

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

In the name of Allah, the beneficent the merciful



GOVERNMENT OF PAKISTAN

MINISTRY OF COMMUNICATIONS

NATIONAL HIGHWAY AUTHORITY



Presentation on

Ongoing Projects

Islamabad – 26th October 2015



- Road Landscape Transformed;
- Infrastructure Projects of over Rs.600 Billion to be completed in next Three Years;
- Implementation Commenced after Planning and Resource Deployment;

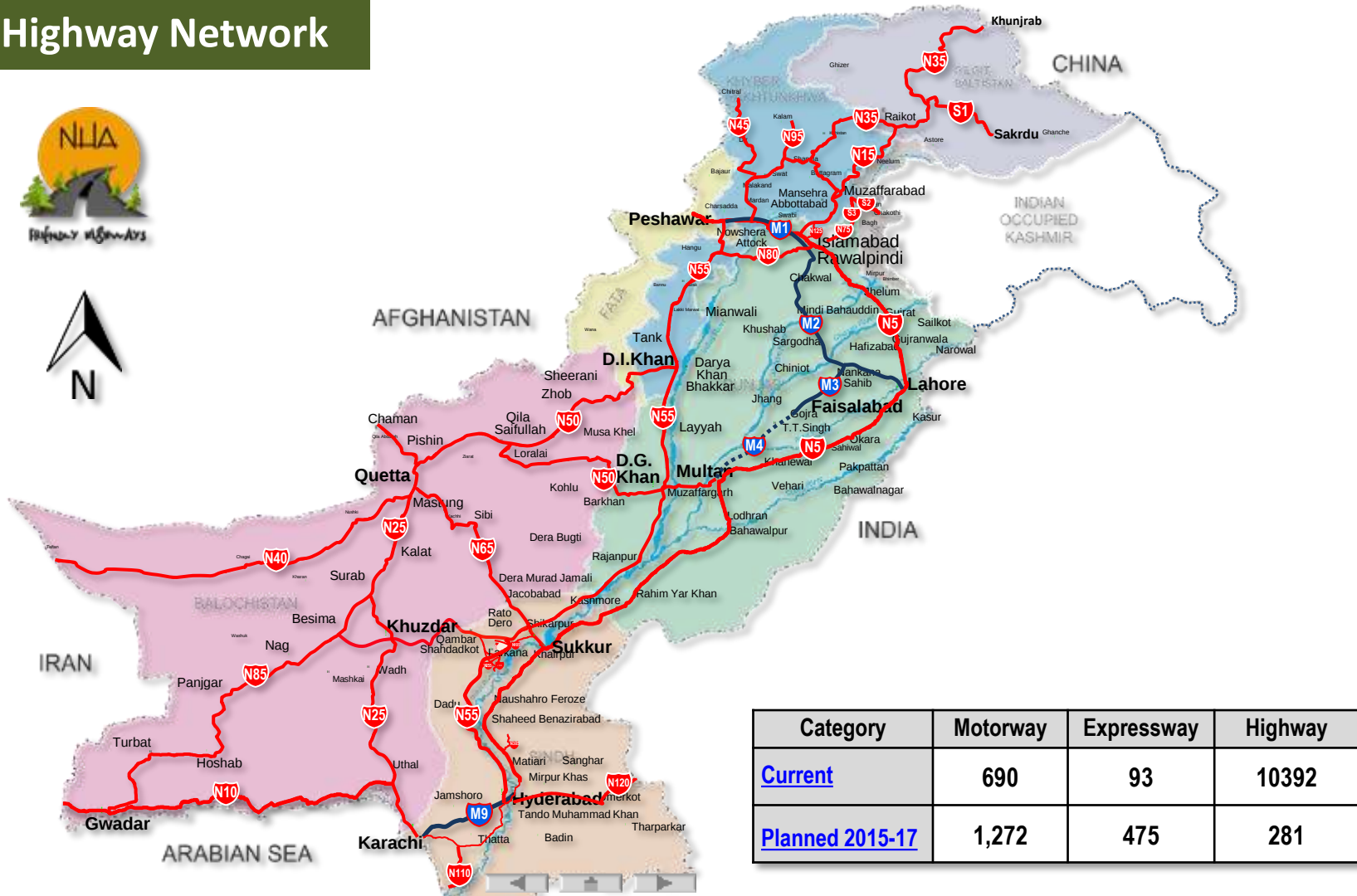




- Complete North South Motorway Link;
- Strengthen East West Connectivity i.e. Baluchistan;
- Spread Across all Provinces Including GB;
- Largest BoT Regime under PPP Mode;
- Contribution to GDP Growth i.e. 1.0% to 1.5%;



National Highway Network



Category	Motorway	Expressway	Highway
Current	690	93	10392
Planned 2015-17	1,272	475	281

Major Projects

- Chakdara - Islamabad
- Torkham - Jalalabad
- Peshawar - Kabul
- DI Khan - Burhan
- DI Khan - Zhob N-50
- Zhob - Quetta
- Multan - DG Khan
- Q.Saifullah-Waigum Rud
- Rakhi Gaaj - Bewata
- Surab - Chaman
- Yakmach - Kharan
- Khuzdar - Shahdadkot
- Khuzdar - Basima
- Surab - Hoshab
- Gwadar - Hoshab

CPEC

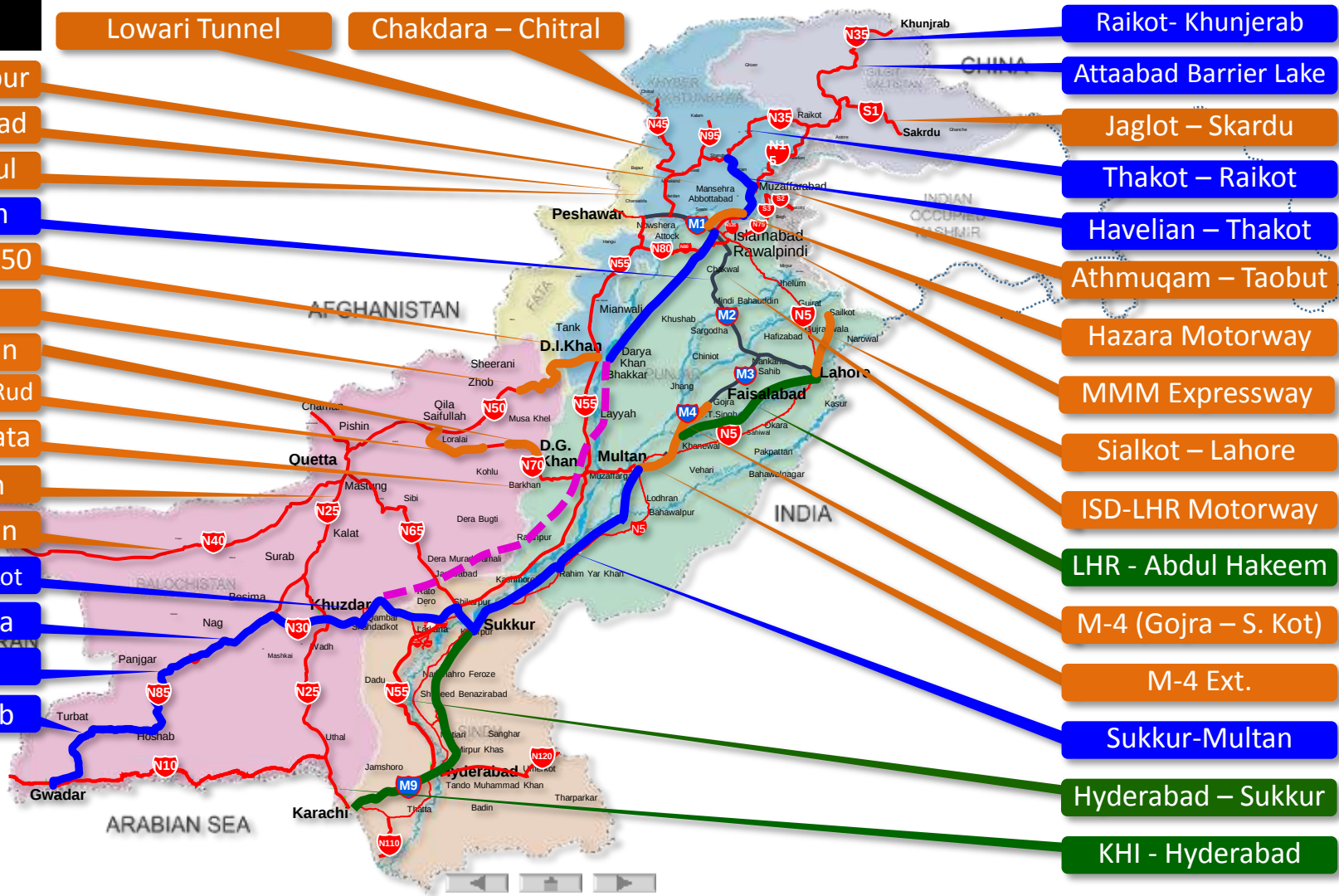
KLM

Others

CPEC Routes

Lowari Tunnel

Chakdara – Chitral



- Raikot- Khunjerab
- Attaabad Barrier Lake
- Jaglot – Skardu
- Thakot – Raikot
- Havelian – Thakot
- Athmuqam – Taobut
- Hazara Motorway
- MMM Expressway
- Sialkot – Lahore
- ISD-LHR Motorway
- LHR - Abdul Hakeem
- M-4 (Gojra – S. Kot)
- M-4 Ext.
- Sukkur-Multan
- Hyderabad – Sukkur
- KHI - Hyderabad



Thank You

National Highway Authority

نیشنل ہائی وے اتھارٹی



LINK SLIDES

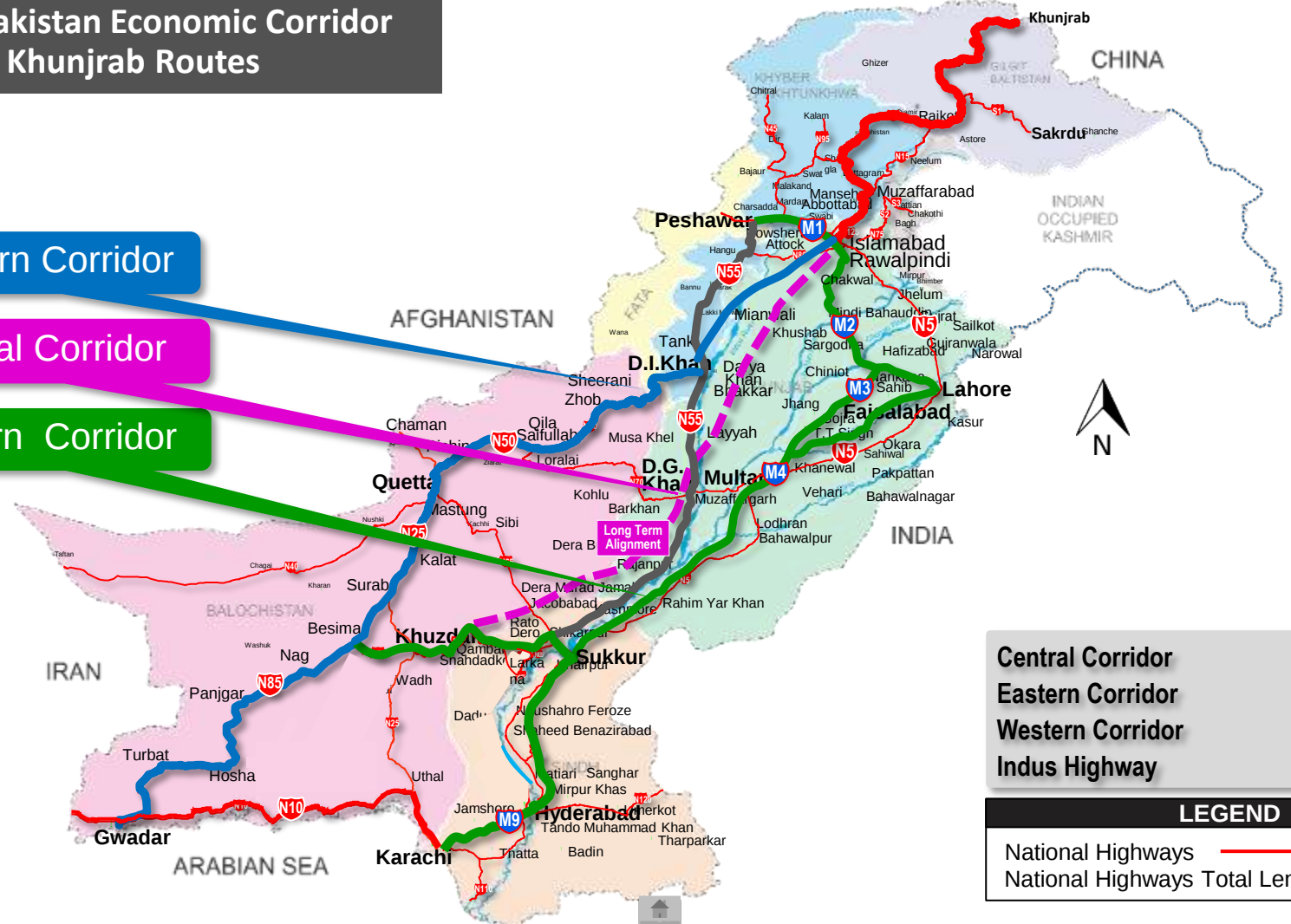


China-Pakistan Economic Corridor (CPEC)

China – Pakistan Economic Corridor Gwadar – Khunjrab Routes



- Western Corridor
- Central Corridor
- Eastern Corridor



Central Corridor

Eastern Corridor

Western Corridor

Indus Highway

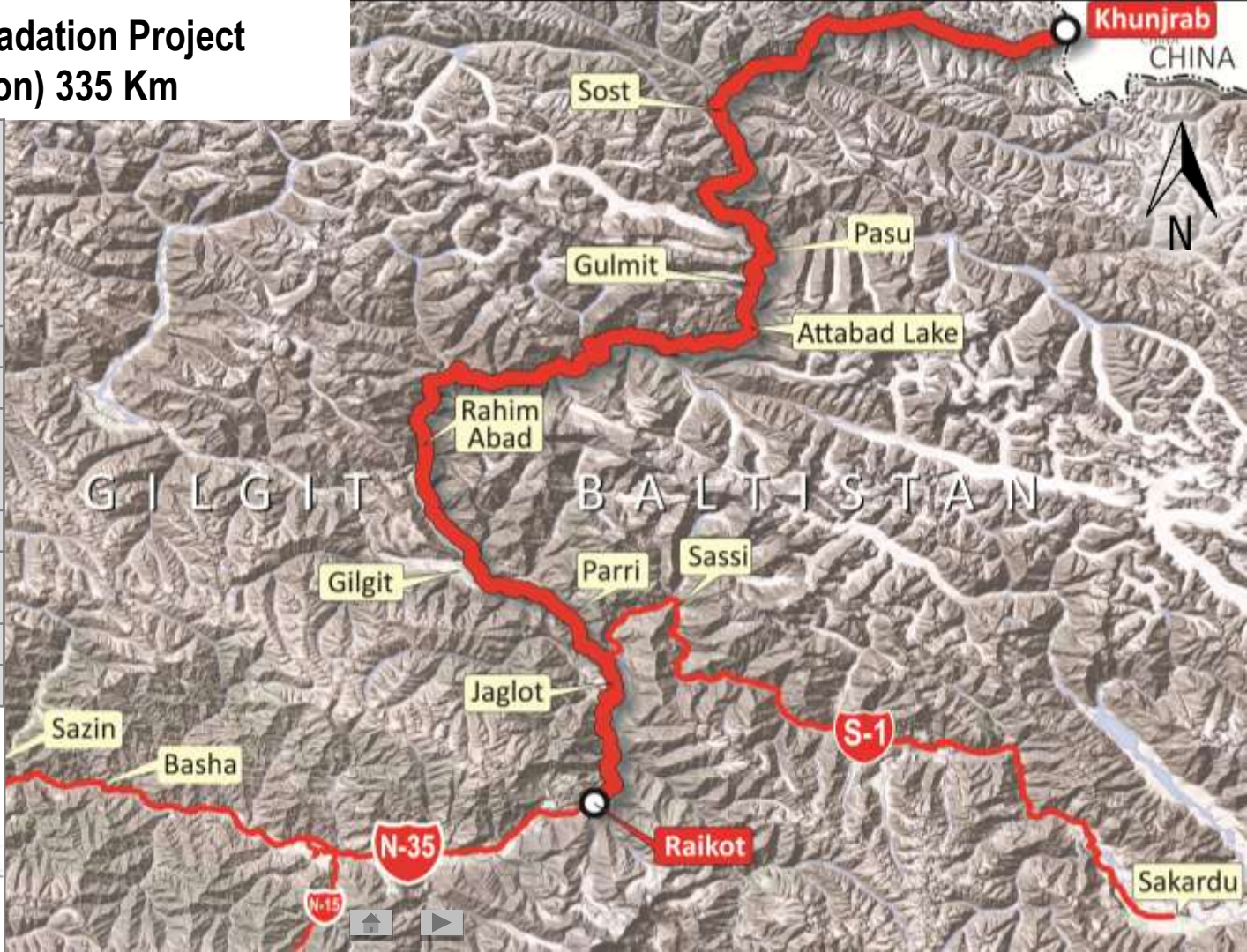
LEGEND

National Highways

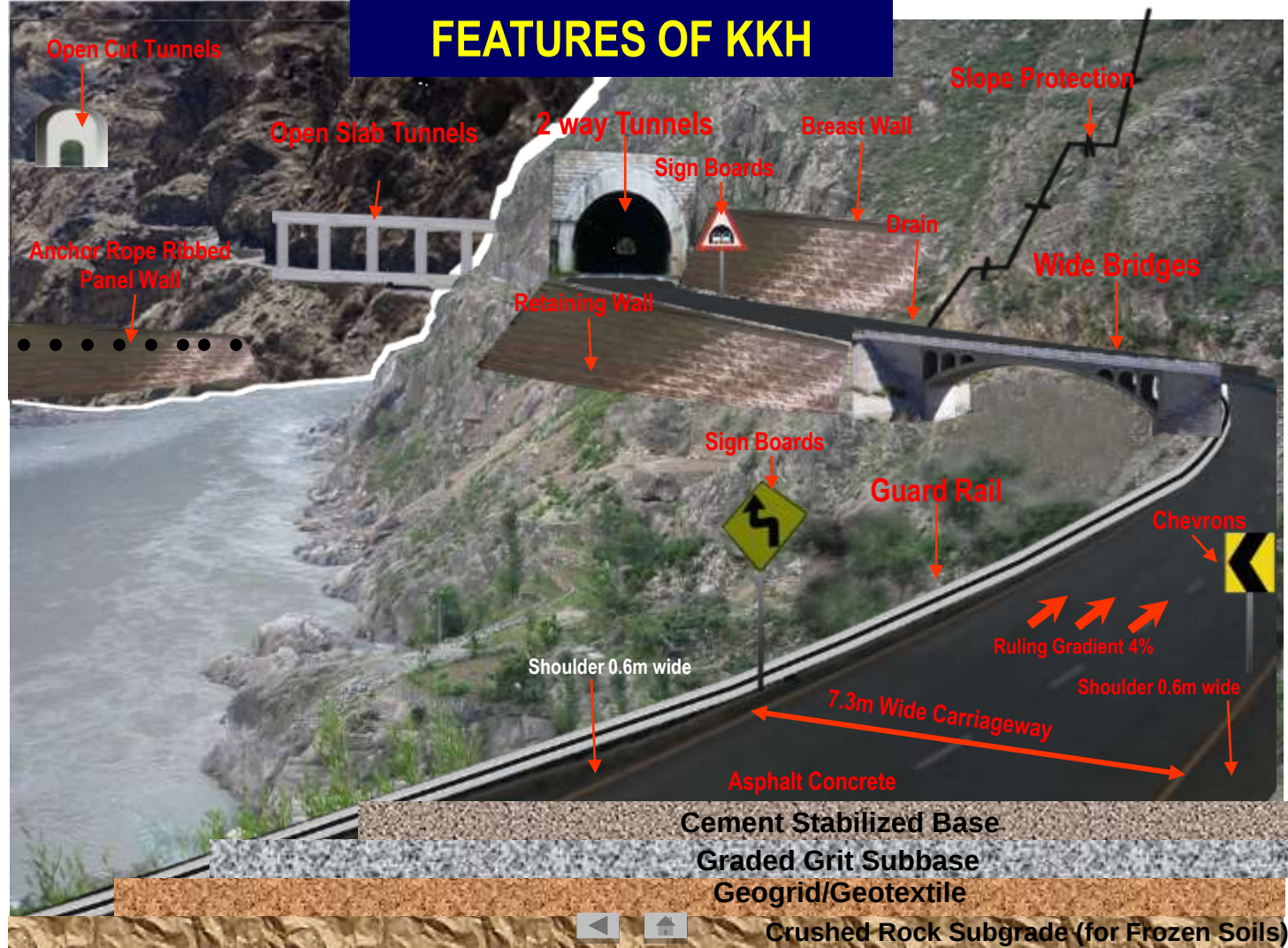
National Highways Total Length: 12,131 Km

KKH Improvement / Up-gradation Project (Raikot – Khunjerab Section) 335 Km

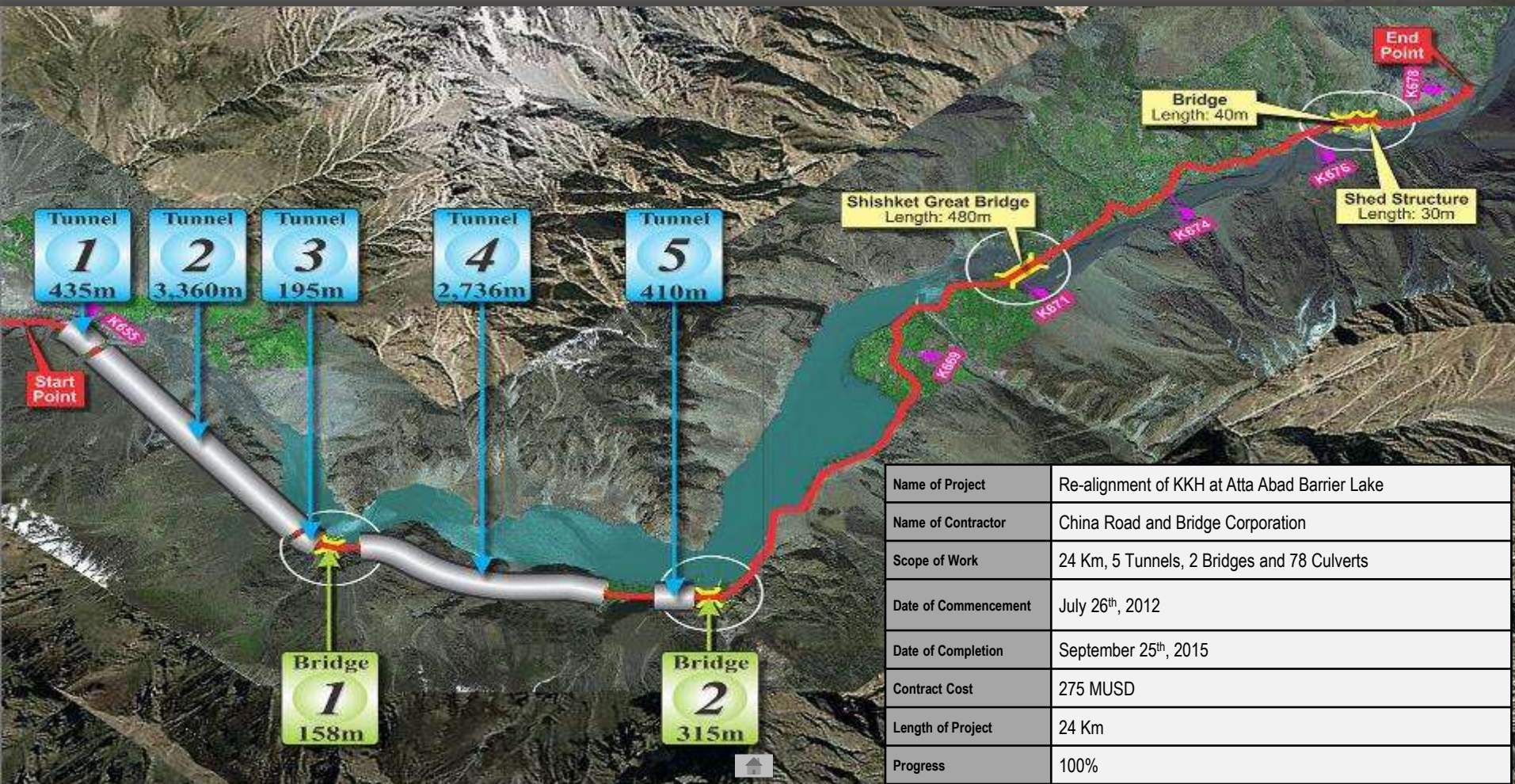
Contractor	China Road and Bridge Corporation (CRBC)
Mode of Contract	Engineer, Procure, Construct-Contract (EPC/ Turnkey)
Total Project Cost	US\$ 510.42 Million
Date of Comm.	August 01, 2008
Date of Completion	(1 st revised) Nov 30 th , 2013 (64 Calendar Months)
Tunnel (Mined)	02-697 meter
Tunnel (Open cut/Shed)	16 No's
Bridges (New)	35 No's
Culverts (New)	1,040 Nos.



FEATURES OF KKH

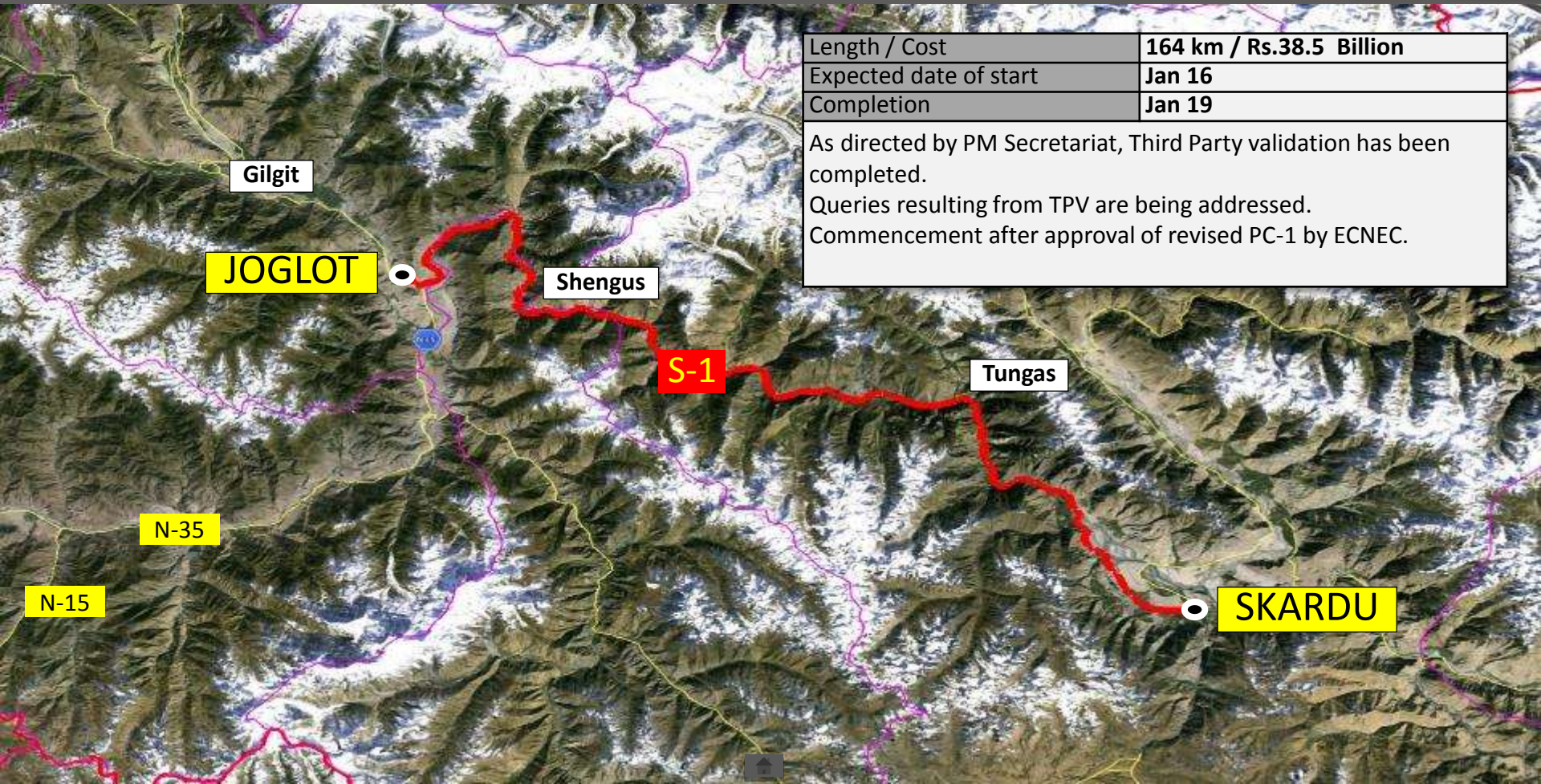


Atta Abad Barrier Lake



Name of Project	Re-alignment of KKH at Atta Abad Barrier Lake
Name of Contractor	China Road and Bridge Corporation
Scope of Work	24 Km, 5 Tunnels, 2 Bridges and 78 Culverts
Date of Commencement	July 26 th , 2012
Date of Completion	September 25 th , 2015
Contract Cost	275 MUSD
Length of Project	24 Km
Progress	100%

Jaglot – Skardu (S-1)



Length / Cost	164 km / Rs.38.5 Billion
Expected date of start	Jan 16
Completion	Jan 19

As directed by PM Secretariat, Third Party validation has been completed.

Queries resulting from TPV are being addressed.

Commencement after approval of revised PC-1 by ECNEC.

Gilgit

JOGLOT

Shengus

S-1

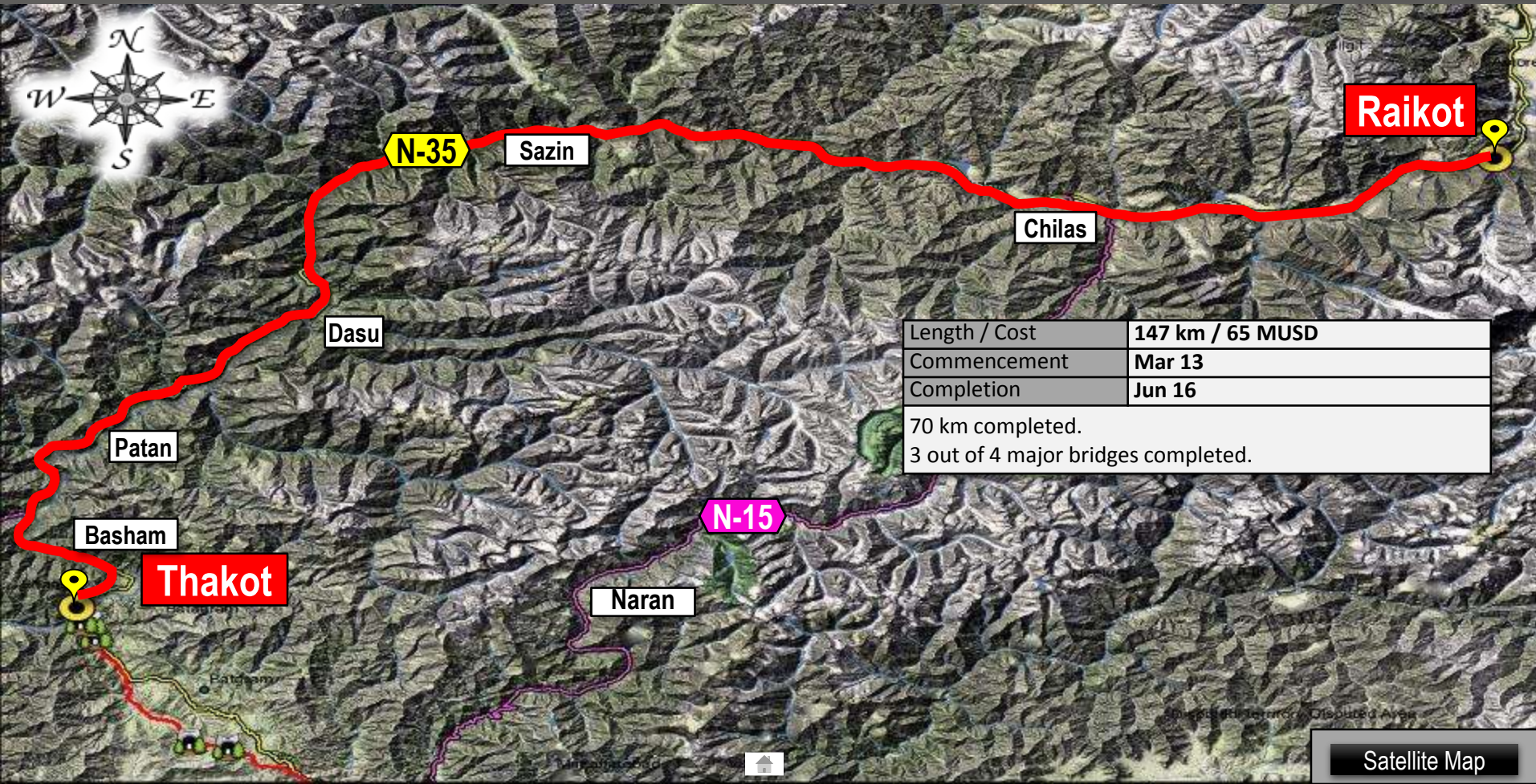
Tungas

N-35

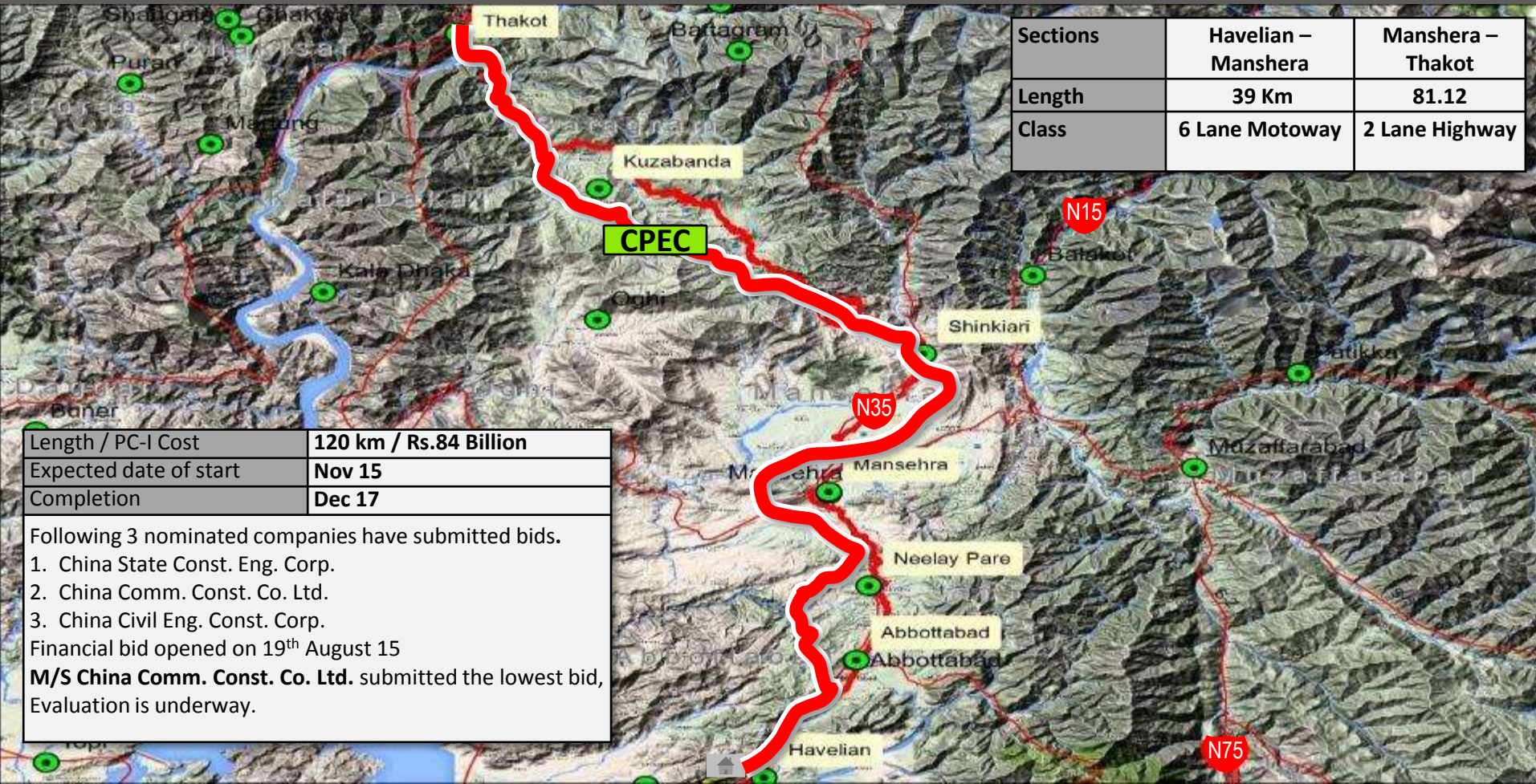
N-15

SKARDU

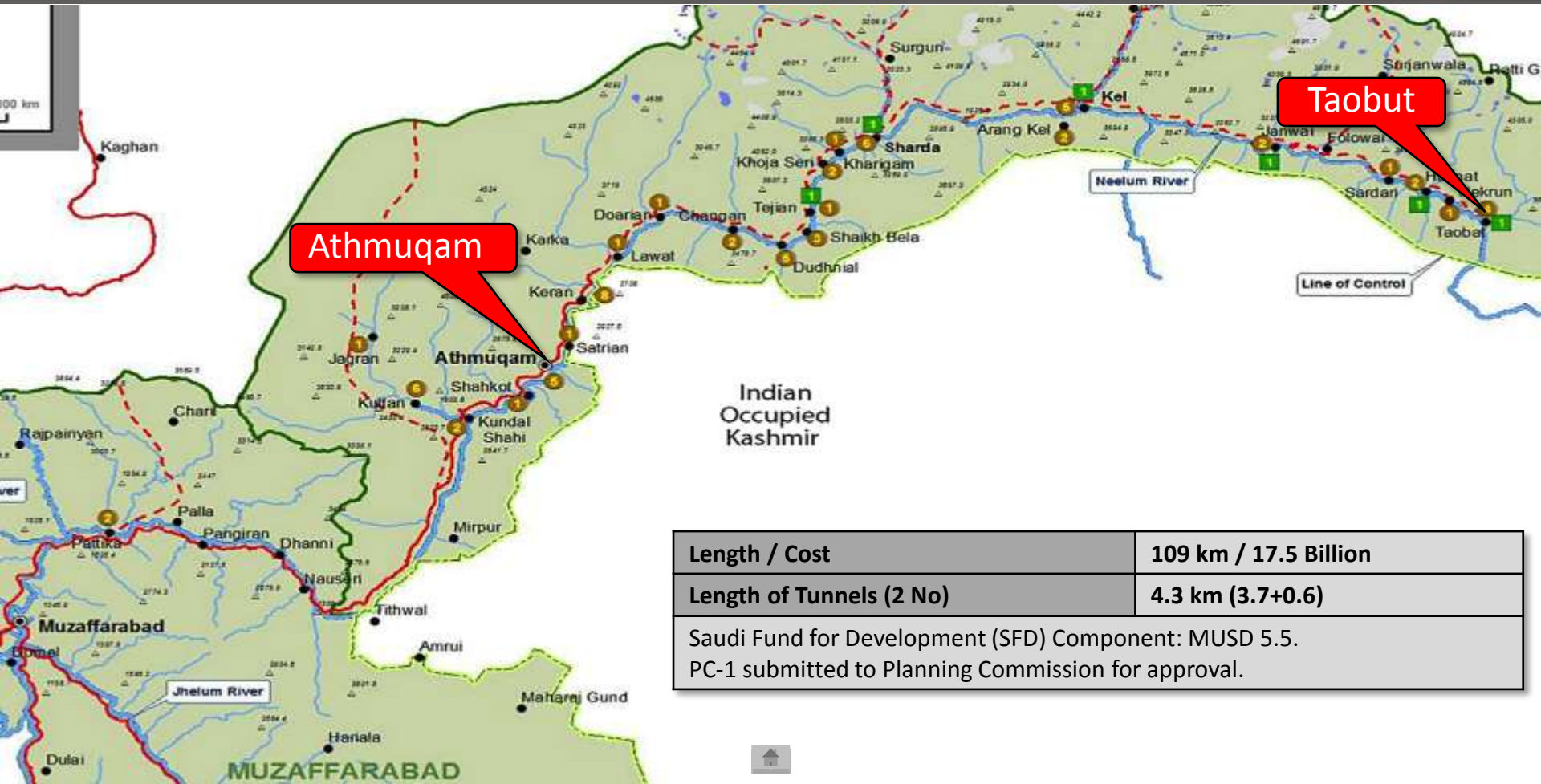
Rehab & Imp. of Thakot – Raikot Section (N-35) FERP Chinese Grant



Havelian – Thakot Section (CPEC)

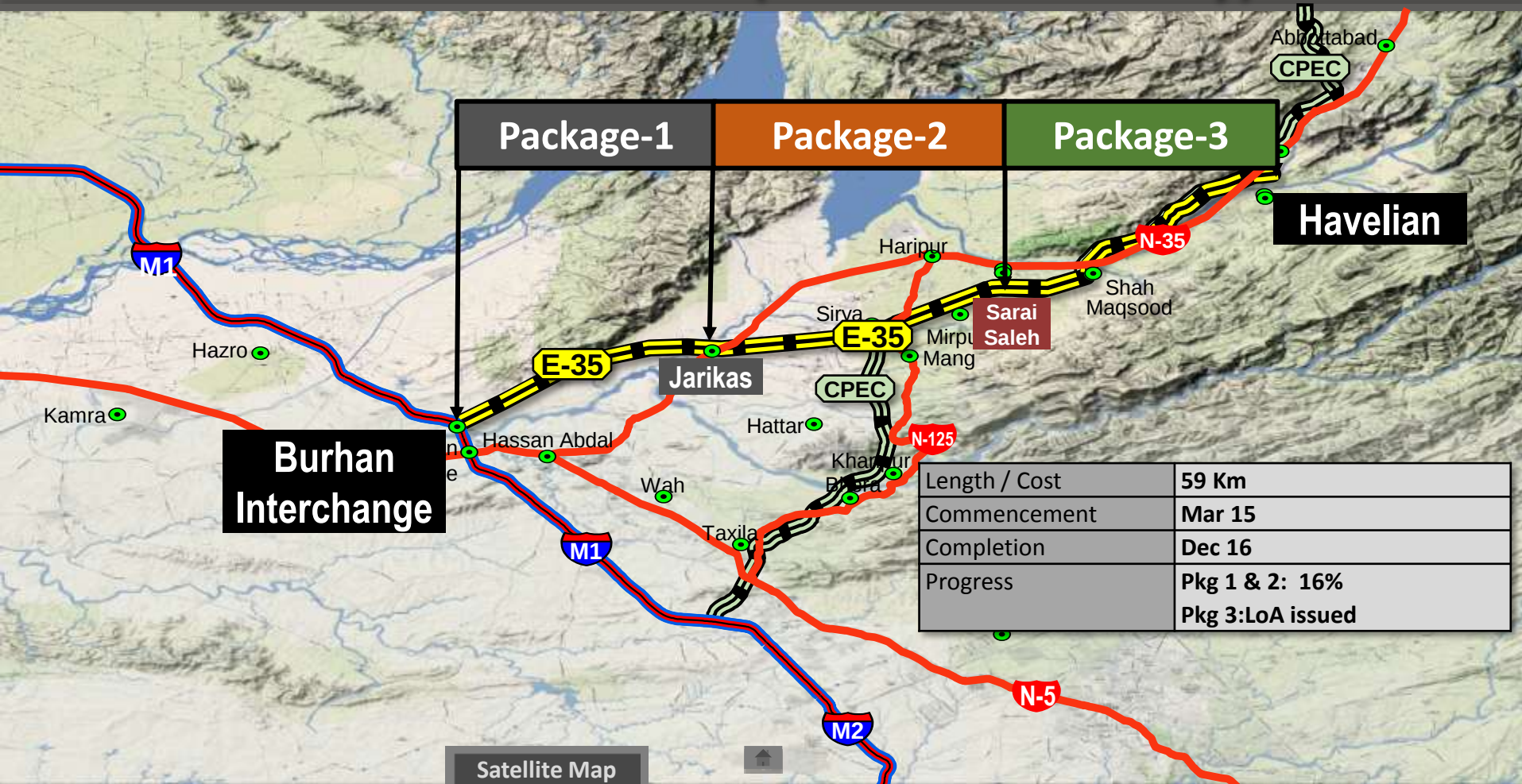


Athmuqam – Taobut

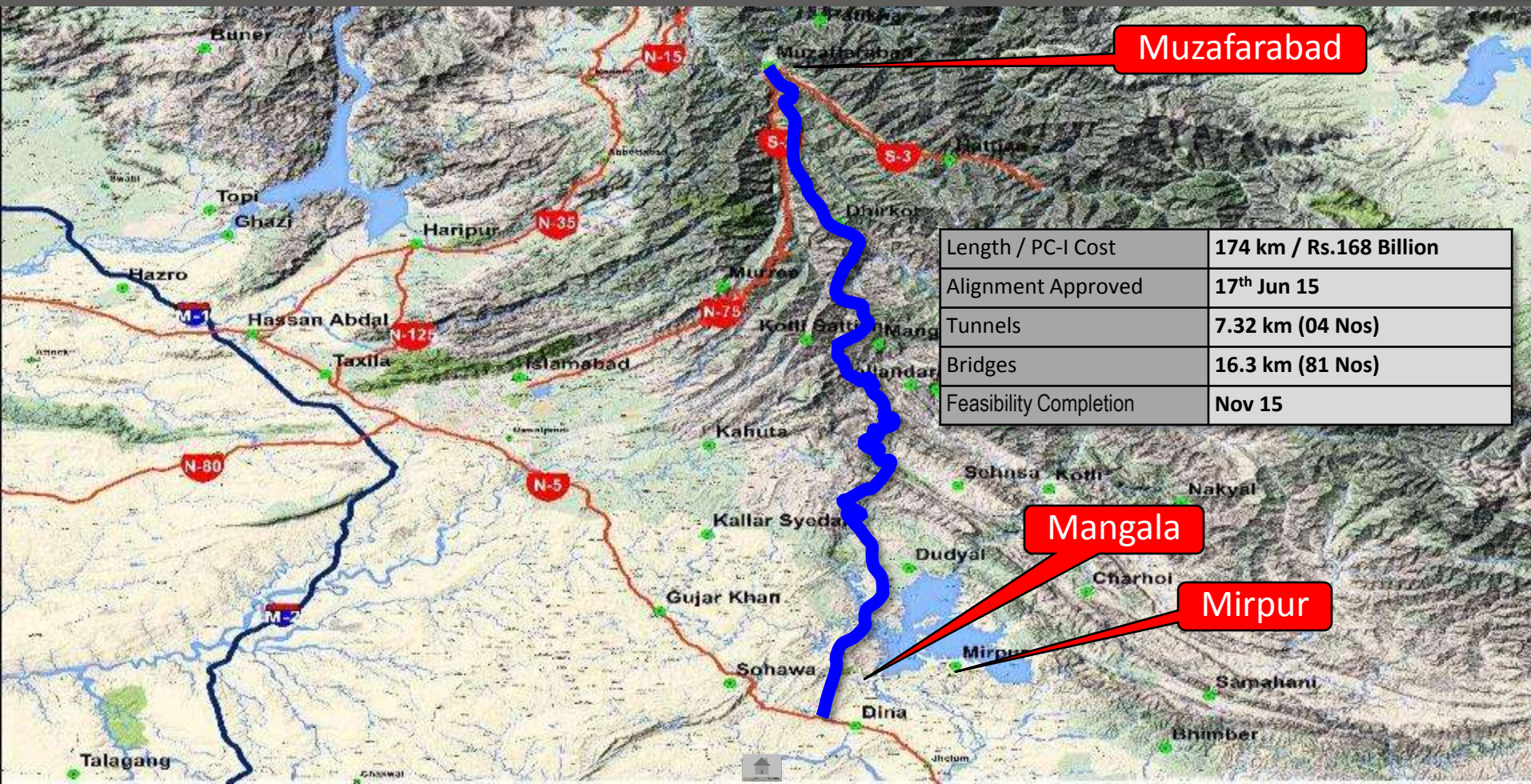


Length / Cost	109 km / 17.5 Billion
Length of Tunnels (2 No)	4.3 km (3.7+0.6)
Saudi Fund for Development (SFD) Component: MUSD 5.5. PC-1 submitted to Planning Commission for approval.	

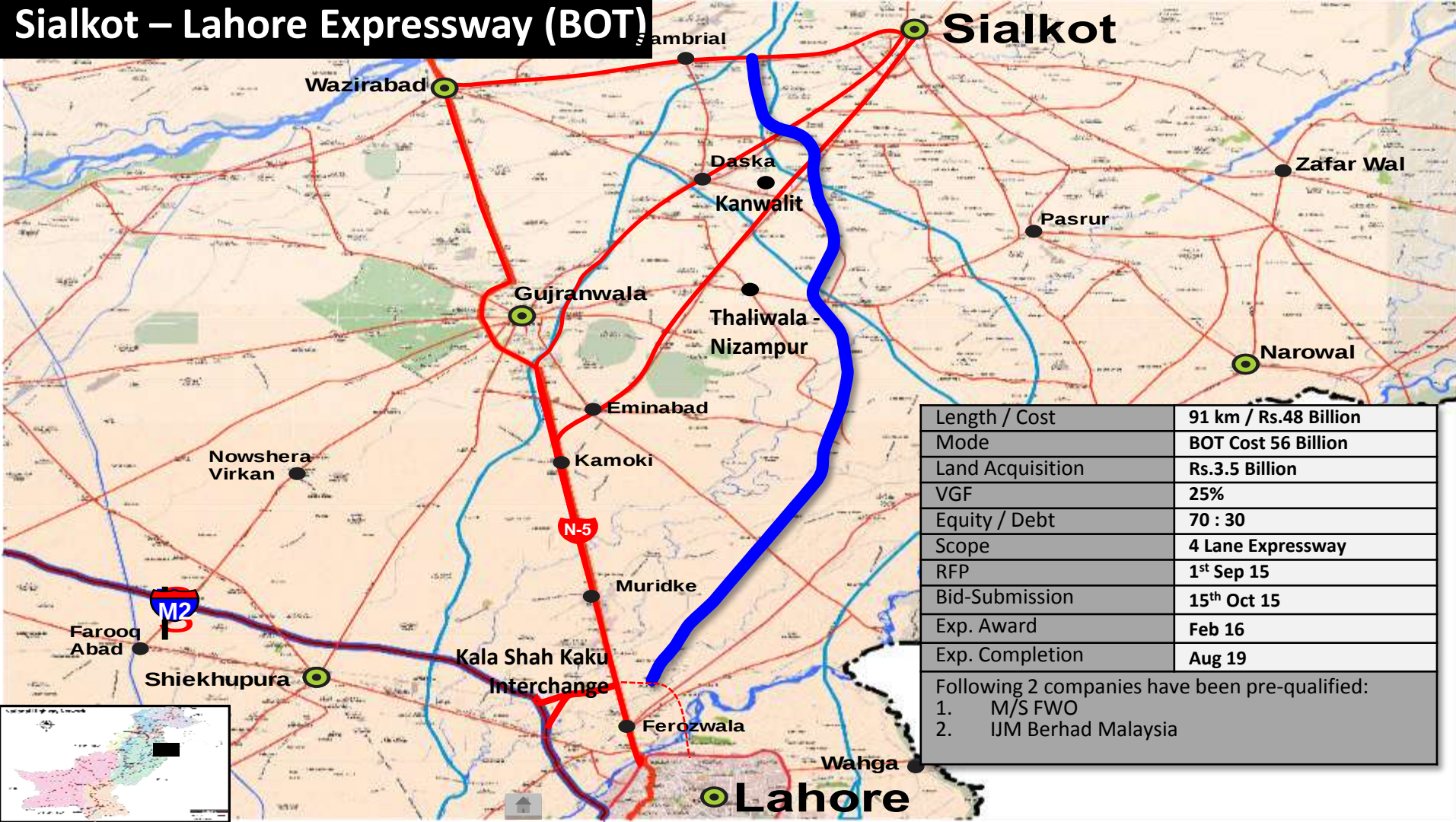
E-35 - Burhan to Havelian (Hazara Motorway) 6 Lanes



Mangla – Mipur – Muzafarabad (MMM) Expressway

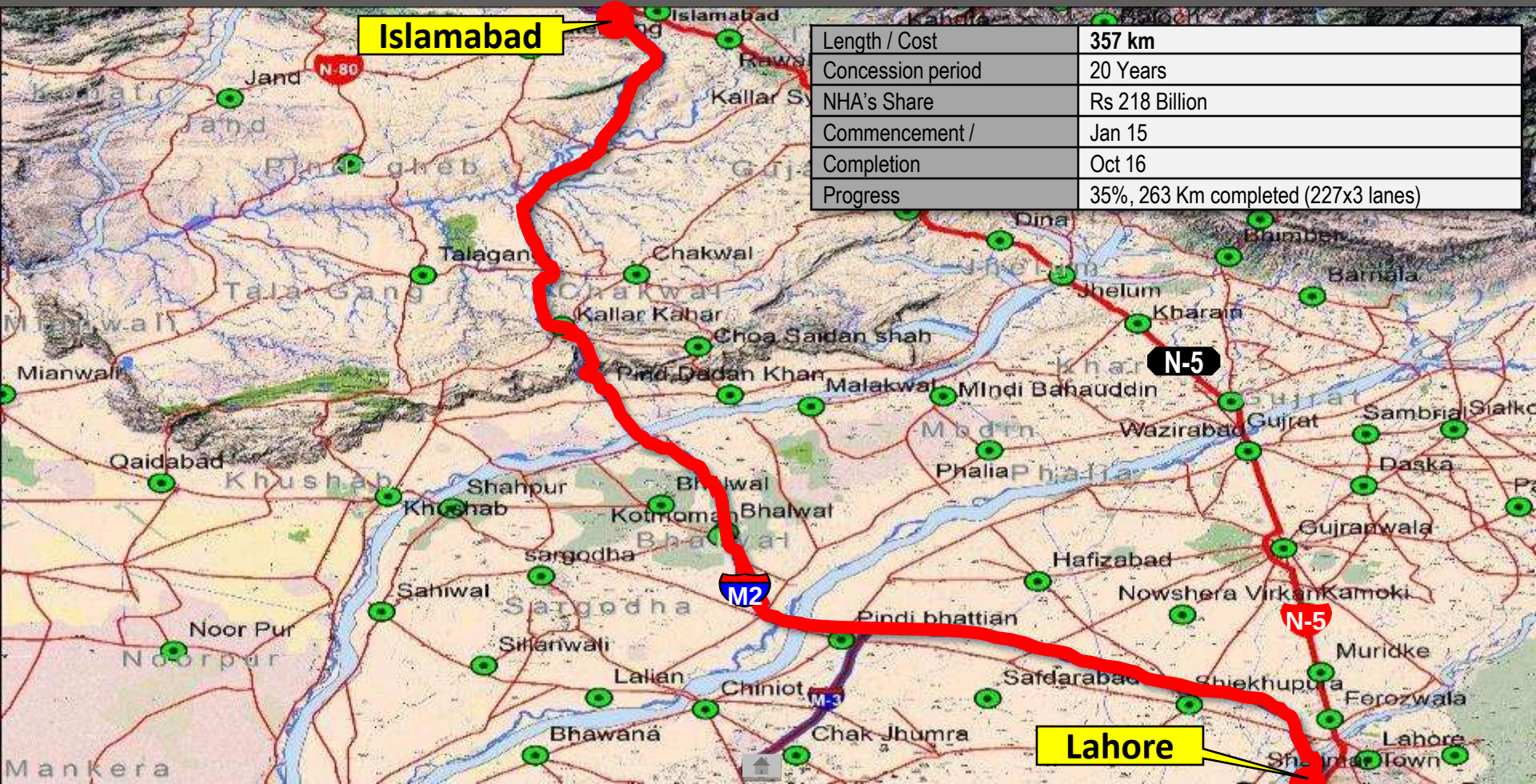


Sialkot – Lahore Expressway (BOT)



Length / Cost	91 km / Rs.48 Billion
Mode	BOT Cost 56 Billion
Land Acquisition	Rs.3.5 Billion
VGF	25%
Equity / Debt	70 : 30
Scope	4 Lane Expressway
RFP	1 st Sep 15
Bid-Submission	15 th Oct 15
Exp. Award	Feb 16
Exp. Completion	Aug 19
Following 2 companies have been pre-qualified:	
1. M/S FWO	
2. IJM Berhad Malaysia	

M-2 (Lahore – Islamabad Motorway) 357 Km



Abdul Hakeem – Lahore Motorway (KLM)

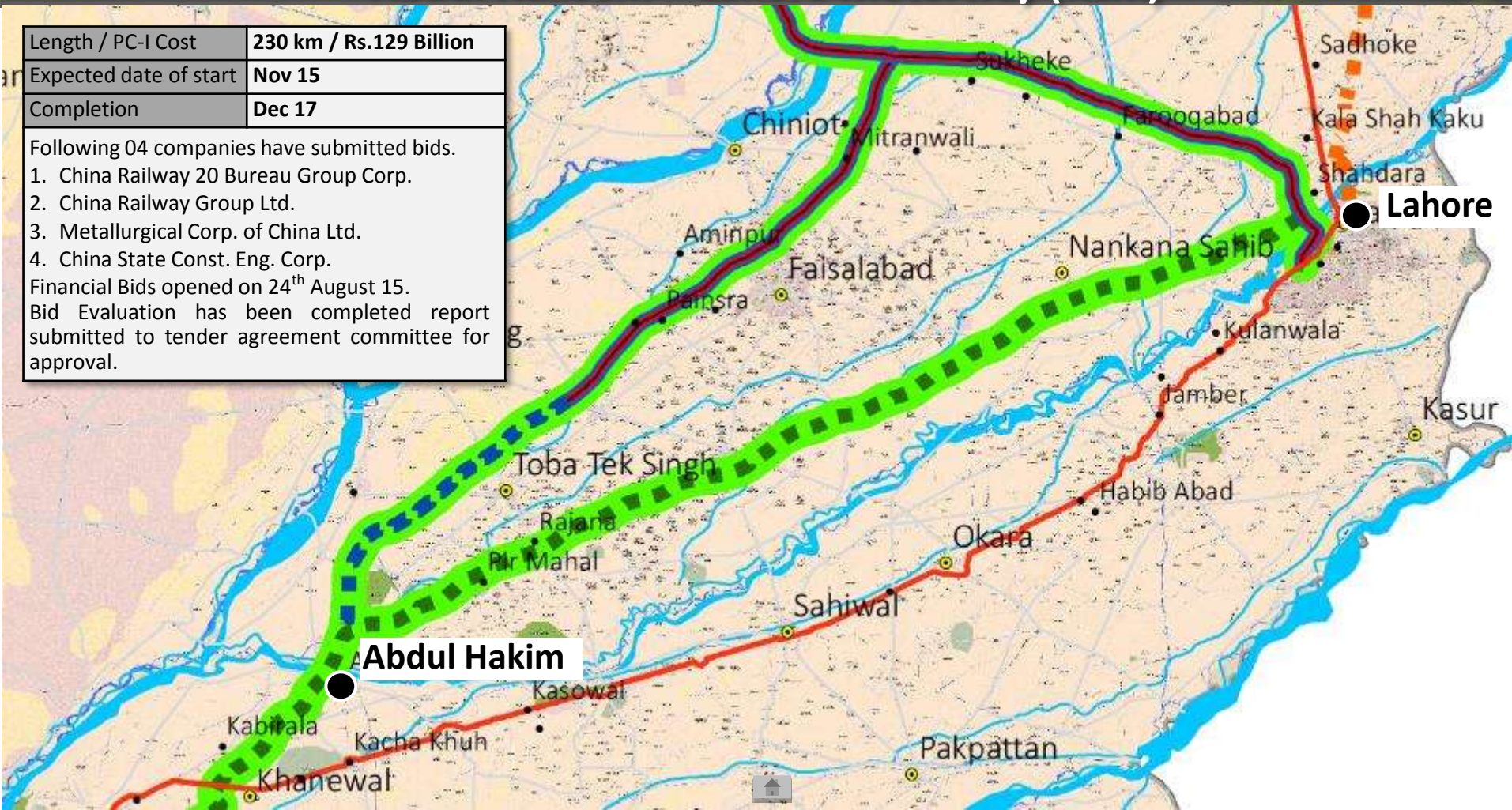
Length / PC-I Cost	230 km / Rs.129 Billion
Expected date of start	Nov 15
Completion	Dec 17

Following 04 companies have submitted bids.

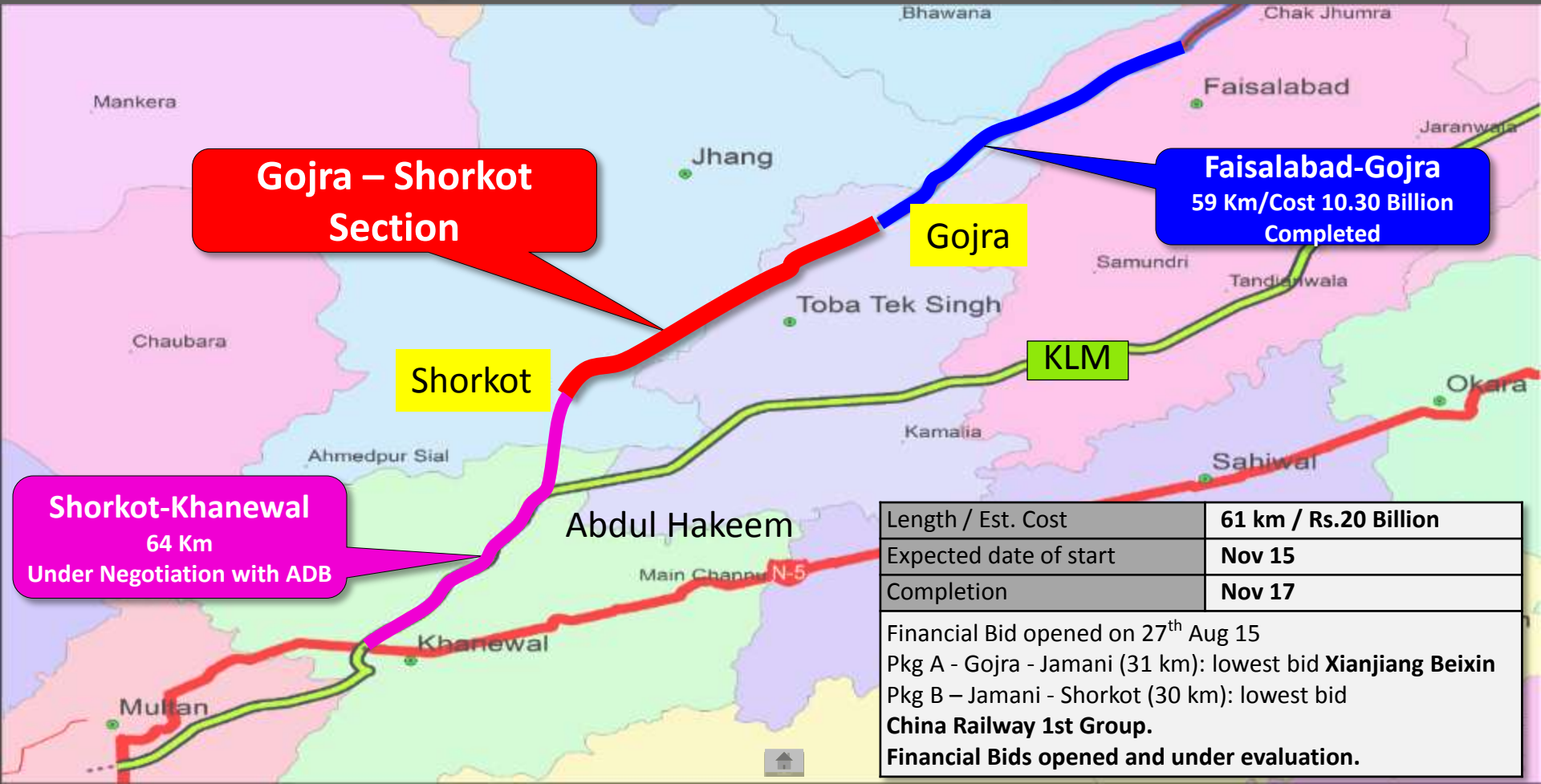
1. China Railway 20 Bureau Group Corp.
2. China Railway Group Ltd.
3. Metallurgical Corp. of China Ltd.
4. China State Const. Eng. Corp.

Financial Bids opened on 24th August 15.

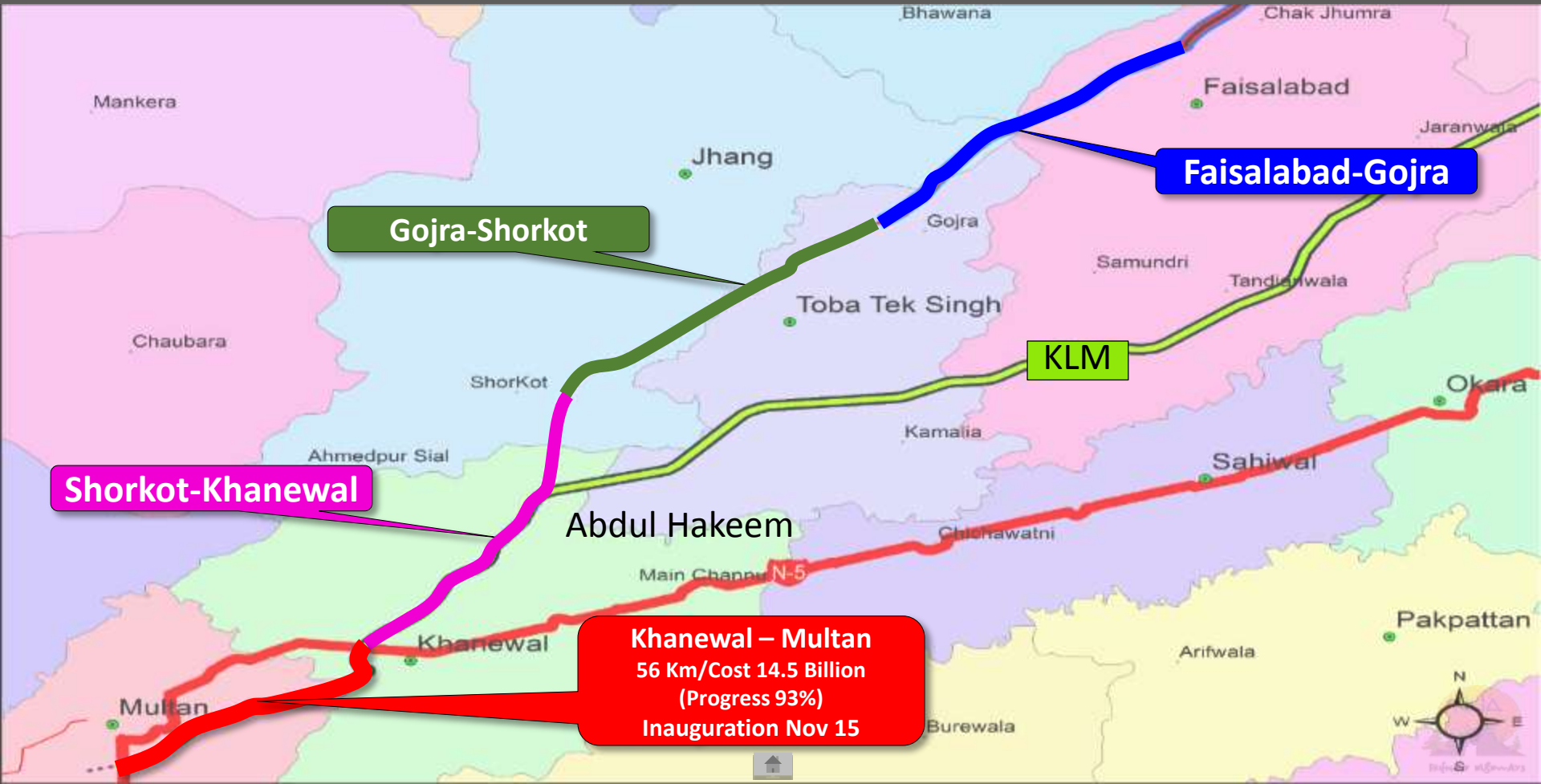
Bid Evaluation has been completed report submitted to tender agreement committee for approval.



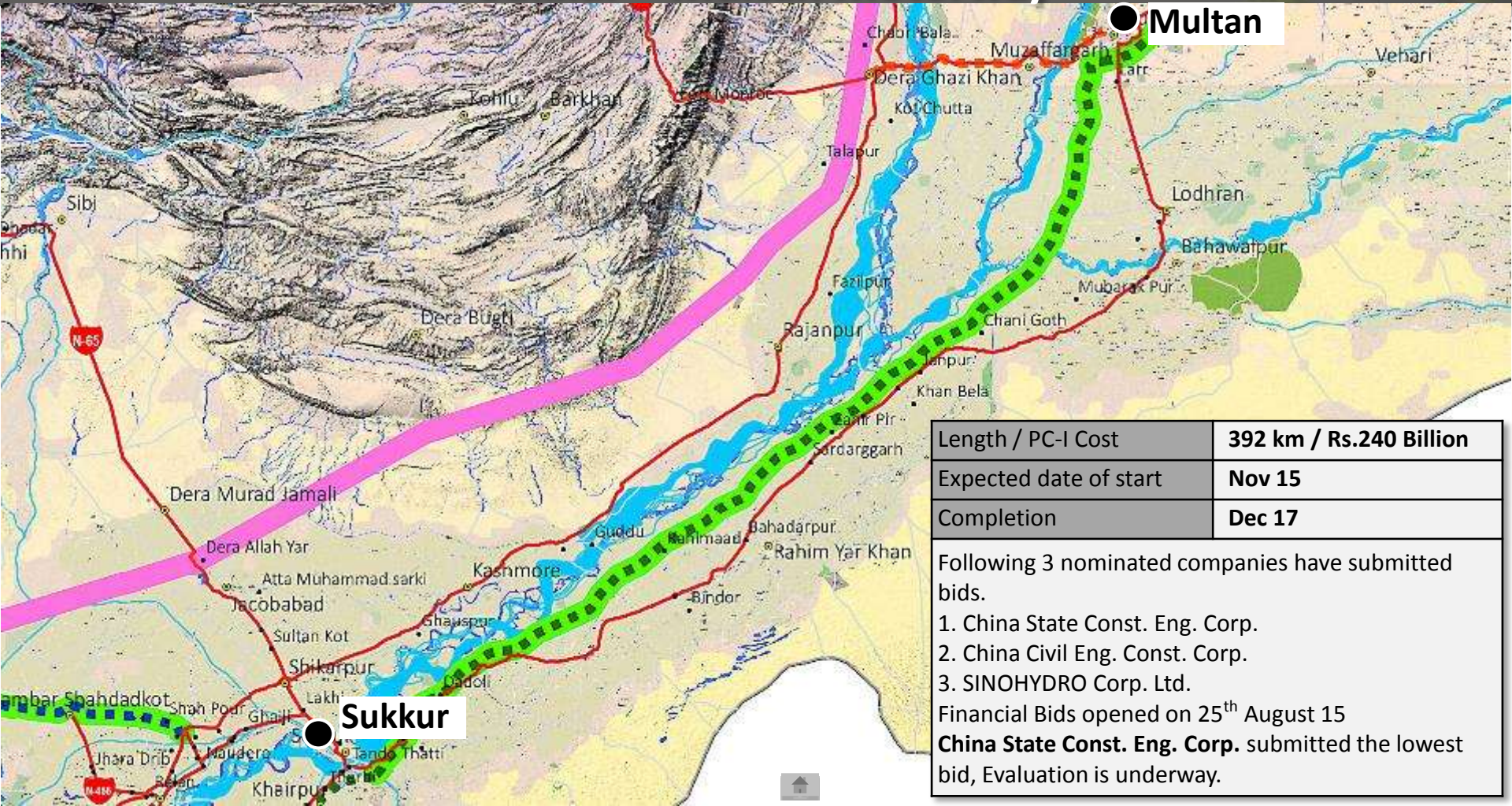
Gojra – Shorkot Section (M-4)



M-4 Ext.



Sukkur – Multan Motorway



Length / PC-I Cost	392 km / Rs.240 Billion
Expected date of start	Nov 15
Completion	Dec 17

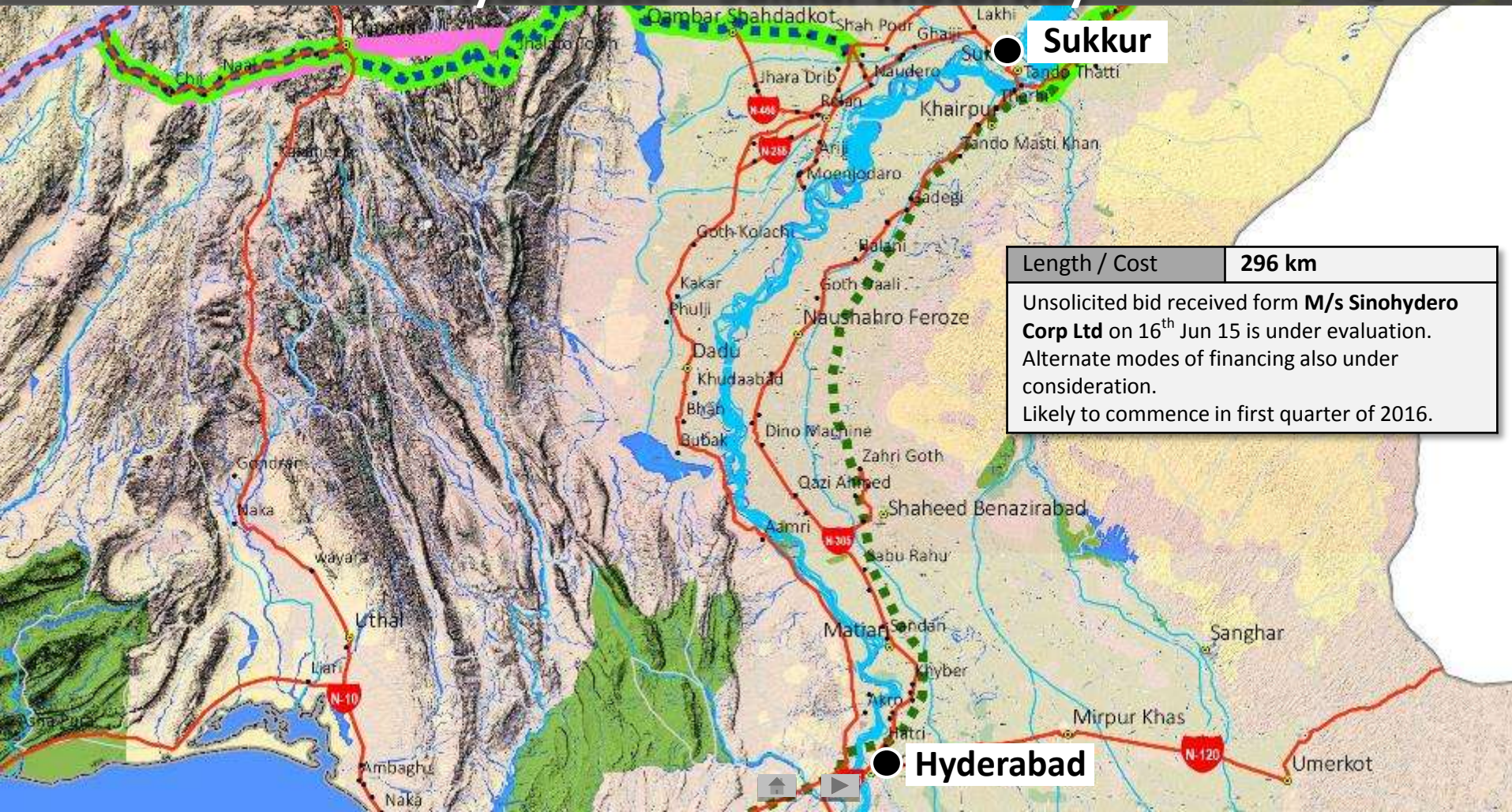
Following 3 nominated companies have submitted bids.

1. China State Const. Eng. Corp.
2. China Civil Eng. Const. Corp.
3. SINOHYDRO Corp. Ltd.

Financial Bids opened on 25th August 15

China State Const. Eng. Corp. submitted the lowest bid, Evaluation is underway.

Hyderabad – Sukkur Motorway



M-6 – Introduction

- M-6 Sukkur – Hyderabad Motorway is proposed to be a world class six-lane access controlled high speed motorway with a track length of 296 kilometers (the Project);
- Earlier, the transaction structuring modality of the Project was agreed upon the Build-Operate-Transfer (BOT) type of Public Private Partnership (PPP);
- Now M/s Sino Hydro Corporation (the Proposer) wishes to undertake the Project on 'Deferred Payment' basis;
- 'Deferred Payment' is a mechanism whereby the Proposer, in the capacity of EPC contractor, shall construct M-6 as per the Technical Parameters provided in the Proposal and shall charge interest from GOP/NHA for delaying the payments;

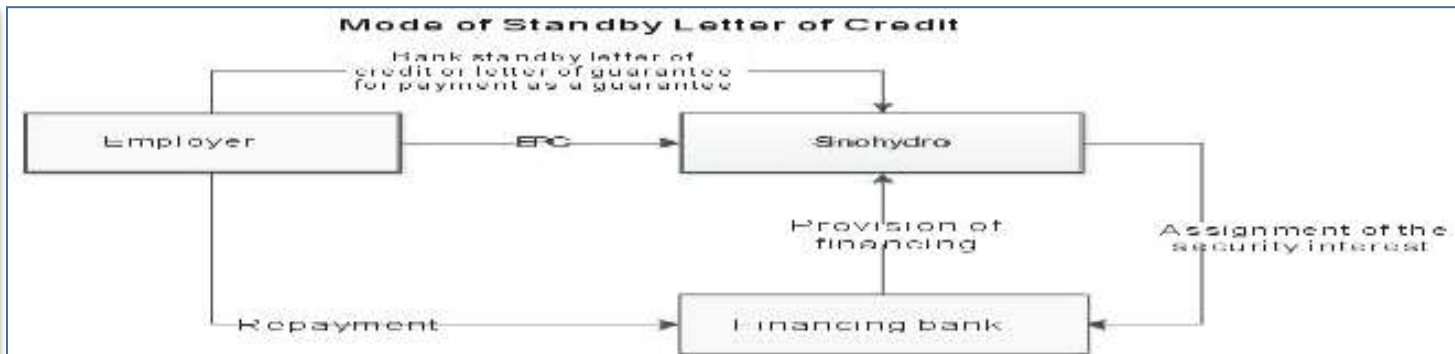


- The Proposer expects GOP/ NHA to provide 15% advance/ upfront while 85% of the EPC cost shall be financed by the Commercial Lender.

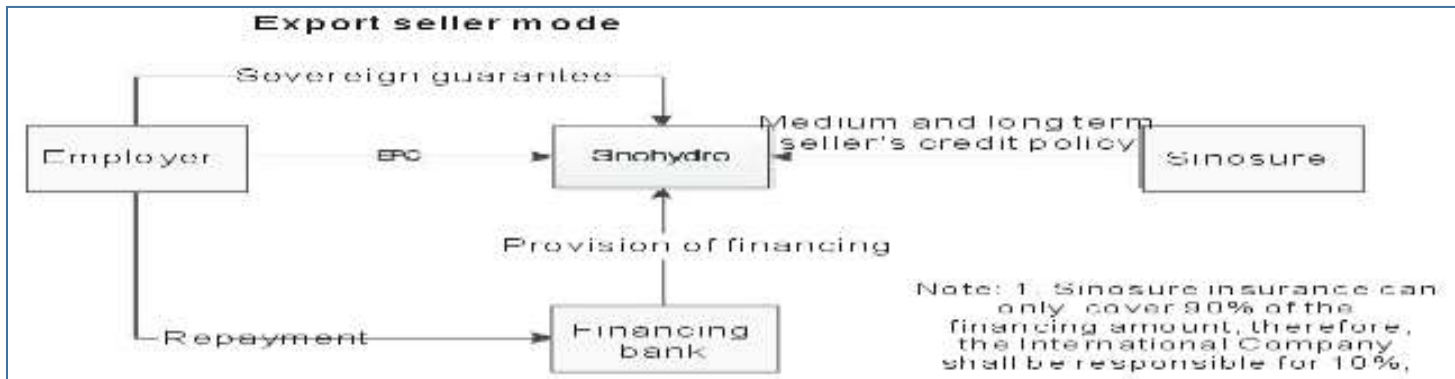
M-6 – Financing Realization Options

The Proposer gives the following two options for realizing 85% financing of the EPC cost:

Proposer
demands SLOC/
Payment
Guarantee



Proposer demands
Sovereign
Guarantee from
GOP NHA



M-6 – Financials

The Proposer gives the following options to undertake the financing and construction of the Project:

Construction phase
(3 years)

Operational/ repayment phase
(7 or 12 years)

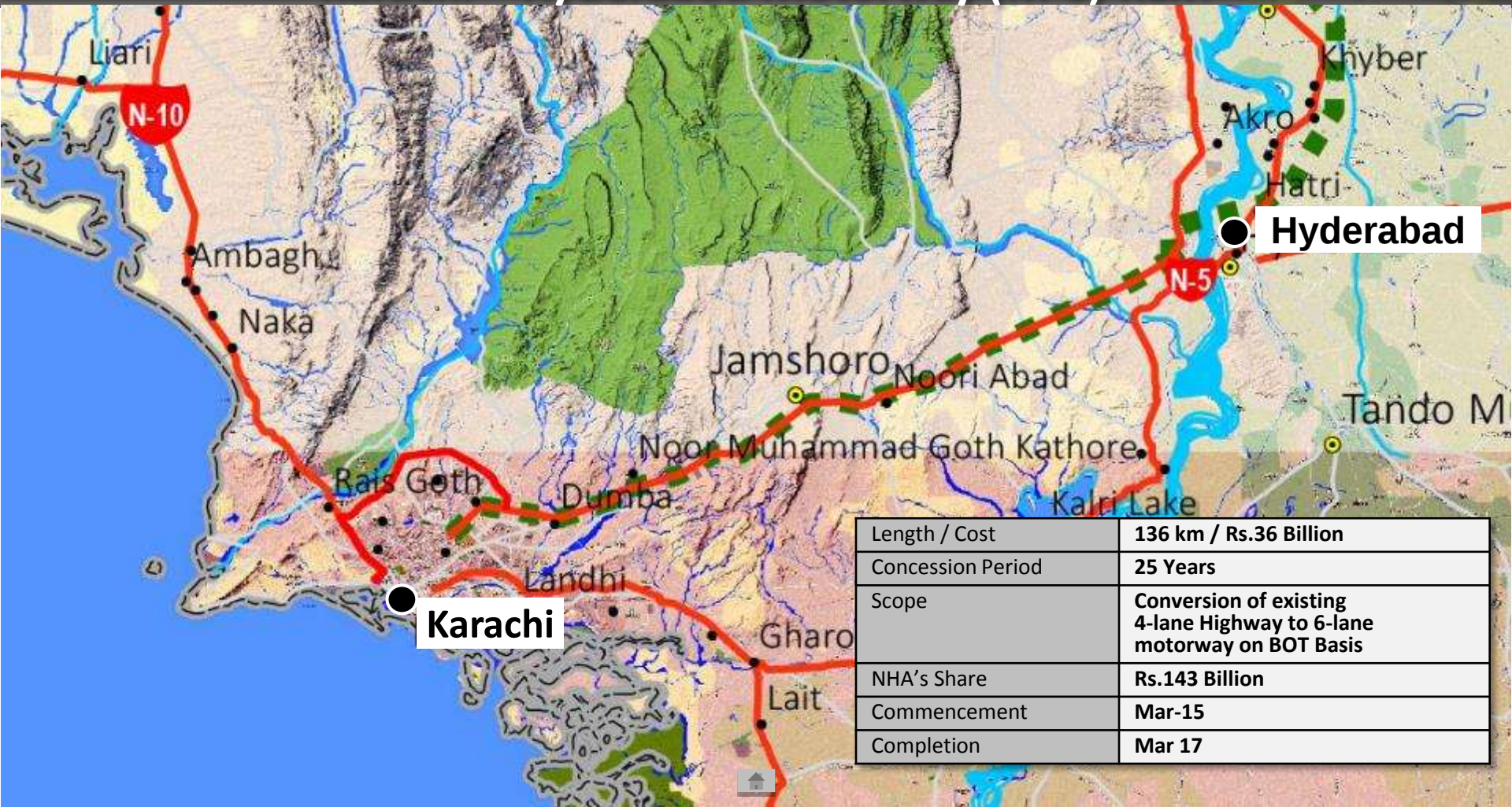
Option	EPC cost: (a)	GOP/ NHA upfront payment (15% of EPC cost): (b)	GOP/ NHA deferred payment (six- monthly)	GOP/ NHA deferred payment entire period: (c)	Total GOP/ NHA outflow: (d) = (b) + (e)	Interest cost to the GOP/ NHA: (e) – (a)	Financing cost to GOP /NHA (USD based)
----- Million USD -----							
Six-lanes 3 + 12 years	2,205	331	148	3,553	3,884	1,678	6%
Six-lanes 3 + 7 years	2,205	331	190	2,654	2,985	780	2%
Four-lanes 3 + 12 years	1,772	266	119	2,855	3,121	1,349	6%
Four-lanes 3 + 7 years	1,772	266	152	2,133	2,399	627	2%

M-6 – Risk Profile

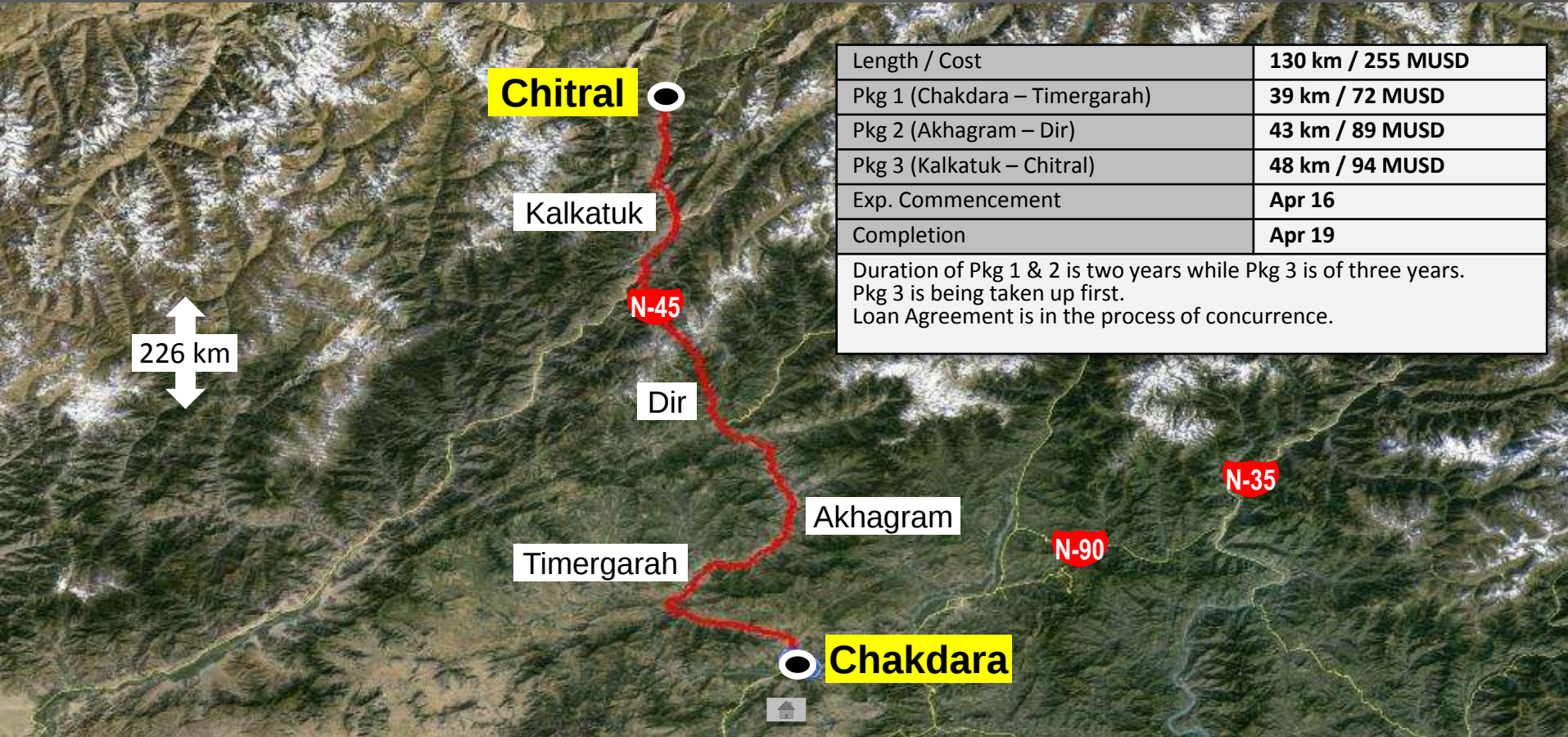
The Project Risk Profile is as follows:

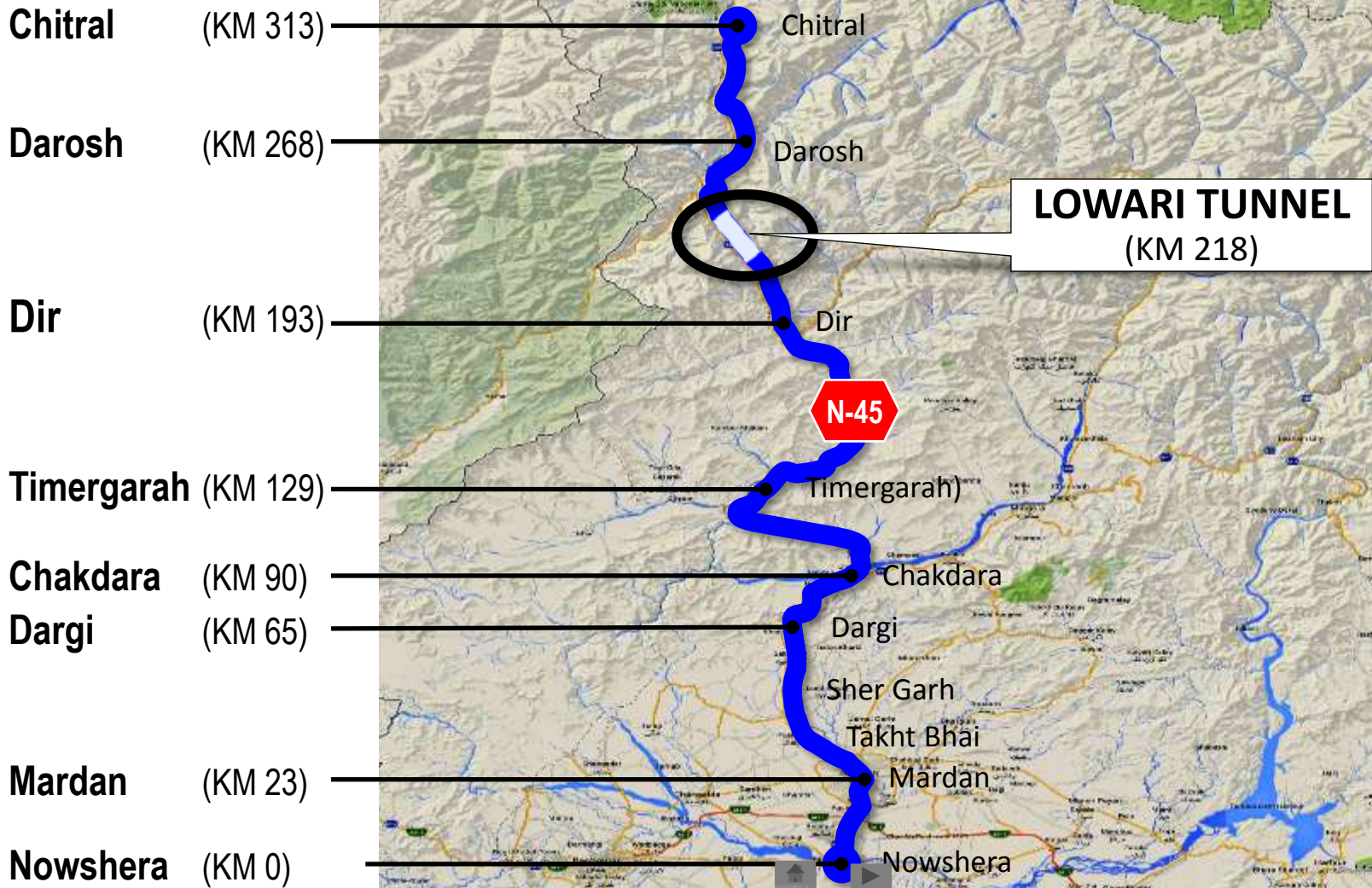
Risk	Transferred to the Proposer	Retained by GOP/ NHA	Consideration
Project cost/time overrun risk	Yes	No	The Proposal is silent on it; but If the Proposer has demanded advance/ upfront (15%) + fixed deferred payments then this risk should be borne by the Proposer
Operational risk (revenue and operational costs)	No	Yes	As it is 'Deferred Payment' transaction
Financing risk	Yes	No	Change in cost of financing etc. if the arrangement is such that the computed periodic deferred payments are fixed this risk should be borne by the Proposer
Foreign exchange risk	No	Yes	As the deferred payments are denominated in USD
Political (direct and indirect) and non-political	No	Yes	As it is 'Deferred Payment' transaction
Change of law	No	Yes	- Do -

Karachi – Hyderabad Motorway (M-9) KLM



Rehab & Imp. of Chakdara – Chitral Section (N-45) Through Korea EXIM Bank Financing

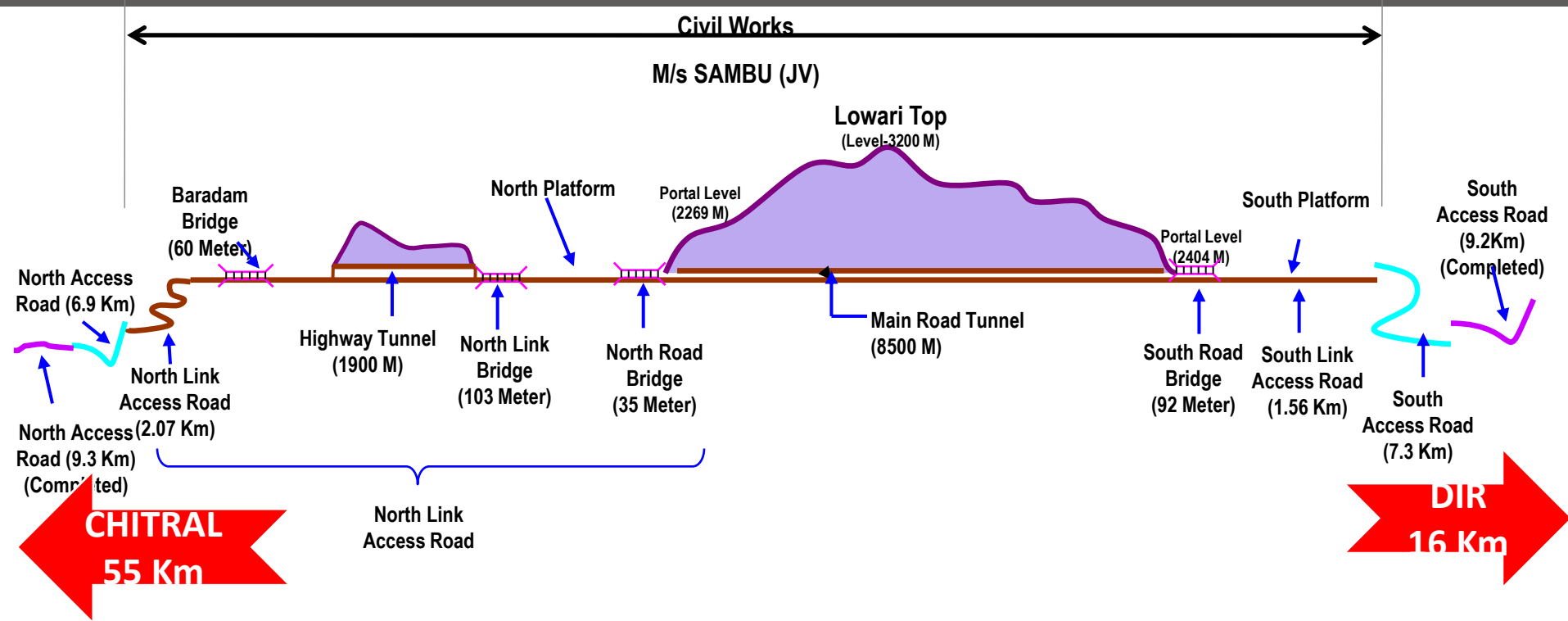




SALIENT FEATURES

Total Project Length	46 km: Two Tunnels (8.5km & 1.9km), Access Roads & 12 bridges (35.6km)
Original PC-I	Rs 7,983 Million
1 st Revised PC-I (Approved by ECNEC on 11 th Nov, 2011)	Rs 18,182 Million
2 nd Revised PC-I (Under process with ECNEC)	Rs 26,954 Million
Expenditure incurred to date	Rs 12.586 Billion
Consultant	M/s Geoconsult – Typsa (JV)
Contractor	M/s SAMBU (JV)
Date of Commencement	September, 2005
Completion of project	October, 2017
Original Contract Cost	Rs 5,428 Million
Revised Contract Cost as per V.O No.6	Rs 9,816 Million (80.72% Increase)
Accumulative Progress Achieved	55%

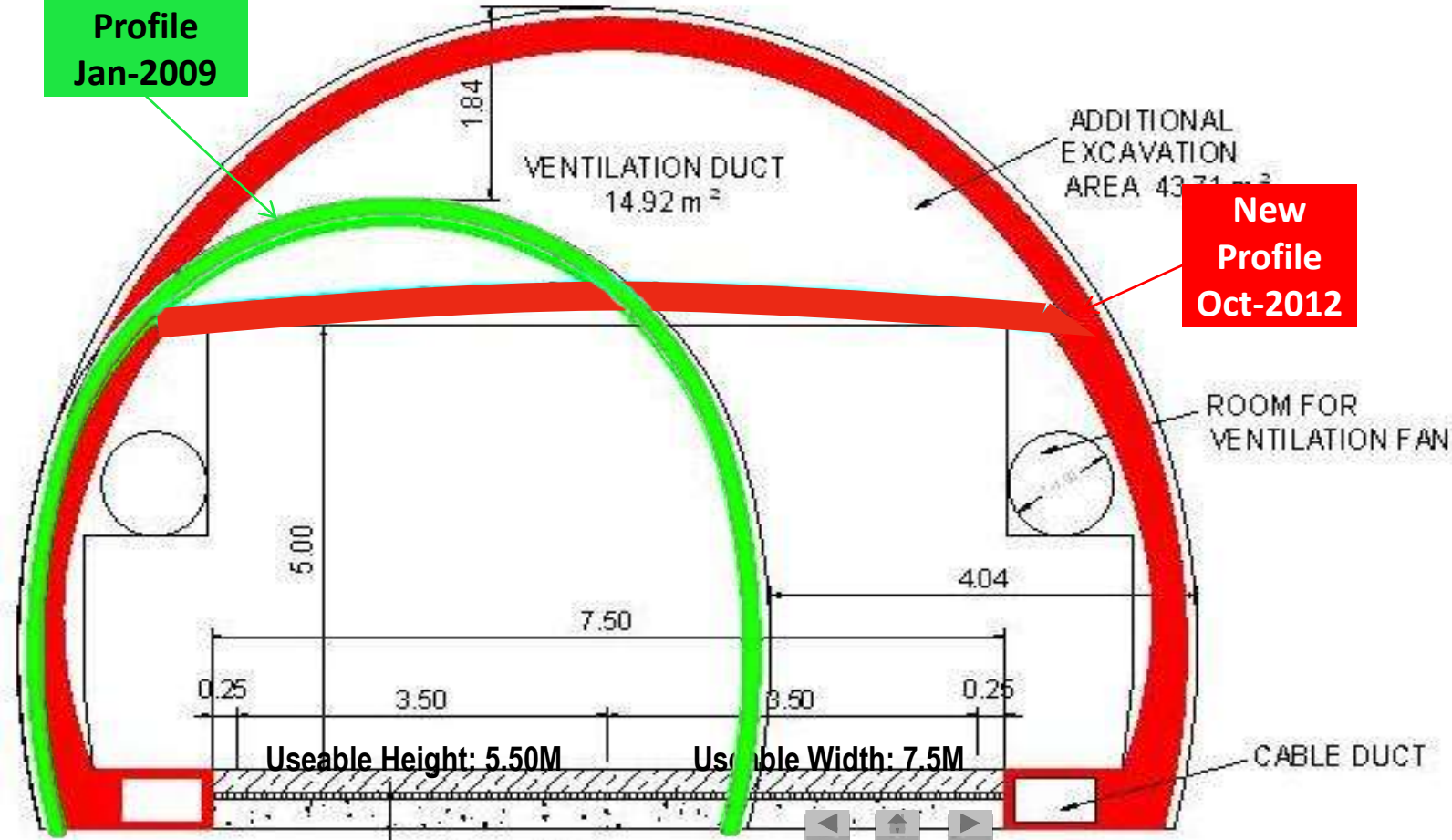
PROJECT LAYOUT



MODIFIED TUNNEL PROFILE

Excavated
Profile
Jan-2009

New
Profile
Oct-2012



Progress of
Widening

Total Length

8,510
Meters

Widening

7,234 Meter

Widening Yet to be
done **1,276**
Meter

85.01%

Expected Date
of Widening
Excavation
Jan, 2016

WORK PROGRAMME

MODIFIED ROAD TUNNEL

Sr. No	Month	Commencement Date	Expected Completion Date
1	Widening Excavation	October, 2012	January, 2016
2	Smooth Shotcrete	March, 2015	April, 2016
3	Water Proofing Membrane & Geotextile	June, 2015	April, 2017
4	Concrete Lining	September, 2015	June, 2017
5	Intermediate Ceiling	February, 2016	July, 2017
6	Main Drainage & Cable Trench Works	September, 2014	August, 2017
7	Rigid Pavement	January, 2017	October, 2017

Rehab & Imp. of Chakdara – Mangora – Fatehpur Section (N-95) Through Saudi Grant



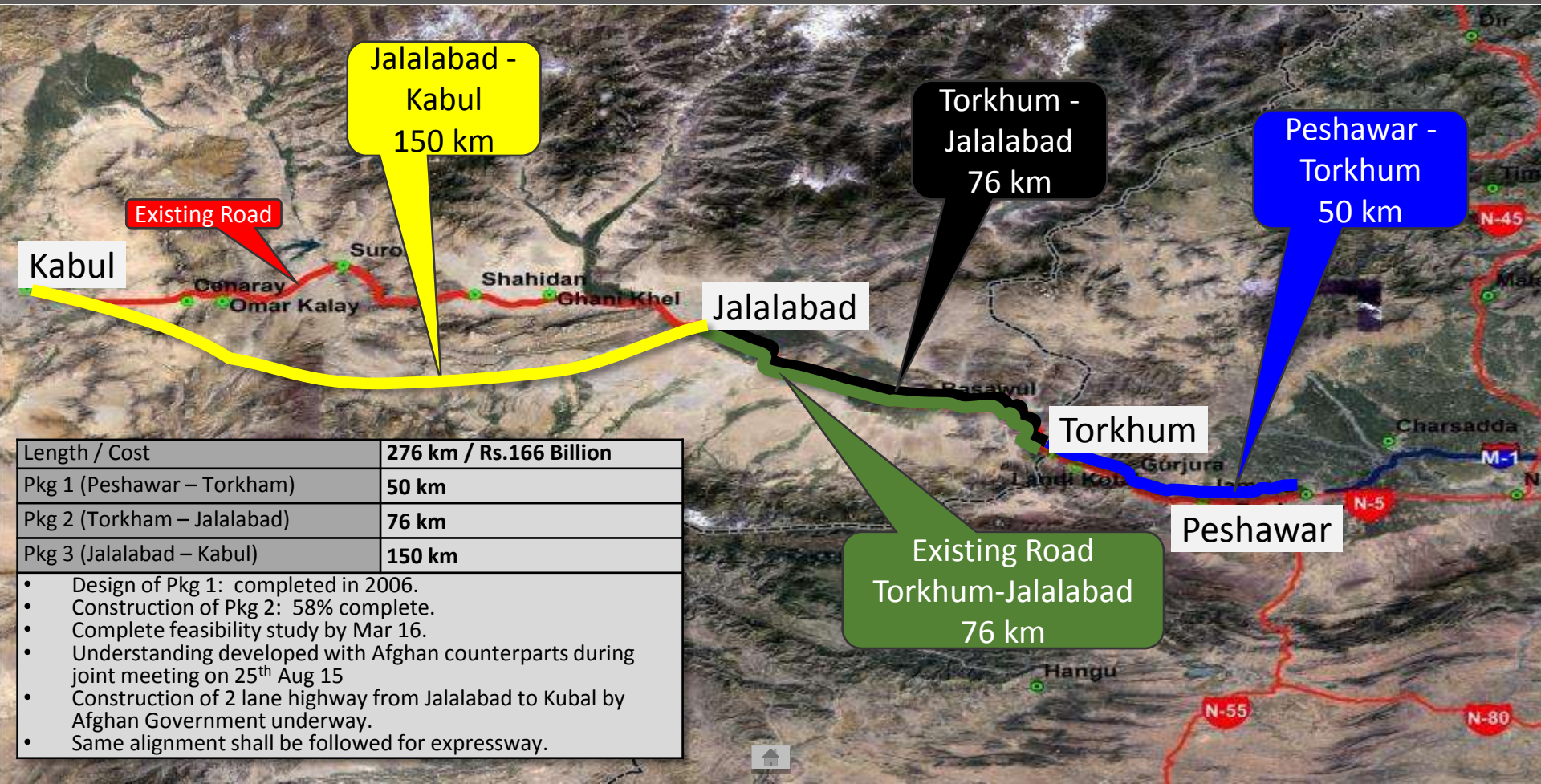
Length / Cost	82 km / 33.9 MUSD
Exp. Commencement	Mar 16
PC-1 sent to KPK Government for approval.	

Additional Carriageway Torkham – Jalalabad

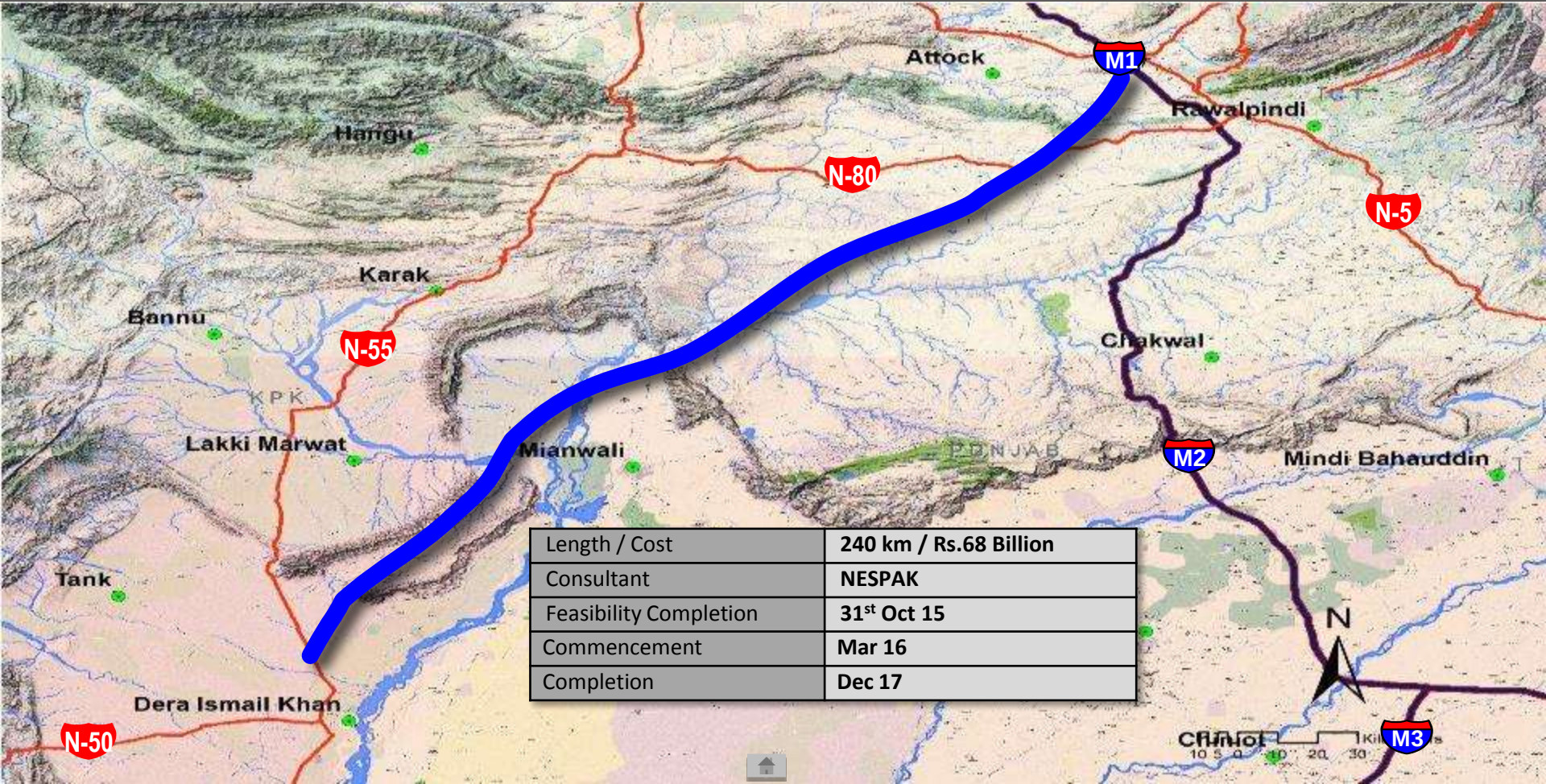


Length / Cost	74 km / Rs.7.34 Billion
Commencement	Jan 07
Re-Commencement	Jul 15
Completion	Sep 16
Progress	58%

Peshawar – Kabul 4 Lane Expressway



Burhan – DI Khan (CPEC)



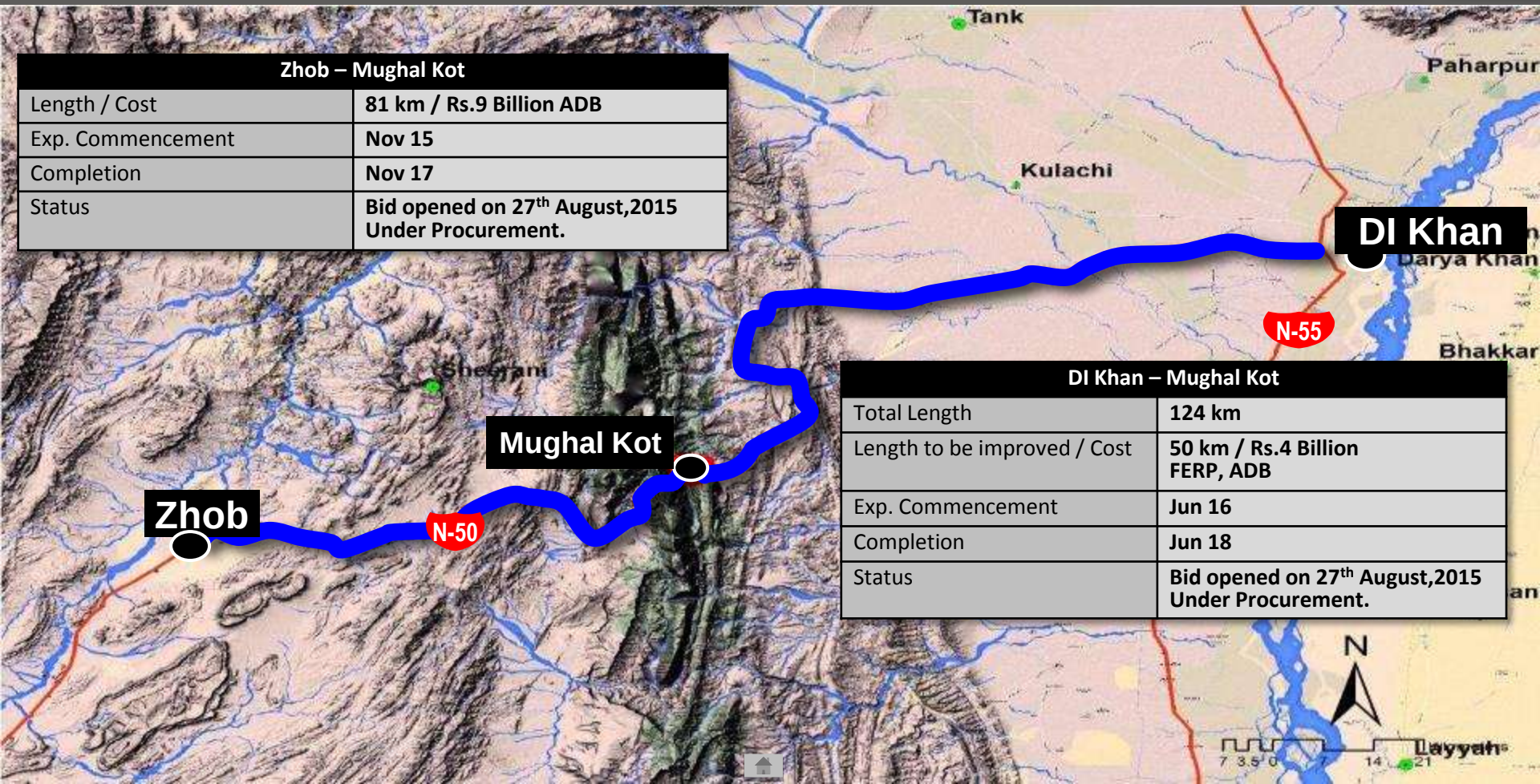
DI Khan – Mughal Kot – Zhob (N-50)

Zhob – Mughal Kot

Length / Cost	81 km / Rs.9 Billion ADB
Exp. Commencement	Nov 15
Completion	Nov 17
Status	Bid opened on 27 th August,2015 Under Procurement.

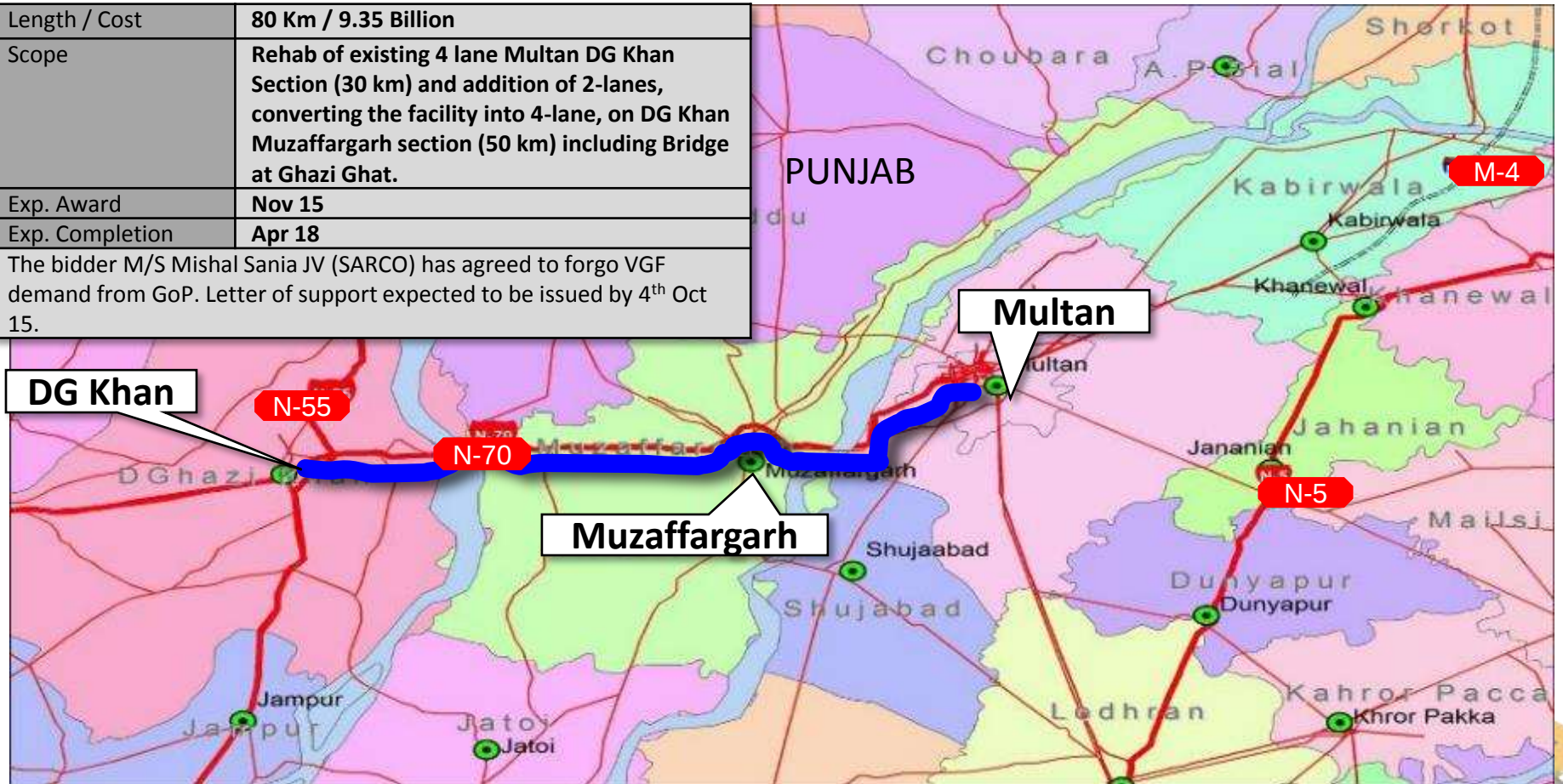
DI Khan – Mughal Kot

Total Length	124 km
Length to be improved / Cost	50 km / Rs.4 Billion FERP, ADB
Exp. Commencement	Jun 16
Completion	Jun 18
Status	Bid opened on 27 th August,2015 Under Procurement.

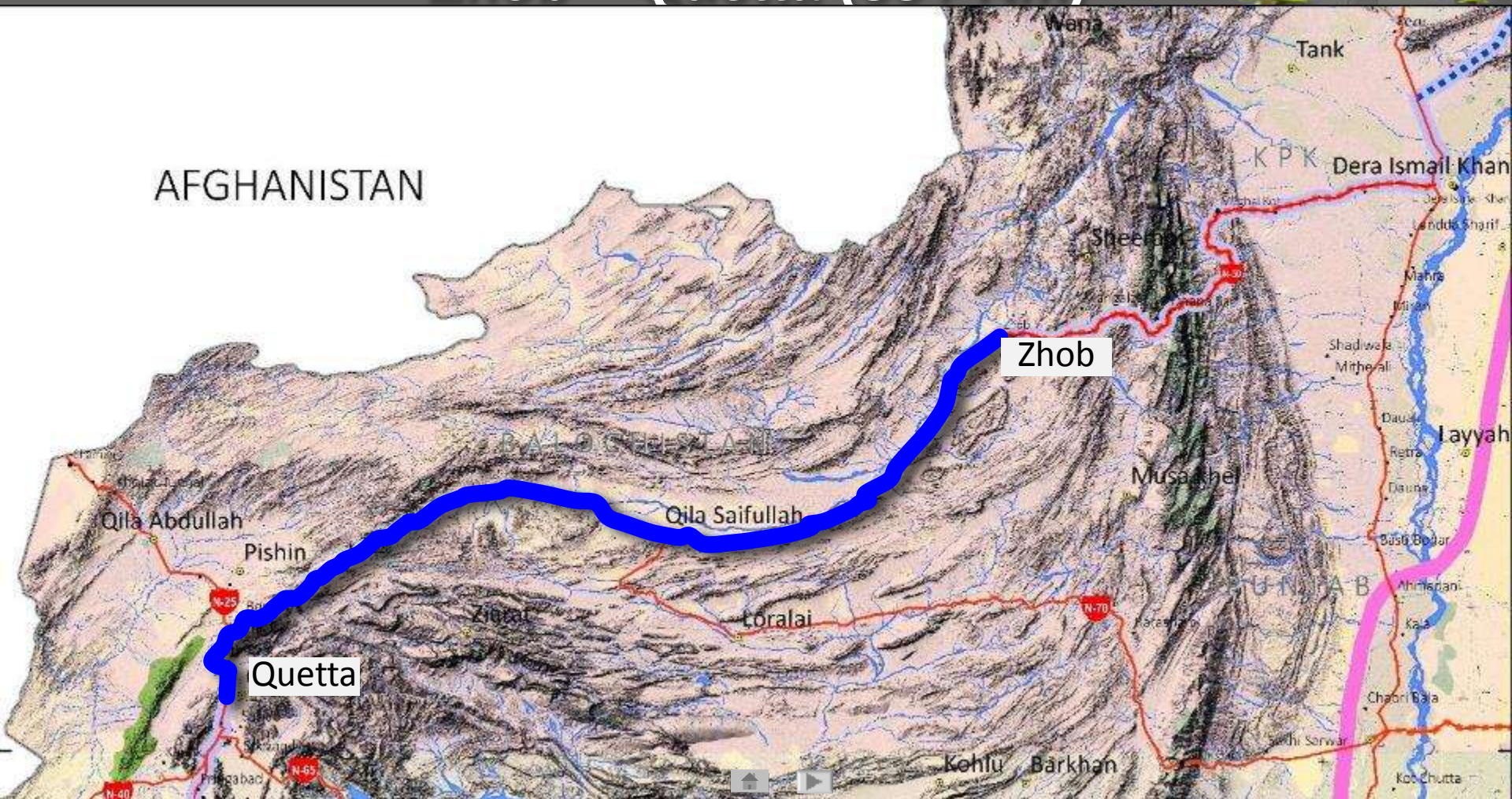


Multan – Muzaffargarh – DG Khan

Length / Cost	80 Km / 9.35 Billion
Scope	Rehab of existing 4 lane Multan DG Khan Section (30 km) and addition of 2-lanes, converting the facility into 4-lane, on DG Khan Muzaffargarh section (50 km) including Bridge at Ghazi Ghat.
Exp. Award	Nov 15
Exp. Completion	Apr 18
The bidder M/S Mishal Sania JV (SARCO) has agreed to forgo VGF demand from GoP. Letter of support expected to be issued by 4 th Oct 15.	



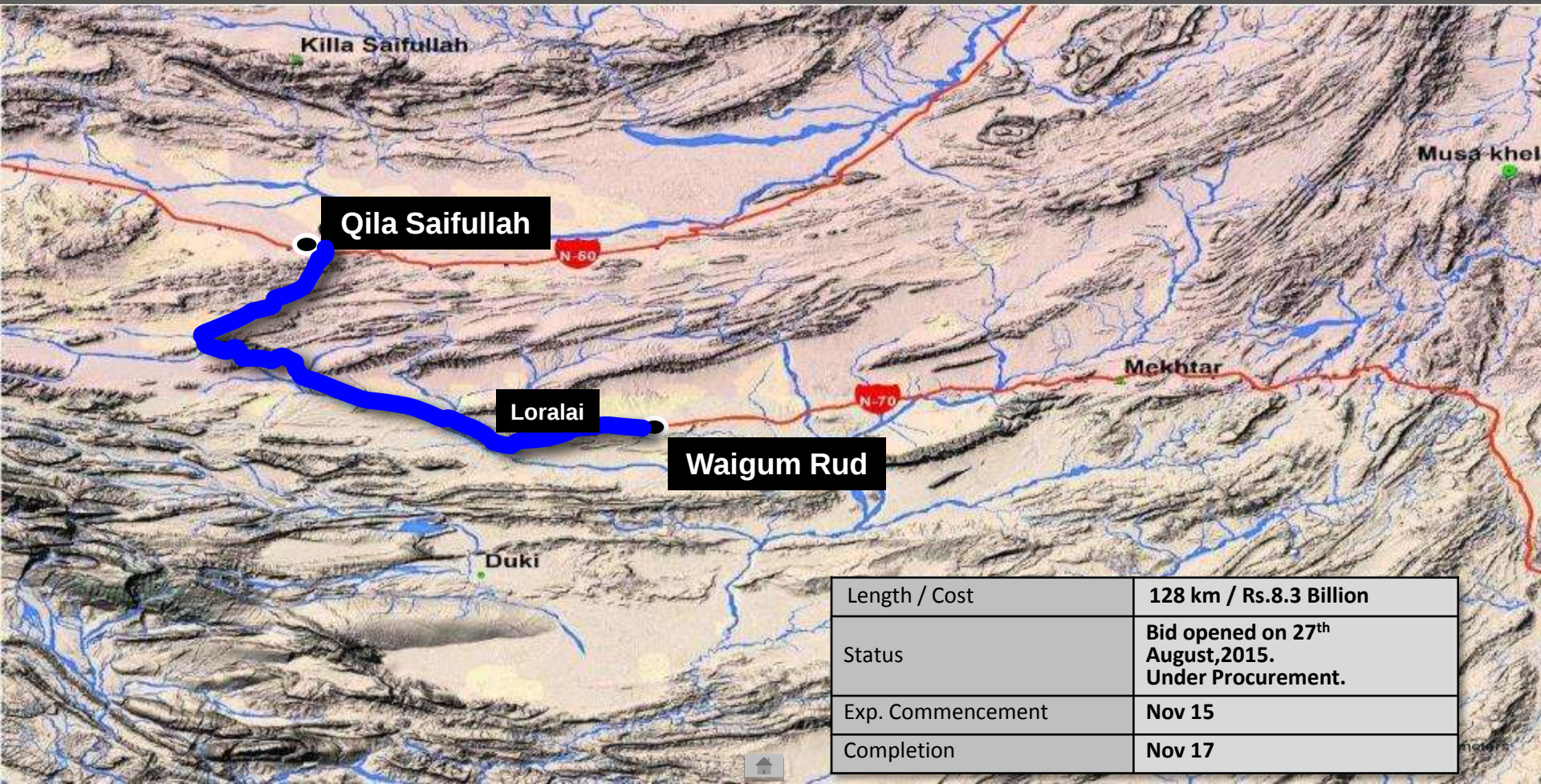
Zhob – Quetta (331 Km)



Western Corridor

From	To	Distance (Km)	Status	Remarks
Burhan	D.I. Khan	280	Feasibility in Process	Land Acquisition 10 Billion in PSDP. Project to be financed by GoP
D.I.Khan	Mughalkot	124	Existing road being improved under ADB Finance	Request for additional carriage way under CPEC short term (536 Km)
Mughalkot	Zhob	81	Existing road being improved under ADB Finance	
Zhob	Quetta	331	Completed	
Quetta	Surab	211	Completed	Additional carriage way planned under CAREC Program
Surab	Hoshab	449	Construction In Progress	Common Section
Hoshab	Gwadar	193	Construction In Progress	
Total		1,669	Total distance from Khunjrab to Gwadar through Western Corridor is 2,453 Km.	

Qila Saifullah – Waigum Rud (N-70)



Length / Cost	128 km / Rs.8.3 Billion
Status	Bid opened on 27 th August,2015. Under Procurement.
Exp. Commencement	Nov 15
Completion	Nov 17

JICA Funded Up-gradation of Rakhi Gaaj – Bewata Section (N-70)

Length / Cost	32.6 km / 23.5 Billion including JICA Grant 16.51 Billion JPY (Rs.15.93 Billion)
Pkg 1	11.6 km JICA funded (Specialized bridges) / (GoP Component Rs.2.16 Billion)
Pkg 2	20.75 km GoP funded (Conventional road) / Rs.5.4 Billion
Exp. Commencement	Jan 16
Completion	Jan 19



JICA Funded Up-gradation of Rakhi Gaaj – Bewata Section (N-70)

Present



After Construction

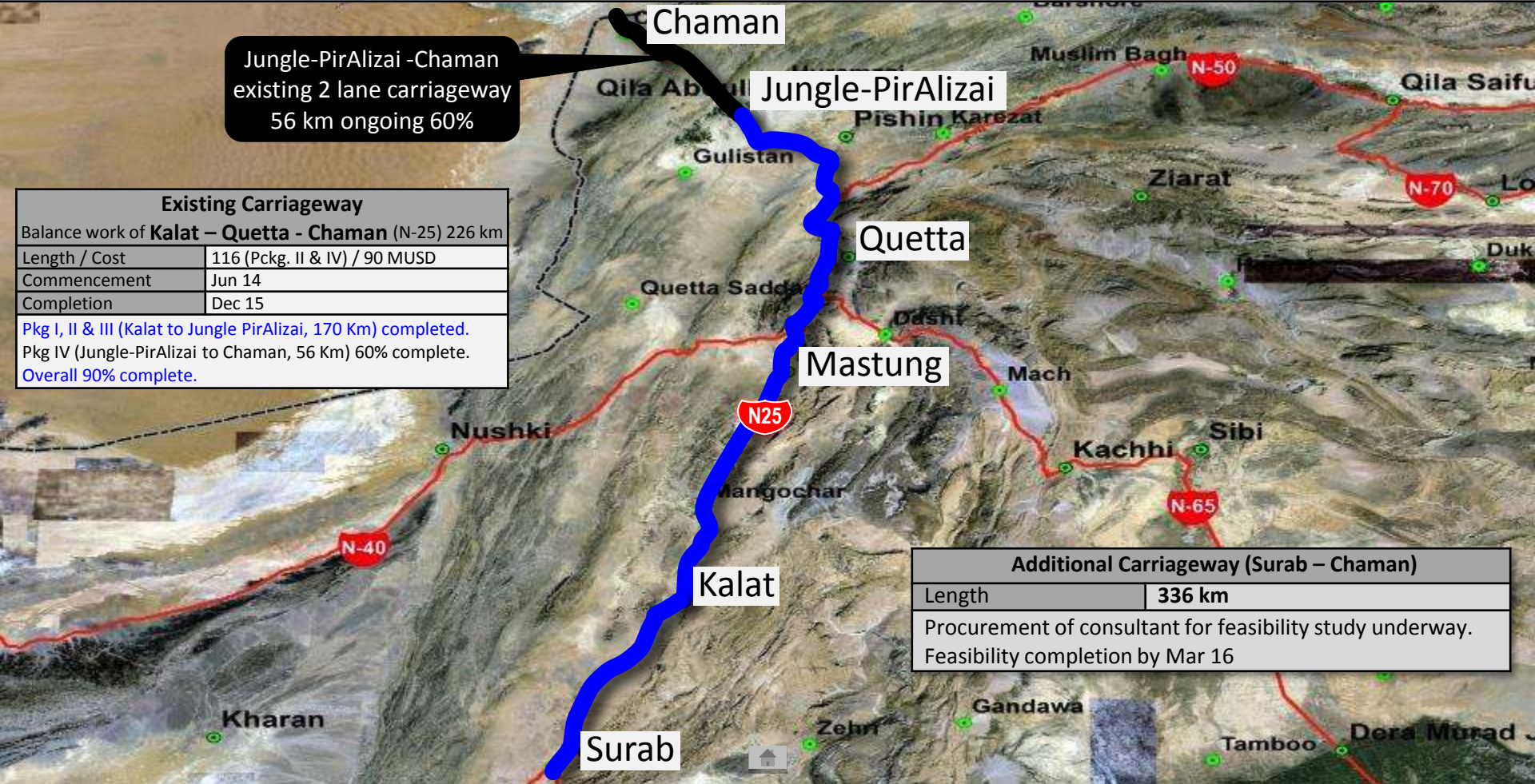


Dualization of Surab – Chaman Section (N-25)

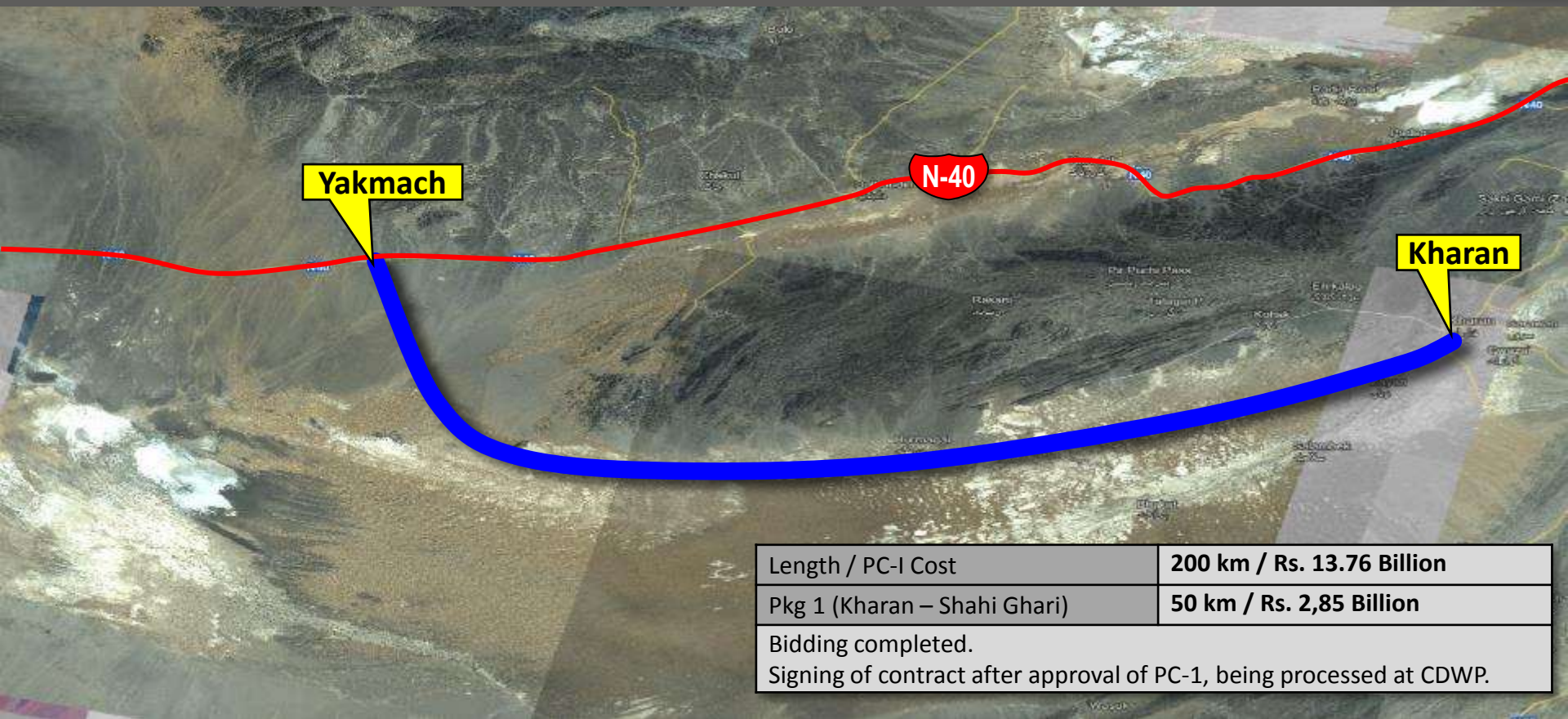
Jungle-PirAlizai -Chaman
existing 2 lane carriageway
56 km ongoing 60%

Existing Carriageway	
Balance work of Kalat – Quetta - Chaman (N-25) 226 km	
Length / Cost	116 (Pckg. II & IV) / 90 MUSD
Commencement	Jun 14
Completion	Dec 15
Pkg I, II & III (Kalat to Jungle PirAlizai, 170 Km) completed.	
Pkg IV (Jungle-PirAlizai to Chaman, 56 Km) 60% complete.	
Overall 90% complete.	

Additional Carriageway (Surab – Chaman)	
Length	336 km
Procurement of consultant for feasibility study underway.	
Feasibility completion by Mar 16	

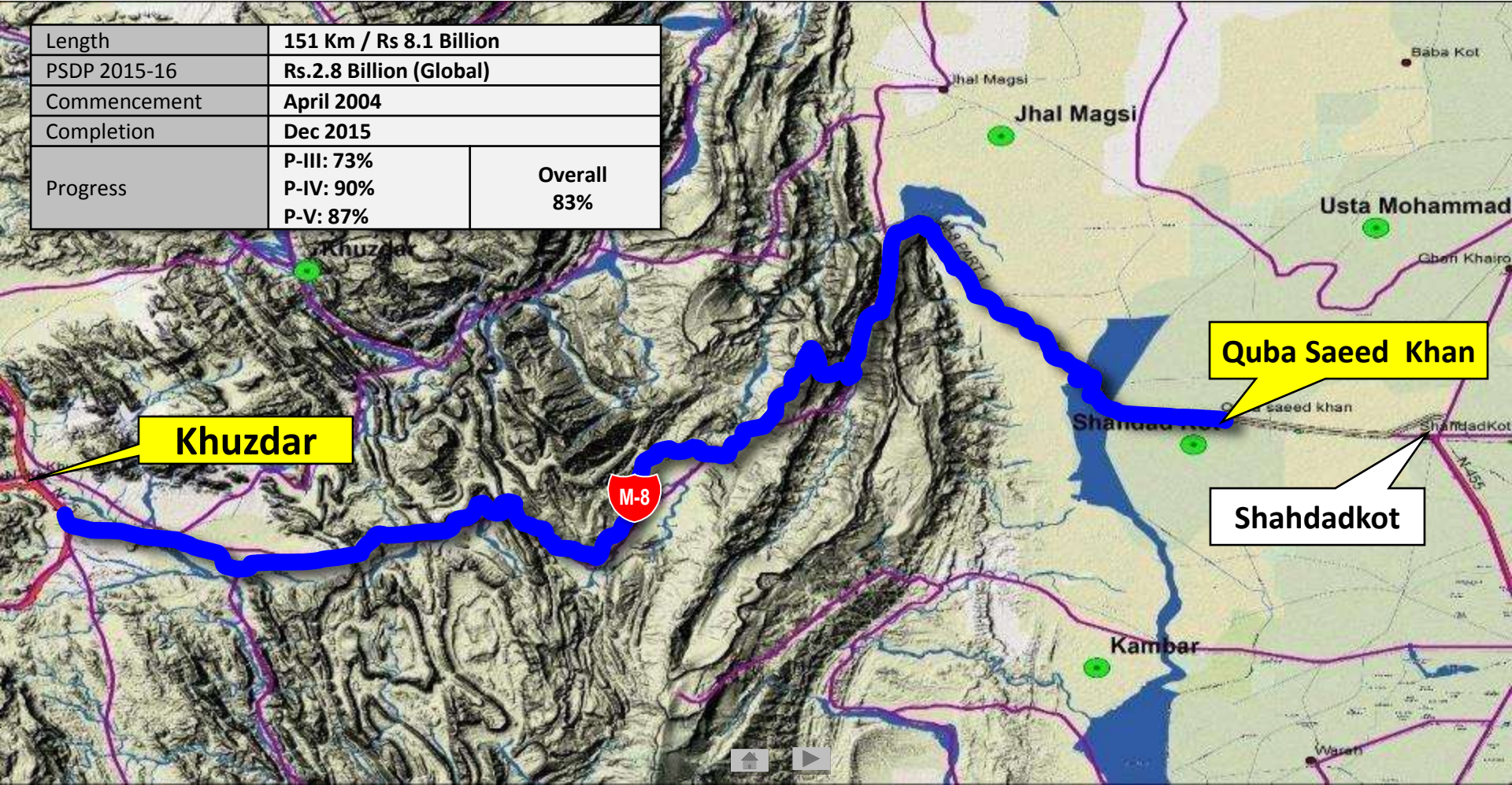


Yakmach – Kharan



Khuzdar – Shahdadkot (M-8)

Length	151 Km / Rs 8.1 Billion	
PSDP 2015-16	Rs.2.8 Billion (Global)	
Commencement	April 2004	
Completion	Dec 2015	
Progress	P-III: 73%	Overall 83%
	P-IV: 90%	
	P-V: 87%	

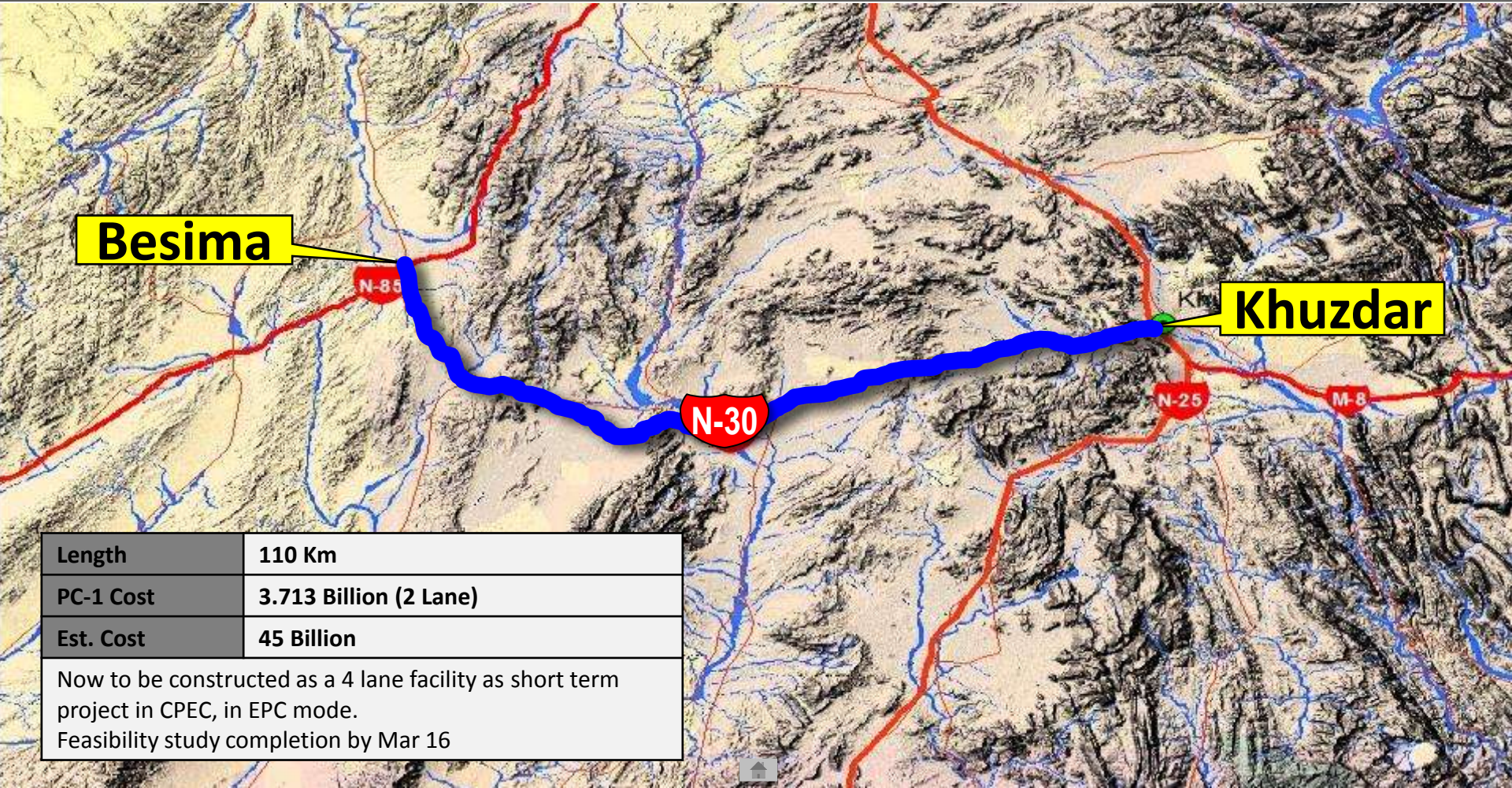


M-8 Khuzdar-Shahdadt (Khor - Quba Saeed Khan Section) 151 Km

Description	Khuzdar-Shahdadt: Package-III (Khor to Wangu Hills)	Khuzda- Shahdadt: Package-IV (Wangu Hills)	Khuzdar-Shahdadt: Package-V (Wangu Hills to Quba Saeed Khan)
Length of Project	51.1 KM	42.5 KM	57.5 KM
Contractor	M/s AM – NAZIR (JV)	M/s SMADB	M/s FWO
Contract Cost (Original)	Rs. 1,116 M	Rs. 525 M	Rs. 1,929 M
Contract Cost (Revised)	Rs. 2,129 M	Rs. 2,902 M	Rs. 3056 M
Date of Commencement	Oct – 2004	Apr – 2004	June 2006
Date of Completion (Org)	Oct-2006	Apr-2006	June-2009
Date of Completion (Revised)	Dec-2015	Dec-2015	Dec-2015
Progress Todate:	73%	90%	87%



Khuzdar To Basima (N-30)

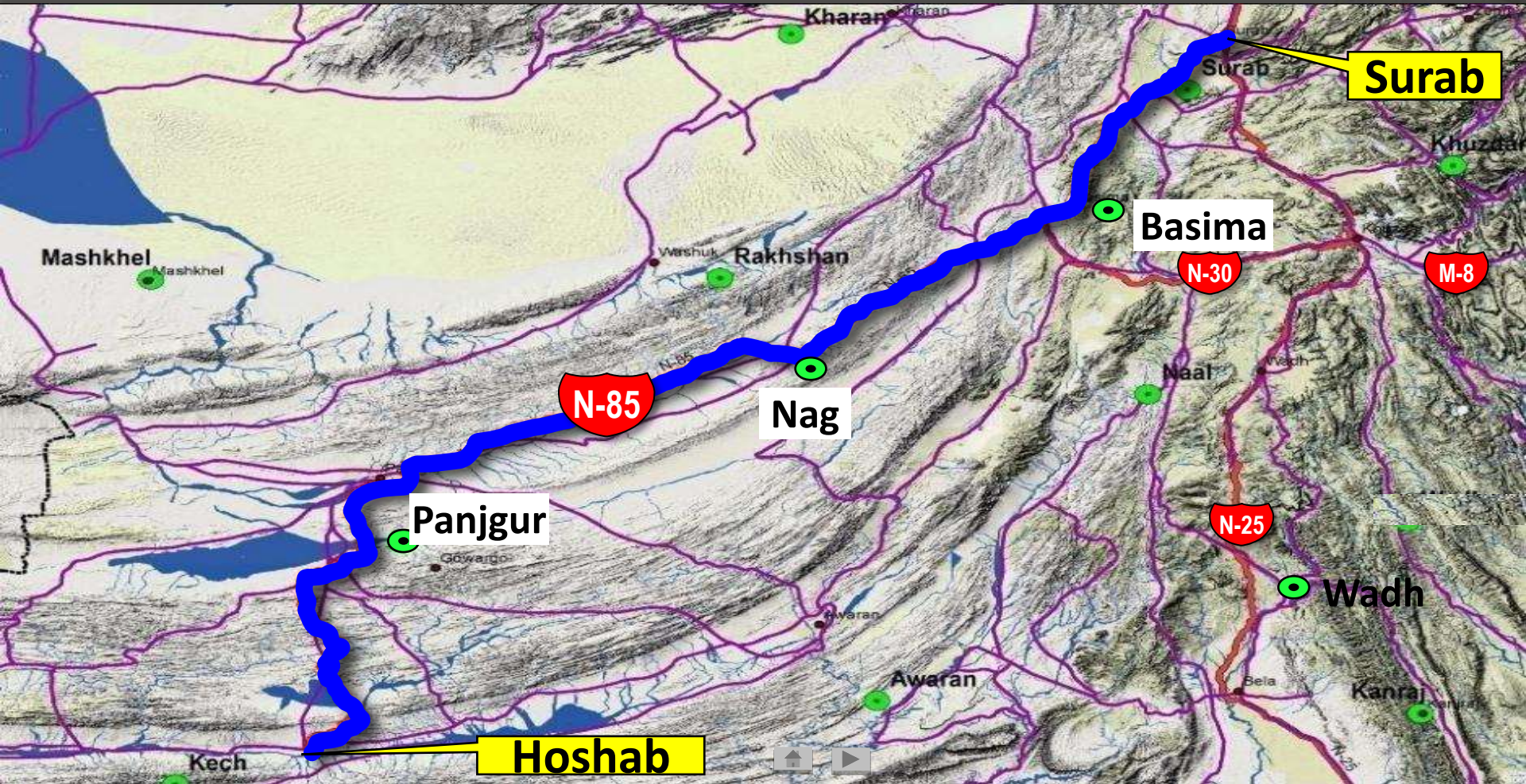


Besima

Khuzdar

Length	110 Km
PC-1 Cost	3.713 Billion (2 Lane)
Est. Cost	45 Billion
Now to be constructed as a 4 lane facility as short term project in CPEC, in EPC mode. Feasibility study completion by Mar 16	

Surab – Hoshab (N-85)



Hoshab – Panjgur – Nag – Basima – Surab (N-85)

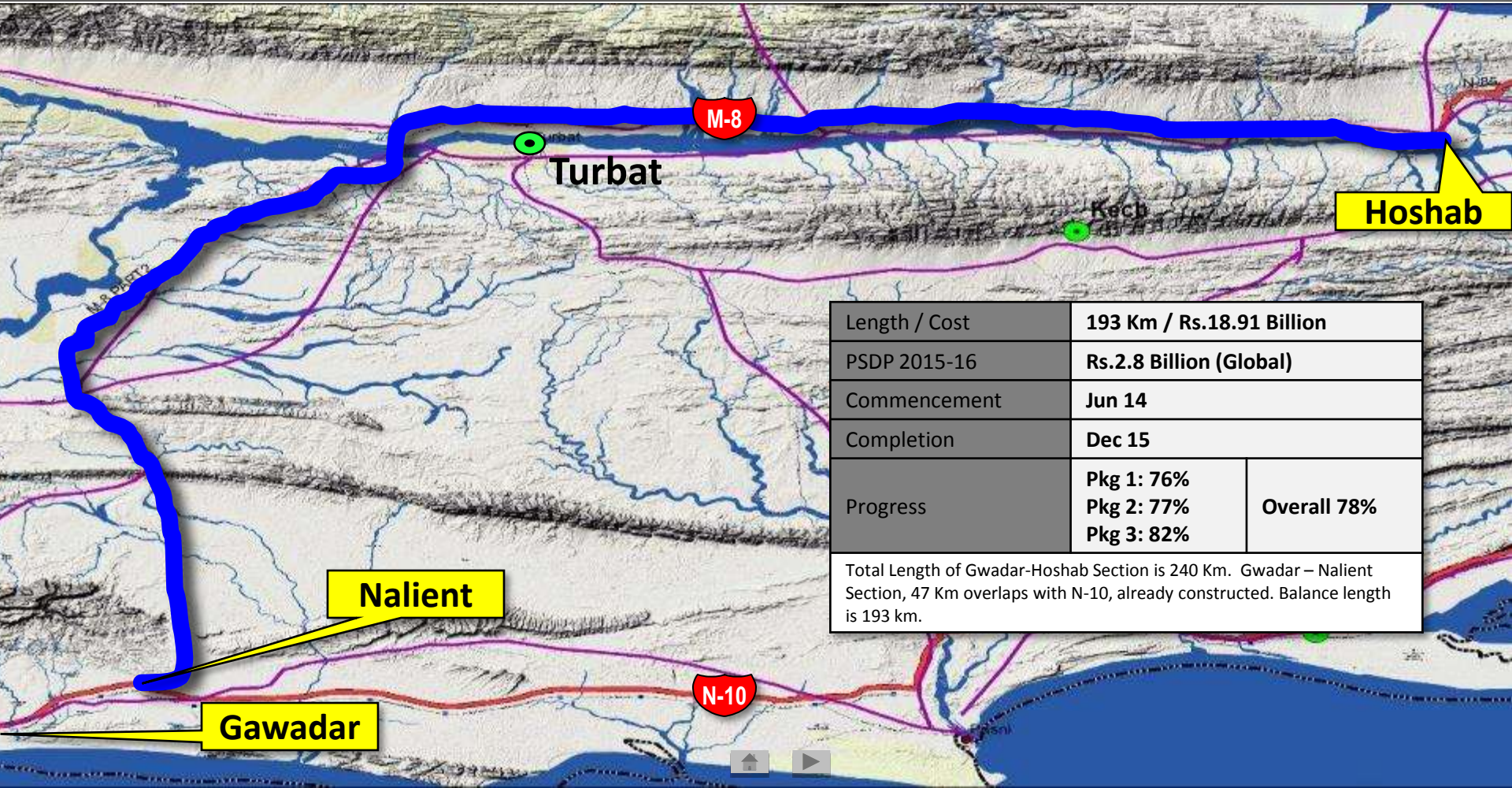
Length	459 km
PC-I Cost	Rs. 22.412 Billion (ECNEC on 22-10-07)
PSDP Allocations	(2015-16) Rs. 2.5 Billion
Consultant	M/s NESPAK
Contractor	M/s FWO
Contract Cost	Rs 17.452 Billion
Date of Start	10 Sep 07
Date of Completion	Dec 16
Overall Progress	50%

N-85 is divided in following four sub sections.

Section	Length	Progress
Sorab-Basima, Section-I	90 Km	27.0%
Basima-Nag, Section-II	91 Km	22.8%
Naag-Panjgur, Section-III	130 Km	86.9%
Panjgur-Hoshab, Section-IV	148 Km	57.5%

Note: Presently Section III is being given priority for early completion

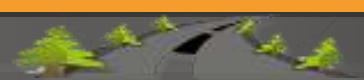
Balance Work of Gwadar –Turbat- Hoshab (M-8)



Length / Cost	193 Km / Rs.18.91 Billion	
PSDP 2015-16	Rs.2.8 Billion (Global)	
Commencement	Jun 14	
Completion	Dec 15	
Progress	Pkg 1: 76% Pkg 2: 77% Pkg 3: 82%	Overall 78%

Total Length of Gwadar-Hoshab Section is 240 Km. Gwadar – Nalient Section, 47 Km overlaps with N-10, already constructed. Balance length is 193 km.

Gwadar – Turbat – Hoshab (M-8)



Description	Gwadar-Turbat Package-IIA (Nalient-Dasht)	Gwadar-Turbat Package-IIB (Dasht-Turbat)	Turbat-Hoshab Section
Length	53.60 km	63.45km	76.25 Km
Commencement Date	2004	2004	2004
Expenditures	1.43 Billion	2.35 Billion	2.1Billion
Progress	60%	66%	65%
Contract terminated due to poor Law & Order situation.			
Balance Work			
Contractor	M/s FWO	M/s FWO	M/s FWO
Consultant	M/s LRA Group	M/s LRA Group	M/s LRA Group
Cost	4 Billion	4.221 Billion	4.810 Billion
Date of Commencement	June, 2014	June, 2014	June, 2014
Date of Completion	Dec,2015	Dec,2015	Dec,2015
Progress (Cumulative)	76%	77%	82%

Existing National Highways Network

Sr. No.	Route No.	Road Description	Length in Kilometers		
			Motoway	Expressway	Highway
1	N-5	Karachi-Lahore-Peshwar-Torkham	-	-	1819
2	N-10	Makran-coastal; liari-Ormara-Gwadar-Jiwani	-	-	653
3	N-15	Mansehra-Naran-Jalkhad	-	-	240
4	N-25	Karachi-Kalat-Quetta-Chaman	-	-	813
5	N-30	Basima – Khuzdar	-	-	110
6	N-35	Hassanabdal-Thakot-Khunjrab	-	-	806
7	N-40	Lakpass-Dalbandin-Taftan	-	-	610
8	N-45	Nowsehra-Dir-Chitral	-	-	309
9	N-50	Kuchlack-Zhob-D.I.Khan	-	-	531
10	N-55	Kotri-Larkana-D.G.Khan-D.I.Khan-Peshawar	-	-	1264
11	N-65	Sukkur-Sibi-Quetta	-	-	385
12	N-70	Multan-D.G.Khan-Loralai-Qali Saifullah	-	-	447
13	N-75	Islamabad-Satra Mile-Lower Topa-Kohala	-	54	
14	N-80	Tarnol-Fateh Jang-Jand-Khushal Garh-Kohat	-	-	146
15	N-85	Hoshab-Panjgur-Nag-Baseema-Sorab	-	-	487
16	N-90	Khwazakhela – Besham	-	-	64
17	N-95	Chakdara – Kalam	-	-	135
18	N-105	Larkana - Naudero – Lakhi	-	-	61
19	N-110	Gharo - Ketī Bunder	-	-	90



Continue....



Existing National Highways Network

Sr. No.	Route No.	Road Description	Length in Kilometers		
			Motorway	Expressway	Highway
20	N-120	Hyderabad - Mirpukhas - Khokhrapar	-	-	220
21	N-125	Taxila - Khanpur – Hairpur	-	-	44
22	N-155	Larkana - Moenjo Daro Road	-	-	28
23	N-255	Larkana - Nasirabad via RasheedWagan	-	-	34
24	N-305	Sakrand - Shaheed Benazirabad	-	-	35
25	N-455	Larkana - Kamber – Shahdadkot	-	-	50
26	N-655	Ratodero - Naudero Road	-	-	18
27	S-1	KKH-Skardu Road (Strategic Road)	-	-	167
28	S-2	Kohala-Muzaffarabad	-	-	40
29	S-3	Muzaffarabad – Chakothi	-	-	55
30	M-1	Islamabad-Peshawar Motorway	155	-	-
31	M-2	Lahore-Islamabad Motorway incl. 32 Km	367	-	-
32	M-3	Pindi Bhattian-FaisalabadMotorway	53	-	-
33	M-4	Faisalabad - Khanewal - Multan 241	115	-	-
34	N-5A	Khanewal – Lodhran	-	-	102
35	M-8	Gwadar-Hoshab-Khuzdar-Ratodero	-	-	436
36	M-9	Karachi-Hyderabad Motorway	-	-	136
37	M-10	Karachi Northern Bypass	-	-	57
38	-	Layari Expressway	-	39	-
Total (Current National Highways)			690	93	10392

Planned 2015-17

Sr. No.	Route No.	Road Description	Length in Kilometers		
			Motoway	Expressway	Highway
1	KLM	Hyderabad – Sukkur	296	-	-
2	KLM	Sukkur - Multan	387	-	-
3	KLM	Abdul Hakeem – Lahore	230	-	-
4	E-35	Burhan - Havalian	60	-	-
5	CPEC	Havalian - Thakot	39	-	81
6	M-4	Gojra - Khanewal	124	-	-
7	SLM	Lahore - Sialkot	-	91	-
8	-	Yakmach - Kharan	-	-	200
9	CPEC	Islamabad – DIKhan	-	210	-
10	M-9	Karachi - Hyderabad	136	-	-
11	MMM	Muzaffarabad – Mangla - Mirpur	-	174	-
Total (Planned 2015-17)			1,272	475	281

