/h passenger speed, axle
load 25 Metric ton

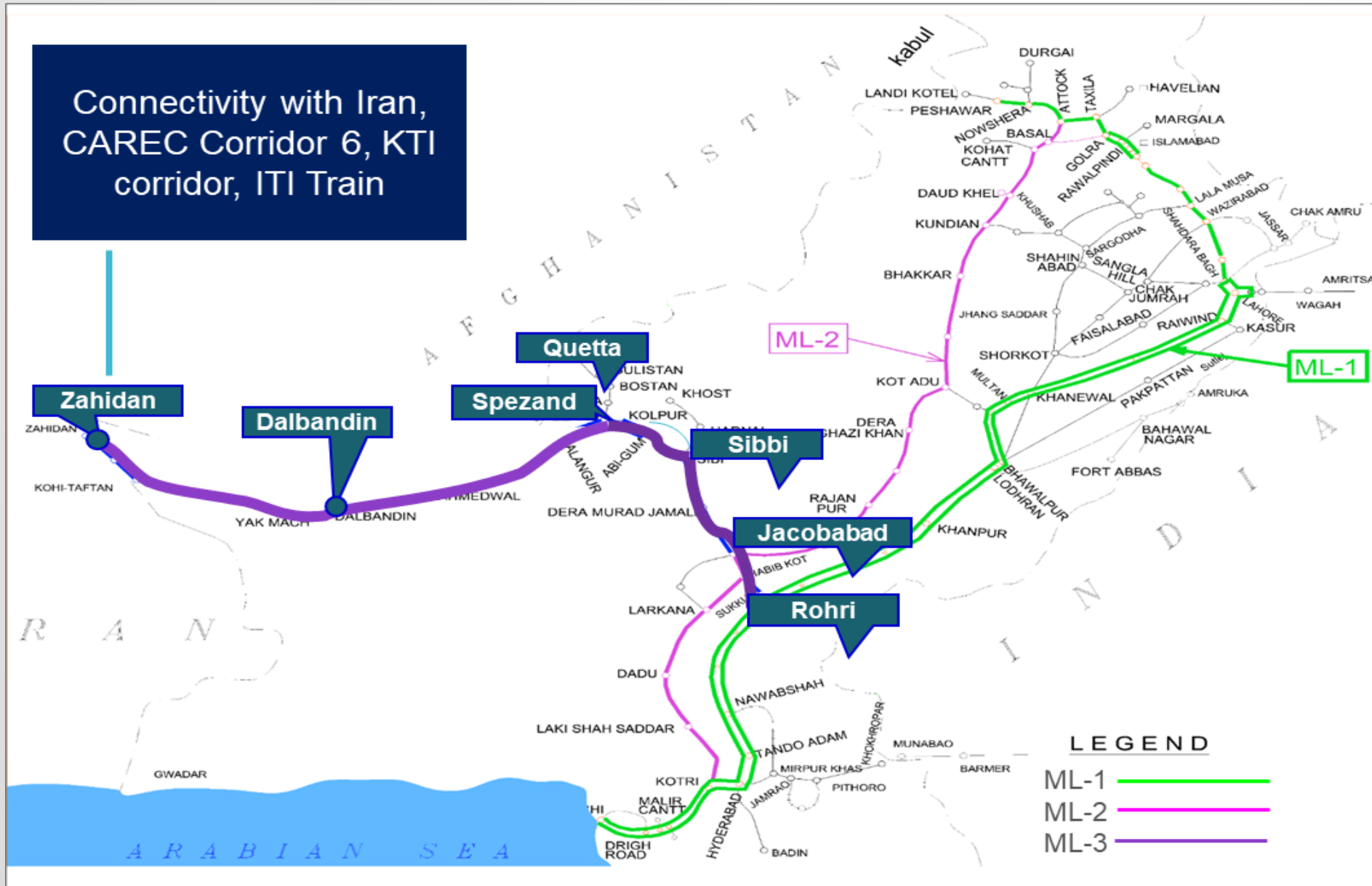
Project Benefits

ITI train support, cross
border trade, trade with
Afghanistan



Up-gradation of Main Line-3 (967 kms)

Connectivity with Iran,
CAREC Corridor 6, KTI
corridor, ITI Train



Technical Parameters

Broad gauge, single track, 120 km/h freight speed, 160 km/h passenger speed, axle load 25 Metric ton

Project Benefits

Connectivity with Iran, Turkey and Europe, CAREC Corridor 6, KTI corridor, ITI Train, cross border trade

AVIATION

- ❑ To energize the Aviation Sector for socio-economic growth, Government has launched new Aviation Policy-2019.
- ❑ The main thrust is on “Fair Sky Policy”. It will ensure safe, secure, efficient and a commercially viable aviation sector.
- ❑ It envisages to create conditions conducive for affordable general aviation activities, i.e., sports flying and inter-city air travel by private aircraft / air-taxi service / charter & Aerial Work operations, etc.

THANKYOU