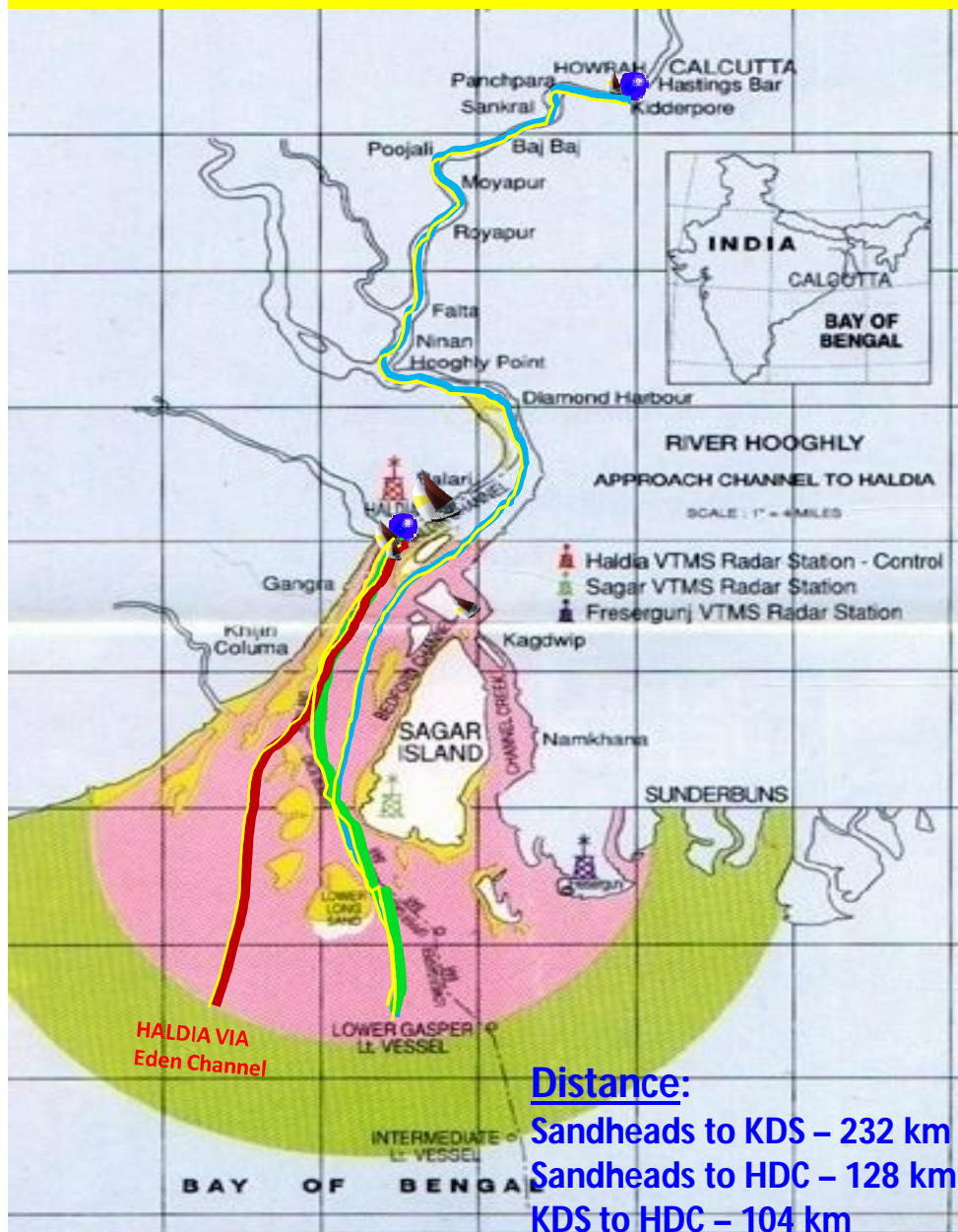




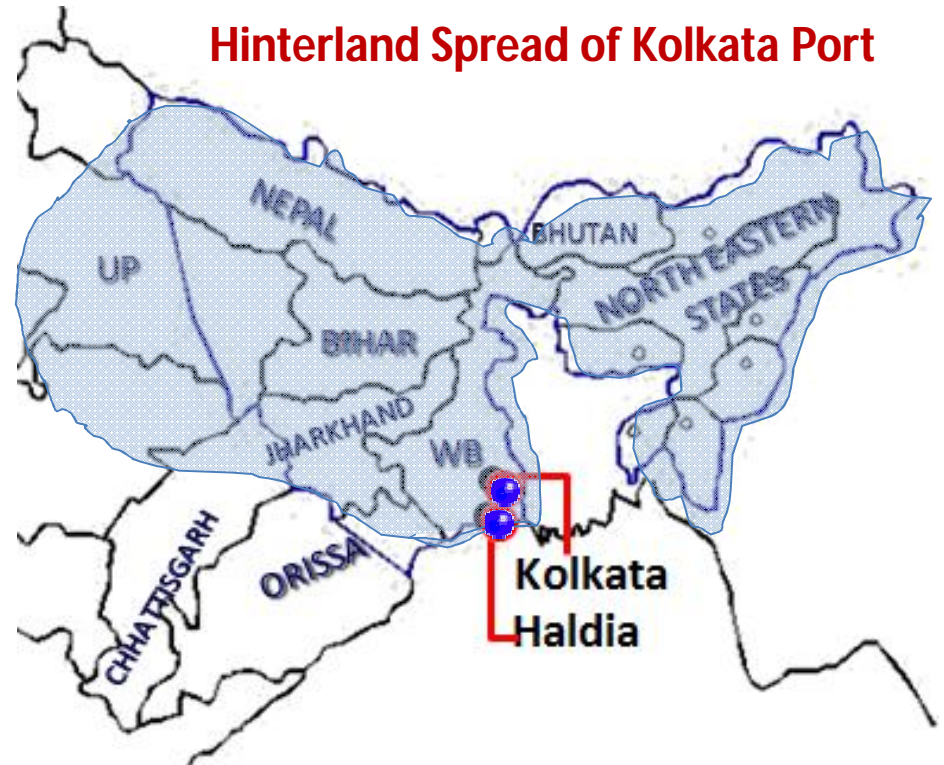
**Greetings from Kolkata Port Trust**

## Kolkata/Haldia Port

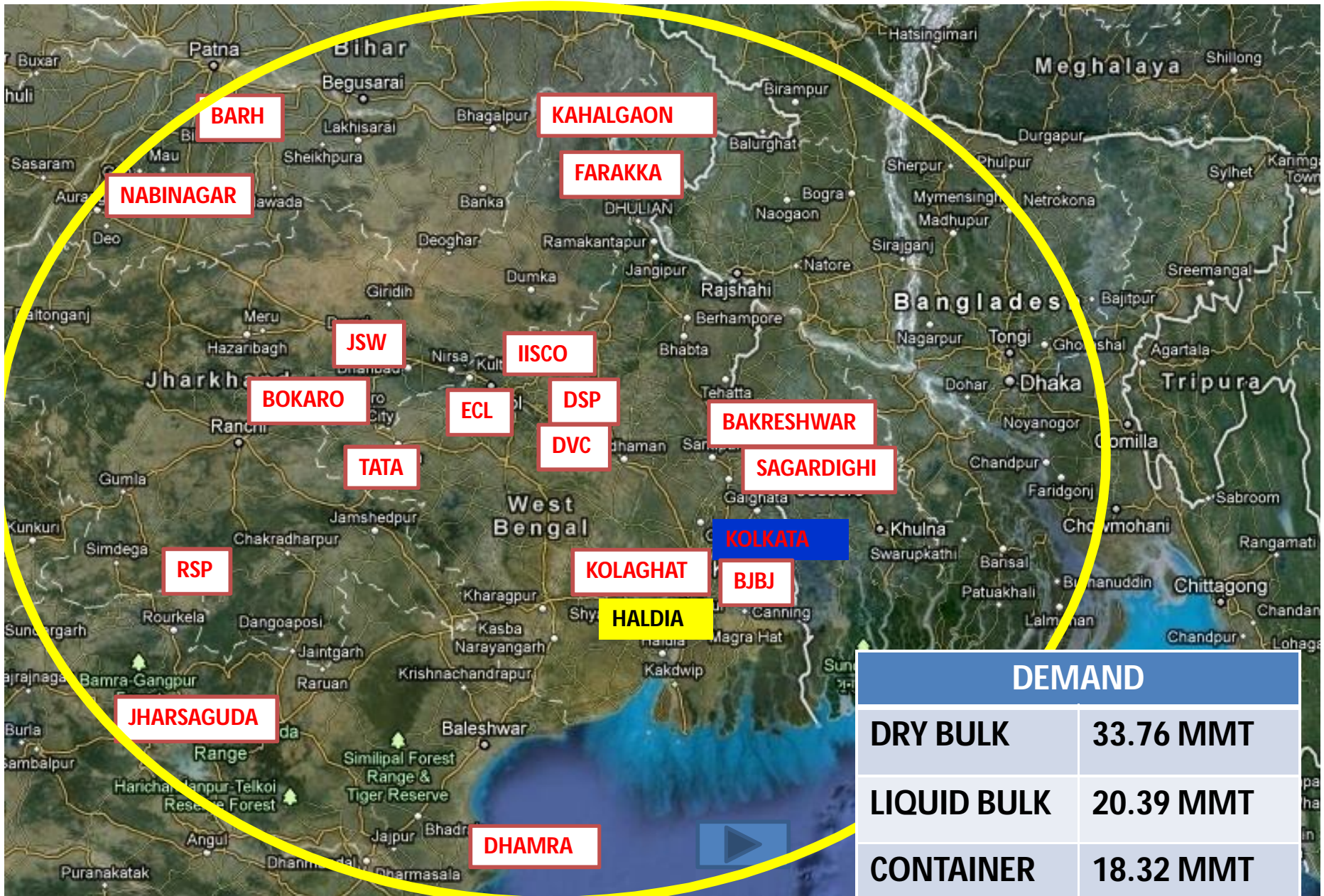
### MAP SHOWING HOOGHLY ESTUARY AND SAGAR ISLAND



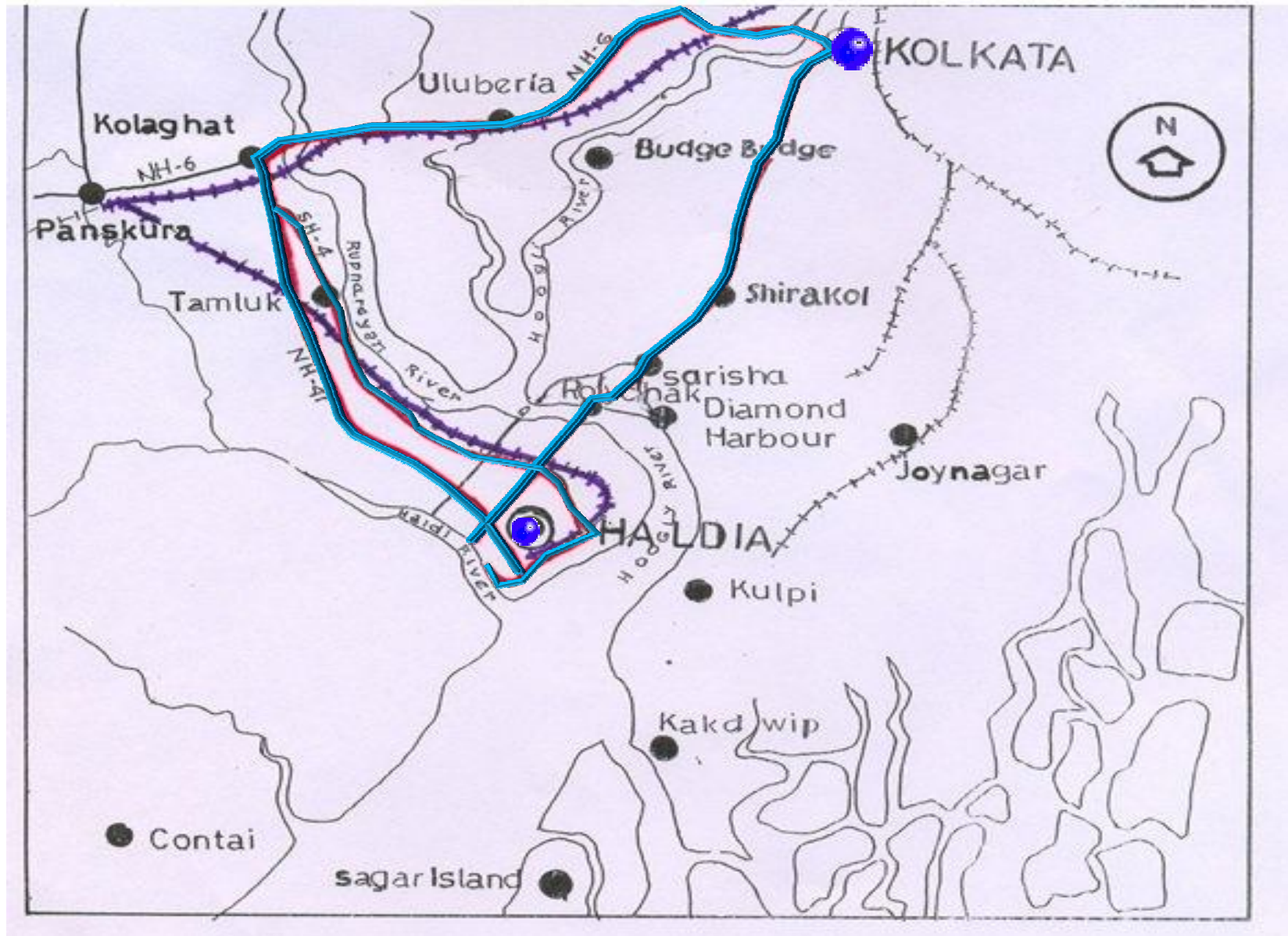
## Hinterland Spread of Kolkata Port



## NATURAL HINTERLAND OF KOLKATA PORT

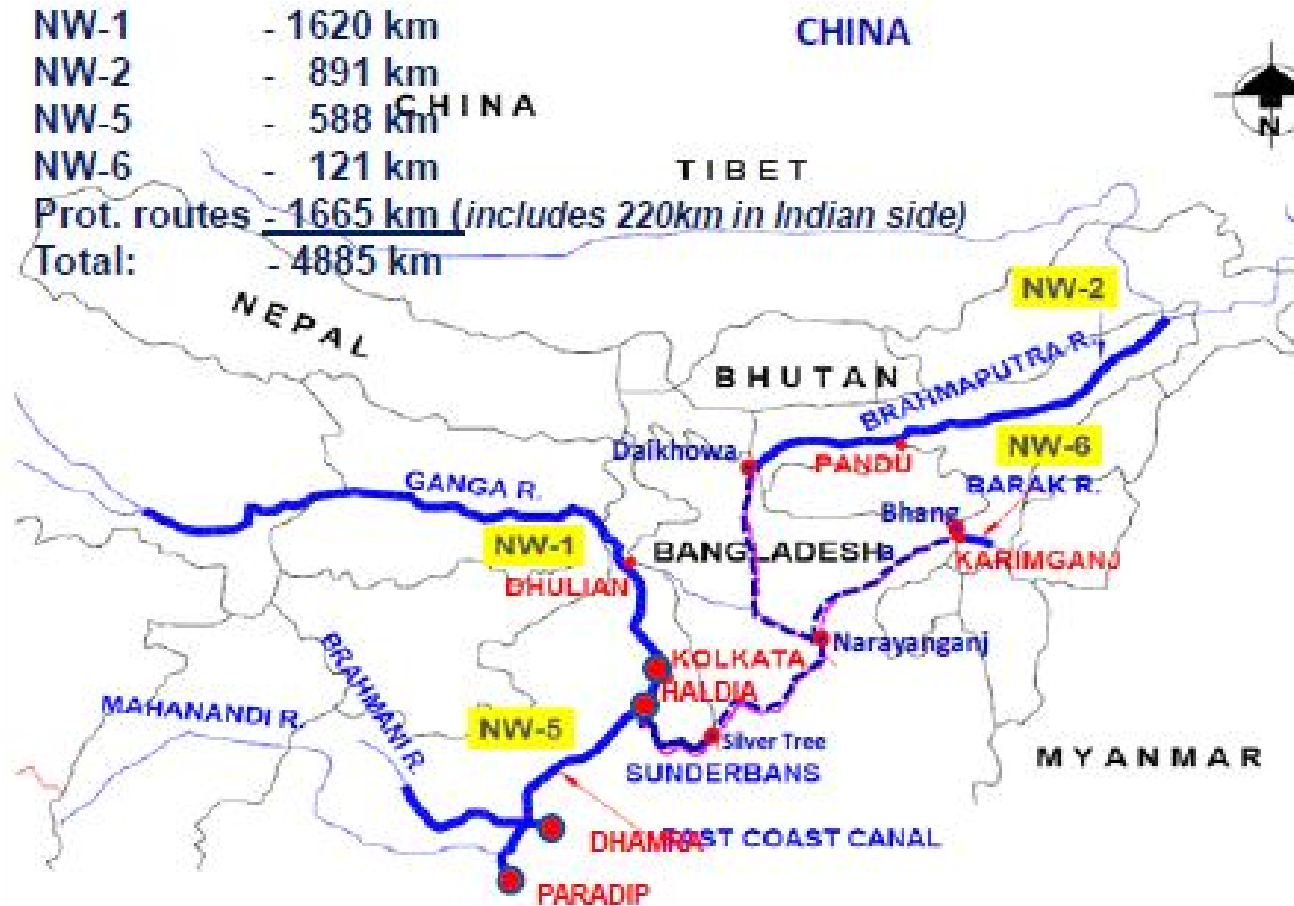


## ROAD AND RAIL CONNECTIVITY TO HDC



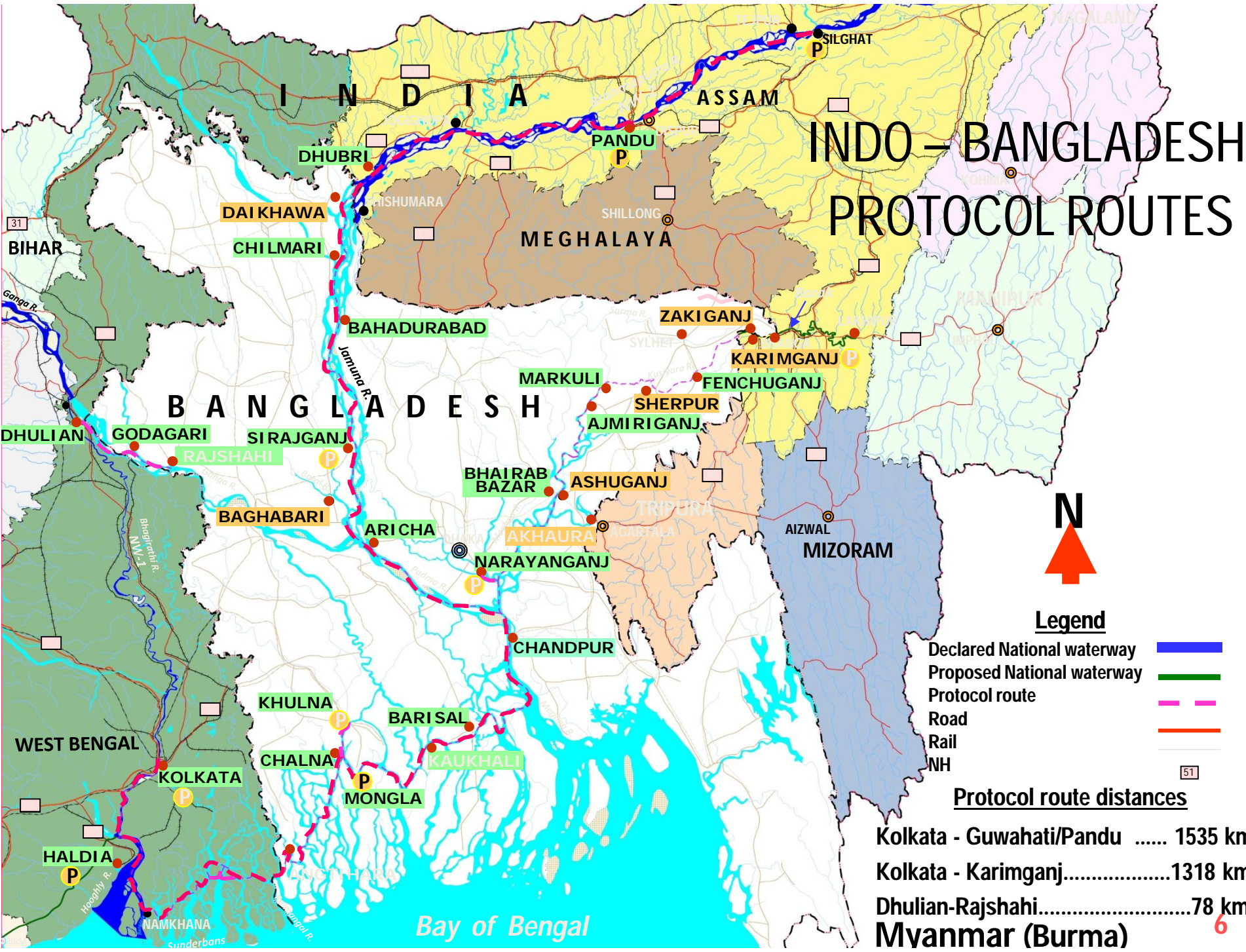
# EASTERN INLAND WATERWAYS GRID

NW-1	- 1620 km
NW-2	- 891 km
NW-5	- 588 km
NW-6	- 121 km
Prot. routes	- 1665 km (includes 220km in Indian side)
Total:	- 4885 km



India map

# INDO - BANGLADESH PROTOCOL ROUTES

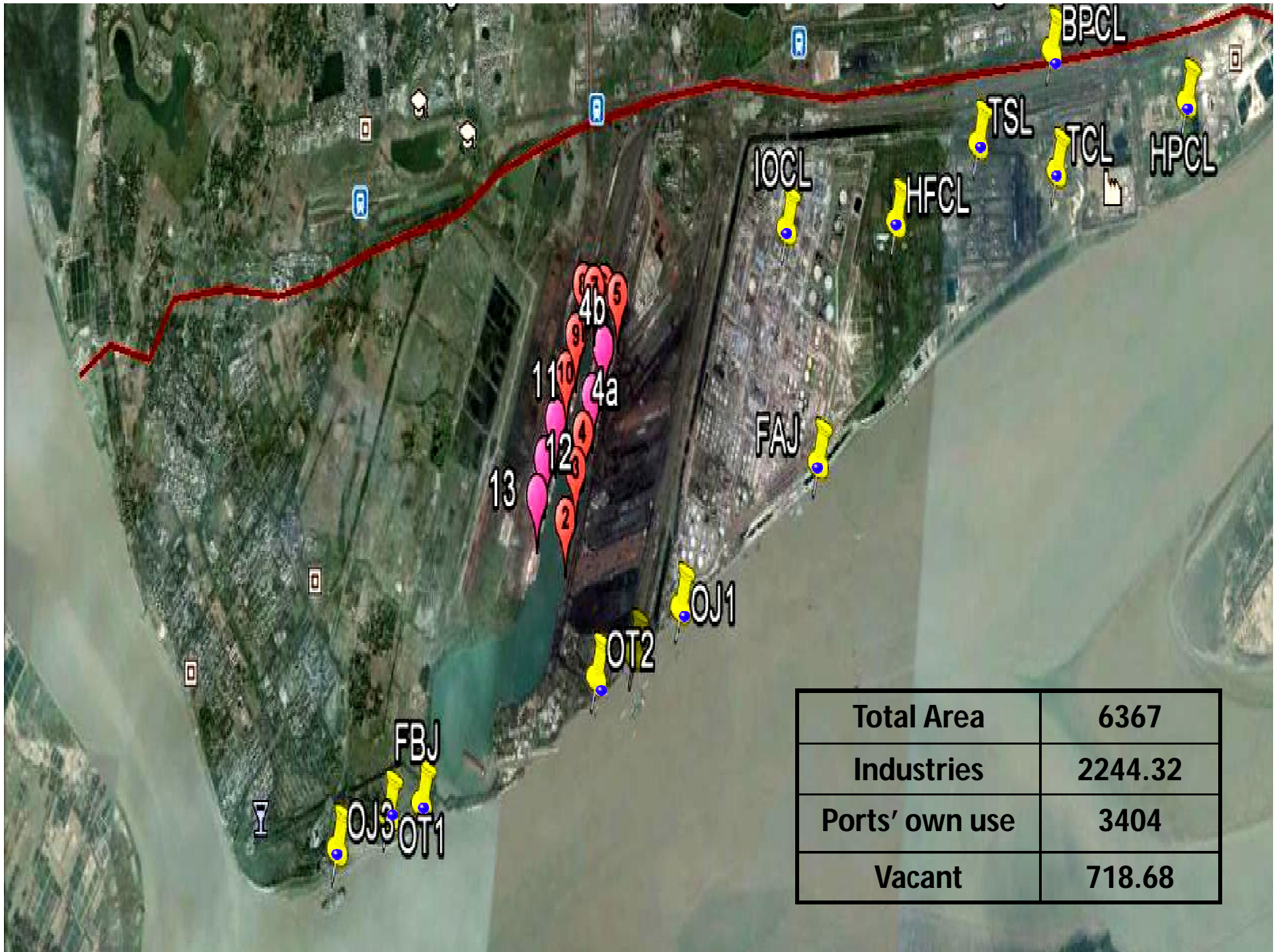


**Legend**

- Declared National waterway —
- Proposed National waterway —
- Protocol route - - -
- Road —
- Rail —
- NH 51

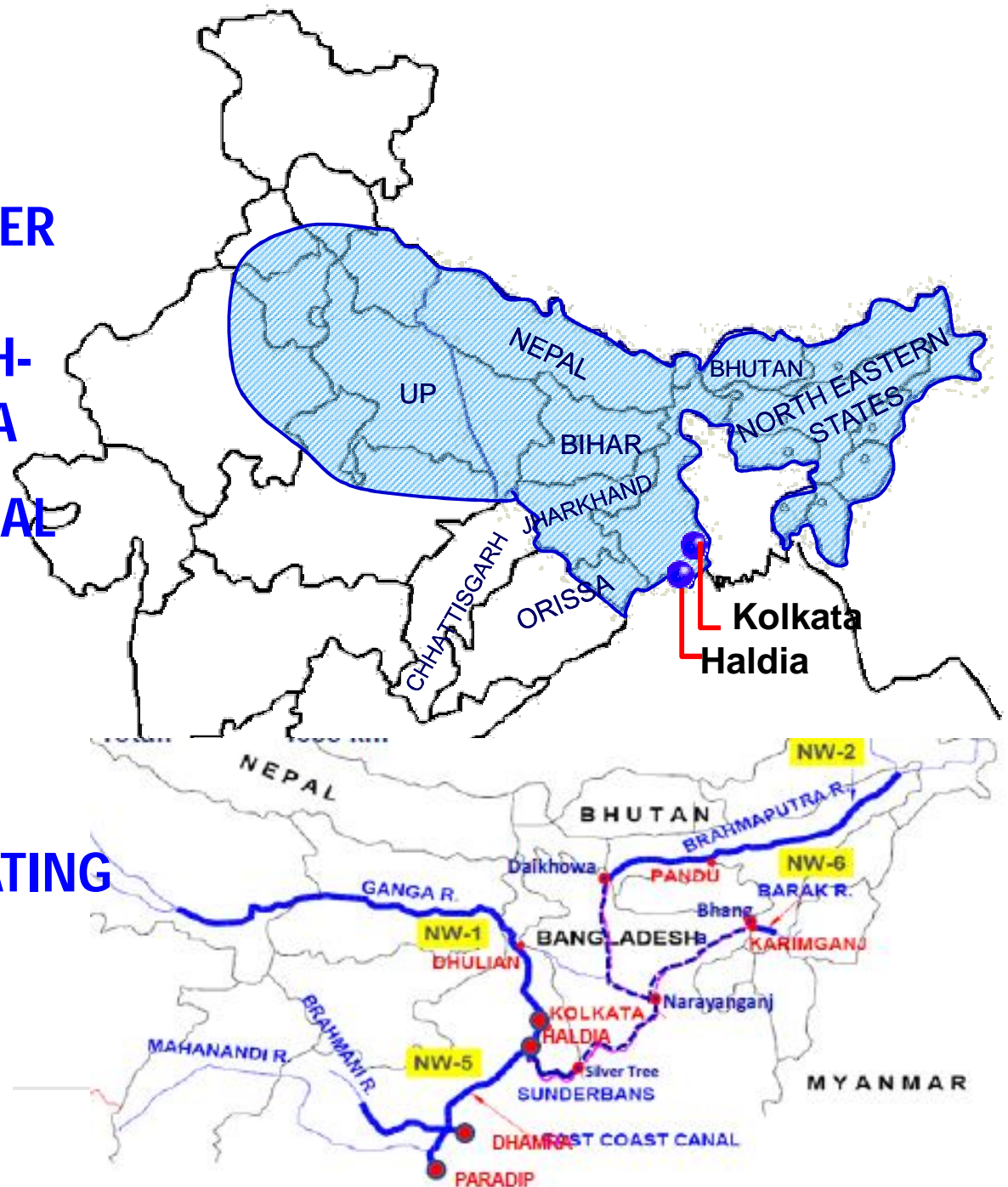
**Protocol route distances**

Kolkata - Guwahati/Pandu .....	1535 km
Kolkata - Karimganj.....	1318 km
Dhulian-Rajshahi.....	78 km
<b>Myanmar (Burma)</b>	<b>6</b>



## VISION

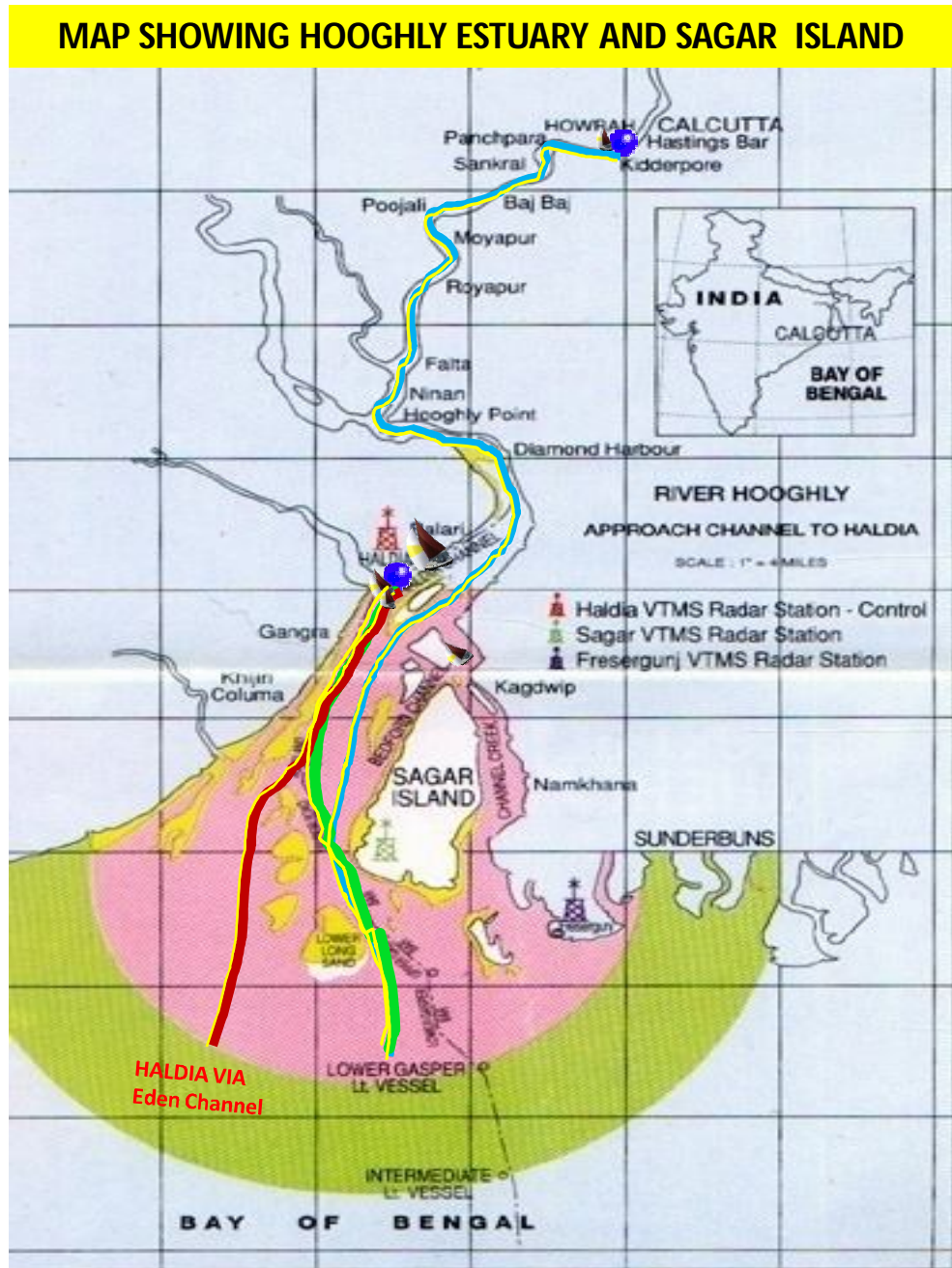
- TO BECOME THE PREMIER GATEWAY OF EASTERN, NORTHERN AND NORTH-EASTERN PART OF INDIA
- TO EMERGE AS TERMINAL HUB FOR COASTAL AND GATEWAY FOR INLAND WATERWAY TRAFFIC
- TO BE PORT WITH INTERNATIONAL OPERATING STANDARDS
- FIRST PORT OF CALL





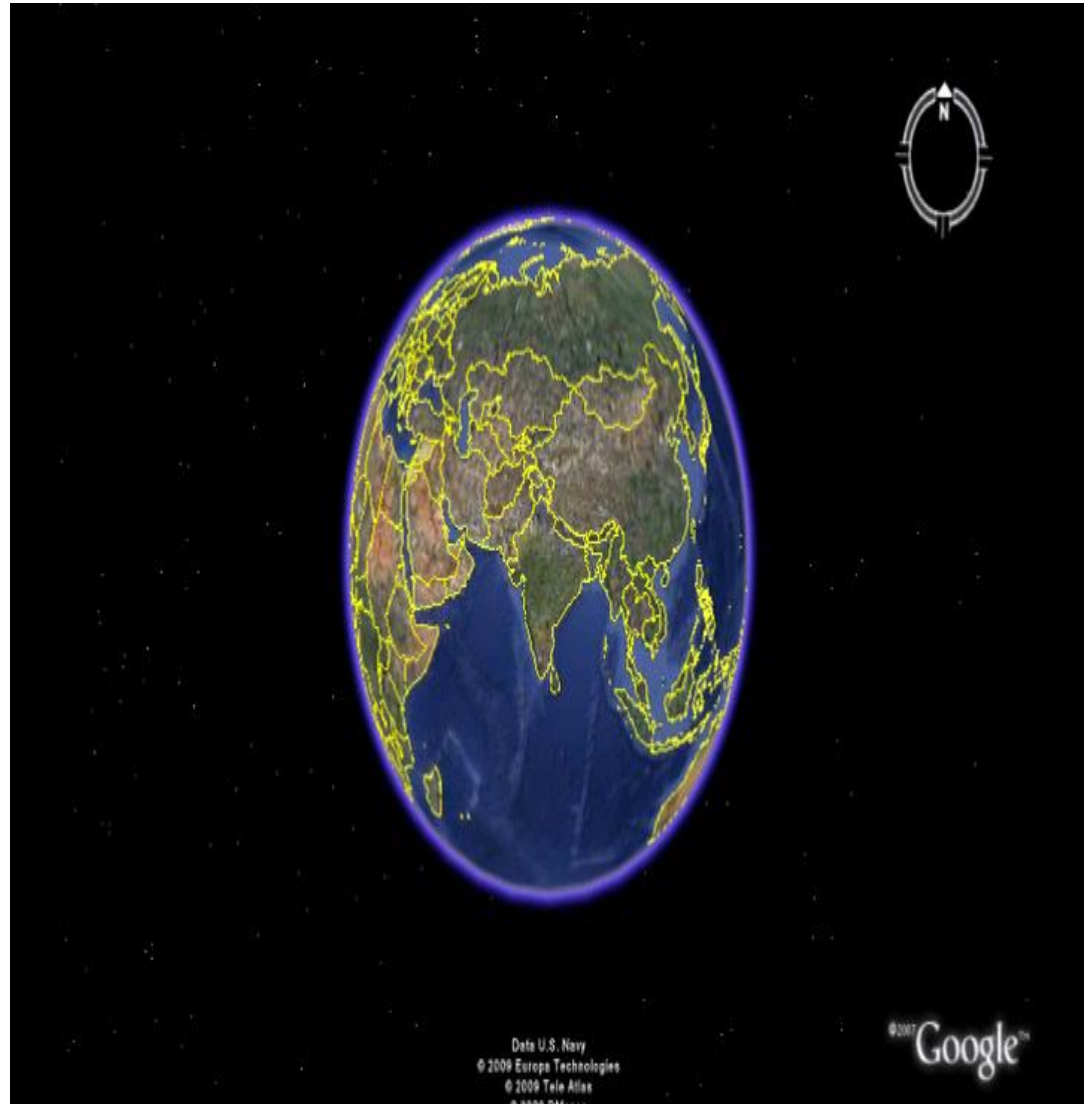
# KOLKATA PORT TRUST

- CHALLENGES
- DRAFT
- LONG NAVIGATIONAL CHANNEL –  
Single Lock Entrance



# ON THE WAY TO MITIGATE DRAFT CONSTRAINTS

- **Transloading of Dry Bulk Cargo**
- **Floating Storage cum Mooring Facility for Liquid Cargo**
- **FSRU for LNG**
- **Deep draft port at Saugar**



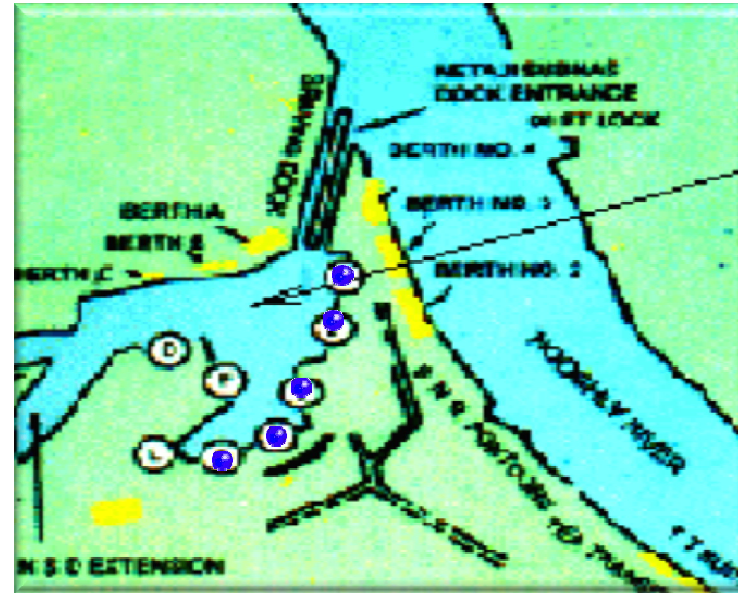
# CHALLENGING THE LOCK CONSTRAINT

- Two riverine terminals at Salukkhali – 11.7 MTPA
- Outer Terminal 1 – 5.0 MTPA
- Outer Terminal 2 – 2.5 MTPA
- Floating Barge Jetty – 2.5 MTPA
- IWT Hub – 3.0 MTPA
- Fly Ash Jetty – 0.5 MTPA



# WAY TO FURTHER INCREASE IN PRODUCTIVITY

- Integrated Container Handling at Berths 10 & 11 of HDC by ULA
- Integrated Container Handling at Berths 3, 4, 5, 7 & 8 at NSD by Bharat Kolkata Container Terminal Pvt. Ltd. (subsidiary of PSA Singapore)
- Equipping of Berths 2 & 8 of HDC



NSD



## **ACTION PLAN FOR 2014-15 AND SHELF OF PROJECTS**

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
<b>Capacity (In MMTPA)</b>	<b>71.40</b>	<b>71.40</b>	<b>73.10</b>	<b>82.34</b>	<b>85.34</b>	<b>87.69</b>	<b>104.50</b>
<b>KDS :17.14, HDC: 49.75, Anchorage: 4.51</b>							
<b>Transloading Facilities</b>	--		<b>3.60</b>				
<b>Mechanization of 2, 8 Berths (H)</b>			<b>3.00</b>				
<b>Floating Pipeline for Edible Oil (Imp) at 5, 6 &amp; off 5 &amp; off 6 (H)</b>	--		<b>0.44</b>				
<b>Floating Riverine Barge Jetty (H)</b>	--		<b>1.50</b>				

## **ACTION PLAN FOR 2014-15 AND SHELF OF PROJECTS**

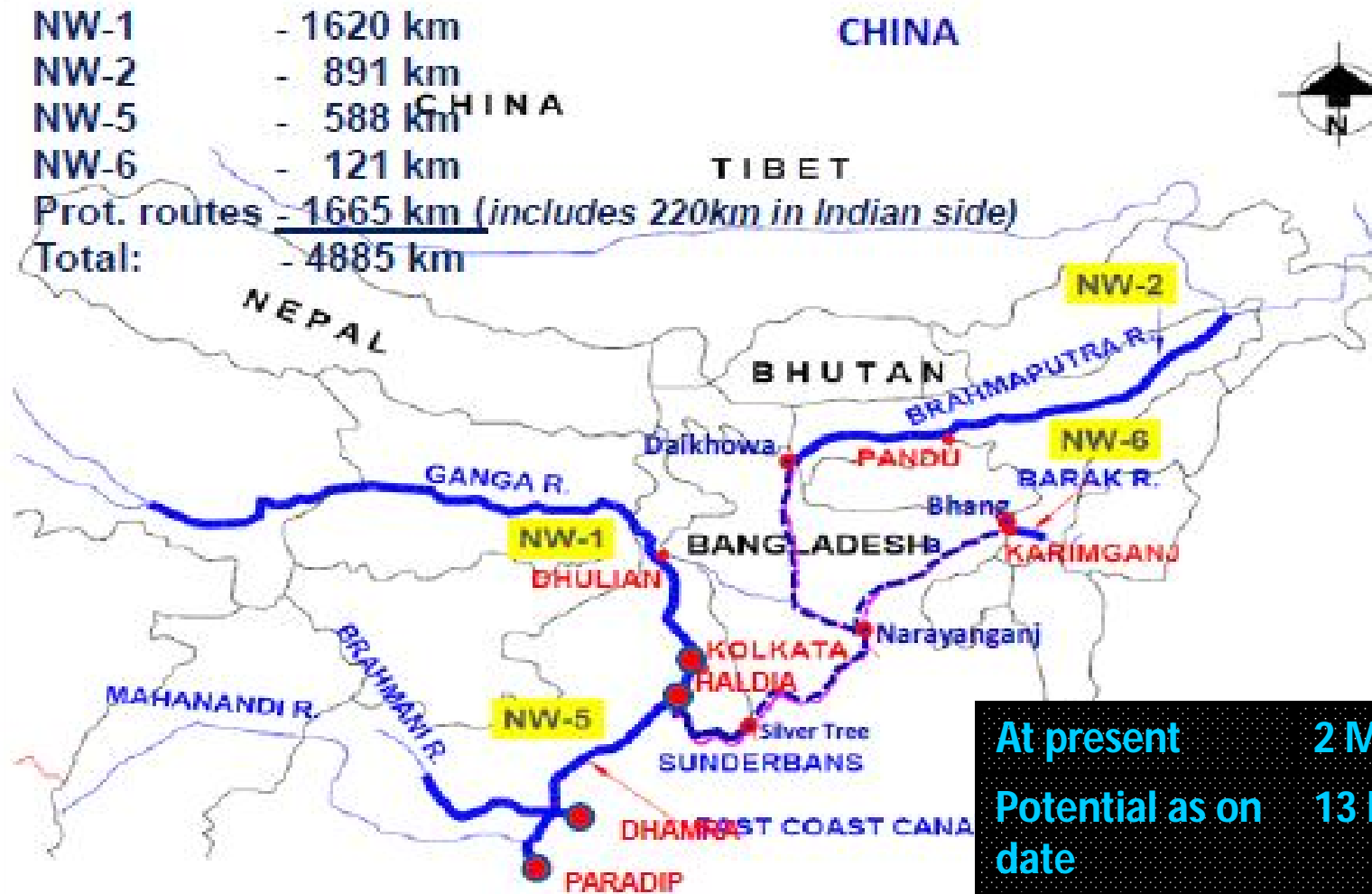
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
<b>Capacity (In MMTPA)</b>	<b>71.40</b>	<b>71.40</b>	<b>73.10</b>	<b>82.34</b>	<b>85.34</b>	<b>87.69</b>	<b>104.50</b>
<b>Riverine Barge Jetty for Fly Ash (H)</b>	--		<b>0.50</b>				
<b>Floating Storage Facilities (H)</b>				<b>3.00</b>			
<b>Development of OT-2</b>					<b>2.35</b>		
<b>Haldia Dock-II (North)</b>	--					<b>11.70</b>	
<b>Development of OT-1</b>						<b>5.11</b>	
<b>Haldia Dock-II (South)</b>							<b>(11.70)</b>

**Note: Capacity addition for DHCT and Haldia Dock-II (South) projects have not been considered since these two projects are currently under review.**

# HALDIA CAN ALSO BE AN IWT HUB

## EASTERN INLAND WATERWAYS GRID

NW-1	- 1620 km
NW-2	- 891 km
NW-5	- 588 km
NW-6	- 121 km
Prot. routes	- 1665 km (includes 220km in Indian side)
Total:	- 4885 km



At present	2 MMT
Potential as on date	13 MMT
2021 - 2022	40 MMT



# STRATEGIES FOR PARTNERSHIP

- **TERMINAL PORT FOR COASTAL CARGO**
- **Strategic alliance with neighboring Ports for steady movement of coastal cargo**
- **Identified location for setting up of dedicated berth for coastal movement**

## OUR DAILY EVACUATION CAPACITY

RAIL	40 RAKES
ROAD	2000 TRUCKS
WATER	NW-1, NW-2, NW-5

Years	Coastal Cargo			Total Cargo			% Share of Coastal Cargo		
	KDS	HDC	KoPT	KDS	HDC	KoPT	KDS	HDC	KoPT
2009-10	1012	6078	7090	13045	33378	46423	7.76%	18.21%	15.27%
2010-11	1041	7126	8167	12540	35005	47545	8.30%	20.36%	17.18%
2011-12	903	6508	7411	12233	31015	43248	7.38%	20.98%	17.14%
2012-13	1111	5157	6268	11844	28084	39928	9.38%	18.36%	15.70%
2013-14	1258	4684	5942	12875	28511	41386	9.77%	16.43%	14.36%
Apr-Dec'14	941	3408	4349	10488	21884	32372	8.97%	15.57%	13.43%



# SYNERGY – MARITIME HUB



*Thank you*





PETRO-CHEMICAL COMPLEX

INDIAN OIL CORPORATION

RIVER HOOGHLY

RIVER HOOGHLY

**LEGEND:-**

- 1. BOUNDARY WALL ALIGNMENT -
- 2. MISEQUITY
- 3. DRAINAGE
- 4. BOUNDARY WALL BEHIND REEFDIRT DUE TO SHORT OF PROP. BOUNDARY WALL
- 5. EXISTING BOUNDARY WALL TO BE UNCHANGED
- 6. DATE TO BE REEQUIDANT
- 7. RLY. GATE NO. 3, 4, 5 & 10
- 8. ROAD GATE NO. 1, 2, 7, 8, 11, 12, 13 & 14
- 9. EXISTING ROAD
- 10. PROP. ROAD
- 11. EXISTING RAILWAY LINE
- 12. PROPOSED RAILWAY LINE



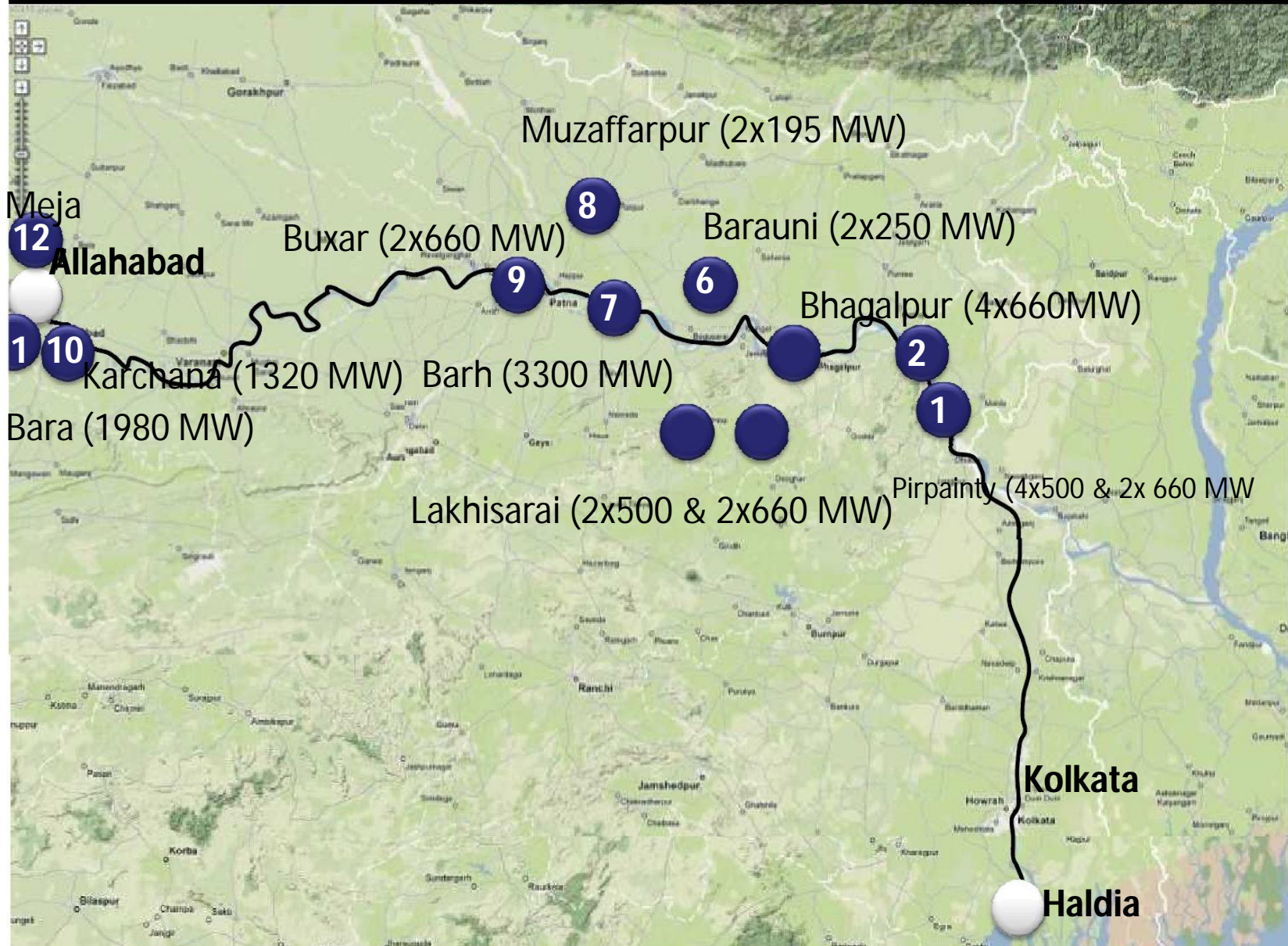
KOLKATA PORT TRUST  
HALDIA DOCK COMPLEX

SURVEYED.	
DRN.	7-8/01
CHKD.	
TRCD.	

MASTER PLAN OF  
HALDIA DOCK COMPLEX

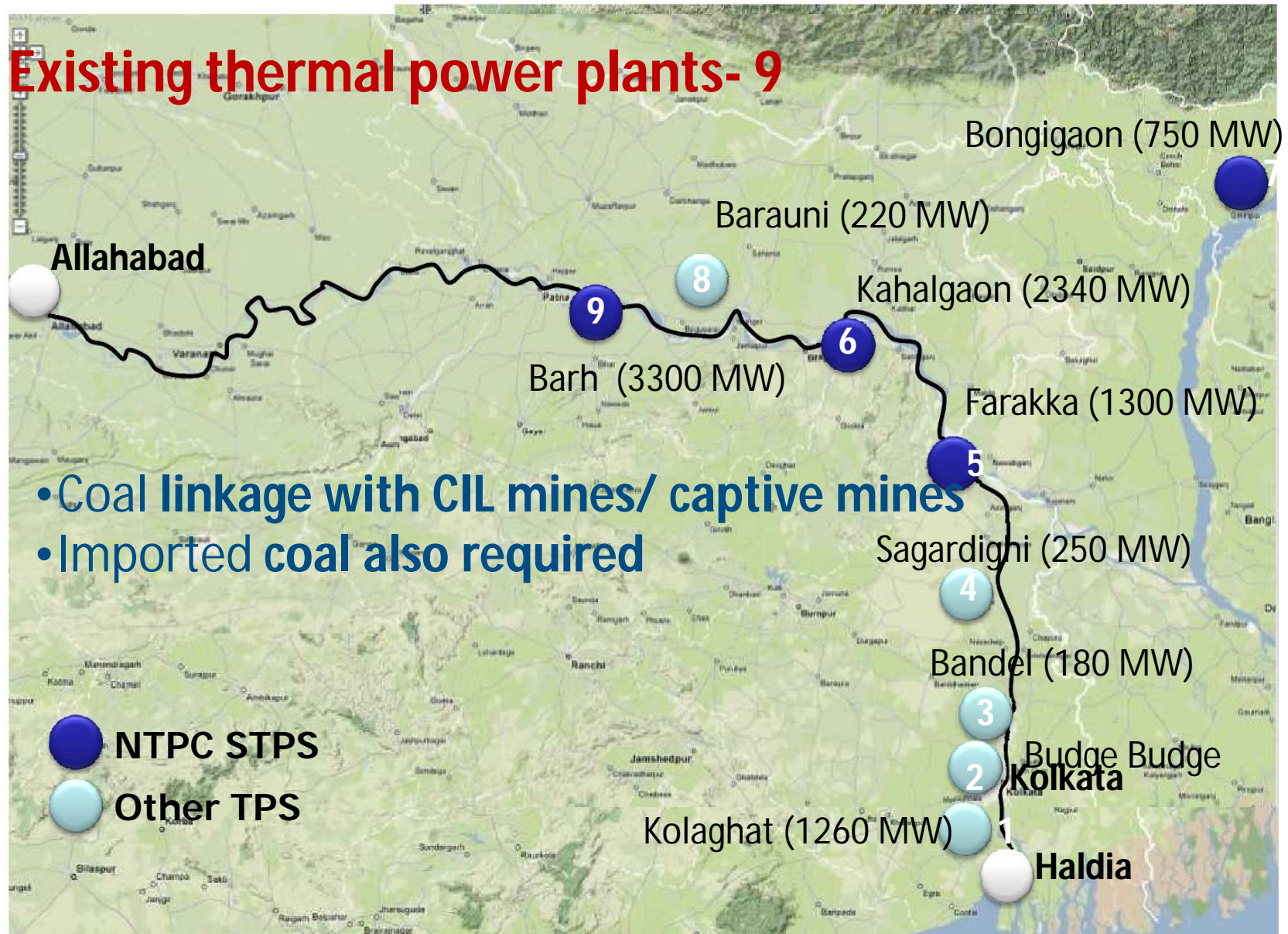
ASST. MANAGER (S&P)    DY. MANAGER (S&P)    MANAGER (S&P)    SCALE: 1:12000    DATE: 18.1.15    DRG. NO - HMP-9A

# PROPOSED THERMAL POWER PLANTS



# POTENTIAL FOR COAL TRANSPORTATION ON NW-1

## Existing thermal power plants- 9



# STRATEGICALLY LOCATED

## ECONOMIC LINK TO SOUTH EAST ASIA, AUSTRALIA

Coal: Australia, New Zealand,  
Indonesia

Coke: China

Crude Veg. Oil: Malaysia,  
Thailand

Iron Ore: China

Container : Transshipment via  
Singapore, Colombo

Limestone: Australia, Thailand



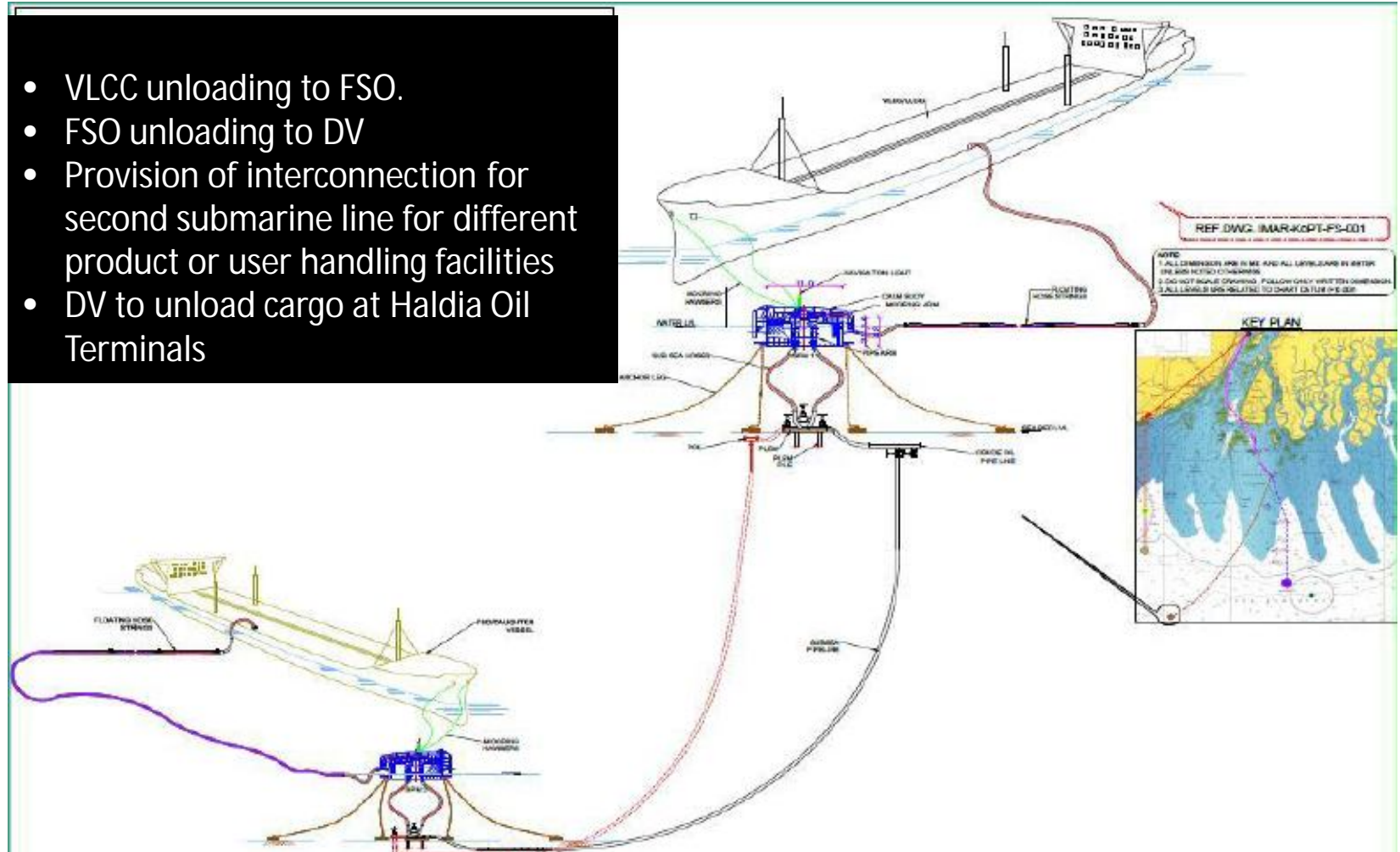
# Transloading Of Dry Bulk Cargo

- RFQ invited for creation of 6.64 MTPA of Transloading
- The facilities will comprise a Transloader of Panamax Size with adequate daughter vessels to transport transloaded cargo regularly to HDC.
- HDC will dedicate two berths for unloading of daughter vessels with guaranteed productivity.
- The daughter vessels will get priority of calling and berthing.
- The transloading location will be to handle cape size vessels
- The facilities are expected to be in place by June,2015



# Floating Storage Operation For Liquid Cargo

- VLCC unloading to FSO.
- FSO unloading to DV
- Provision of interconnection for second submarine line for different product or user handling facilities
- DV to unload cargo at Haldia Oil Terminals





**HALDIA DOCK COMPLEX**

**Overseas Cargo**

**Coastal Cargo**

**IWT**

**Land Bank**

**Transloading**

**Strategic Alliance  
With Neighbors**

**Strategic Alliance  
With IWAI**

**Setting up Industries  
And Storages**

**Riverine Terminals**

**Dedicated Daughter  
Vessel Movement**

**Earmarking  
Waterfront with  
Backup Storage**

**Mechanization**

**Dedicated Coastal  
Cargo Berths**

## Traffic divertible from Rail & Road to NWs (2021-22)

*in million tonnes*

S. No.	Within each National Waterway		From Rail	From Road	Total
1	NW1		25.90	17.44	43.34
2	NW2		2.31	19.48	21.79
3	NW3		0.91	11.18	12.09
4	NW4		14.96	27.09	42.05
5	NW5		14.64	8.61	23.25
6	NW6		0.36	3.71	4.07
	<b>TOTAL</b>		<b>59.08</b>	<b>87.51</b>	<b>146.59</b>

S. No.	Between National Waterways		From Rail	From Road	Total
	From	To			
1	NW1	NW2	1.00	1.13	2.13
2	NW1	NW5	5.02	2.77	7.79
3	NW1	NW6	0.02	0.94	0.96
4	NW2	NW5	0.13	0.47	0.60
5	NW2	NW6	0.04	0.89	0.93
	<b>Total</b>		<b>6.21</b>	<b>6.20</b>	<b>12.41</b>
<b>TOTAL OF I &amp; II:</b>			<b>65.29</b>	<b>93.71</b>	<b>159.00</b>

# National Waterway-1

## Ganga – Bhagirathi – Hooghly river system

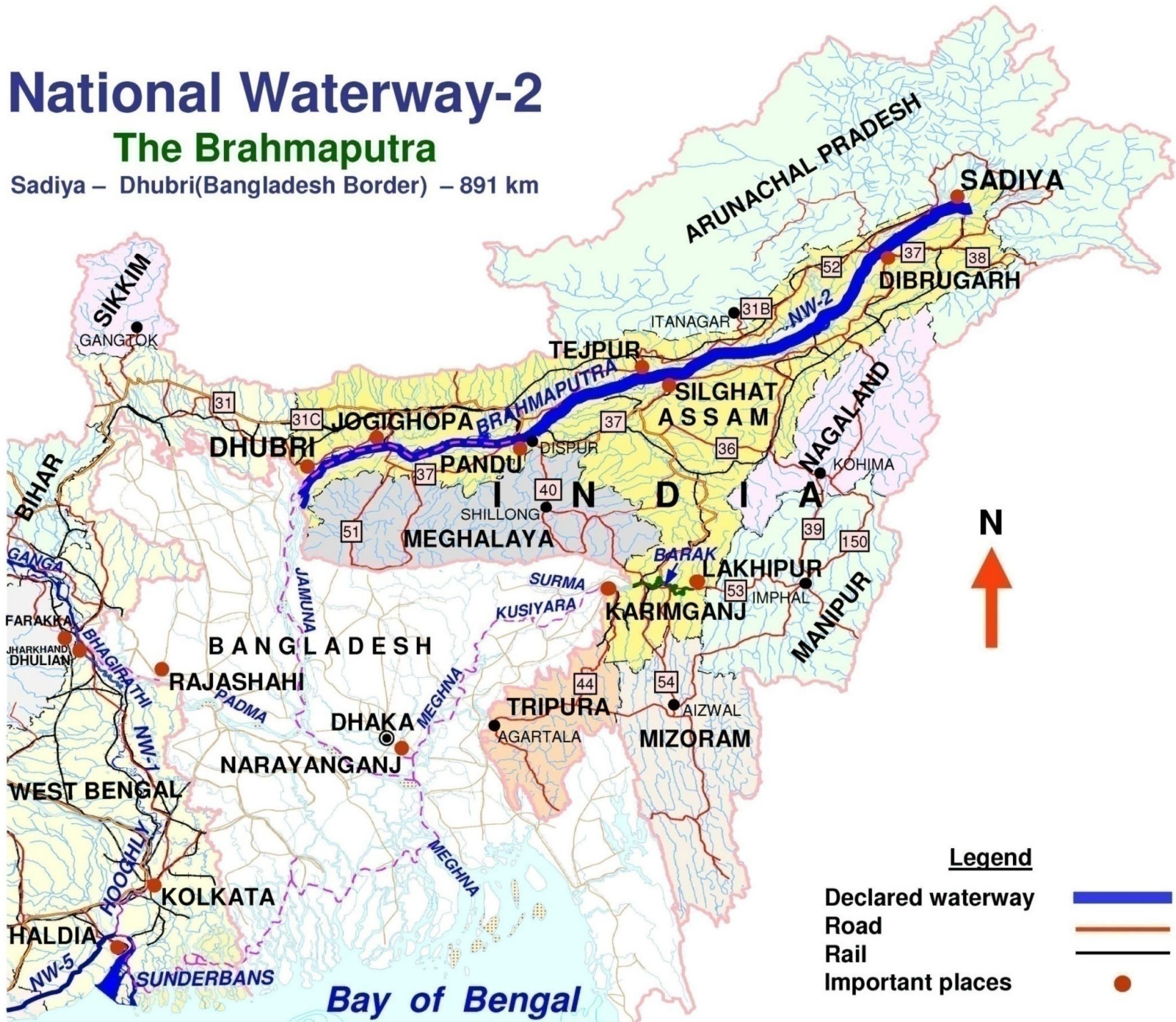
Haldia(Sagar island) – Allahabad –1620 km



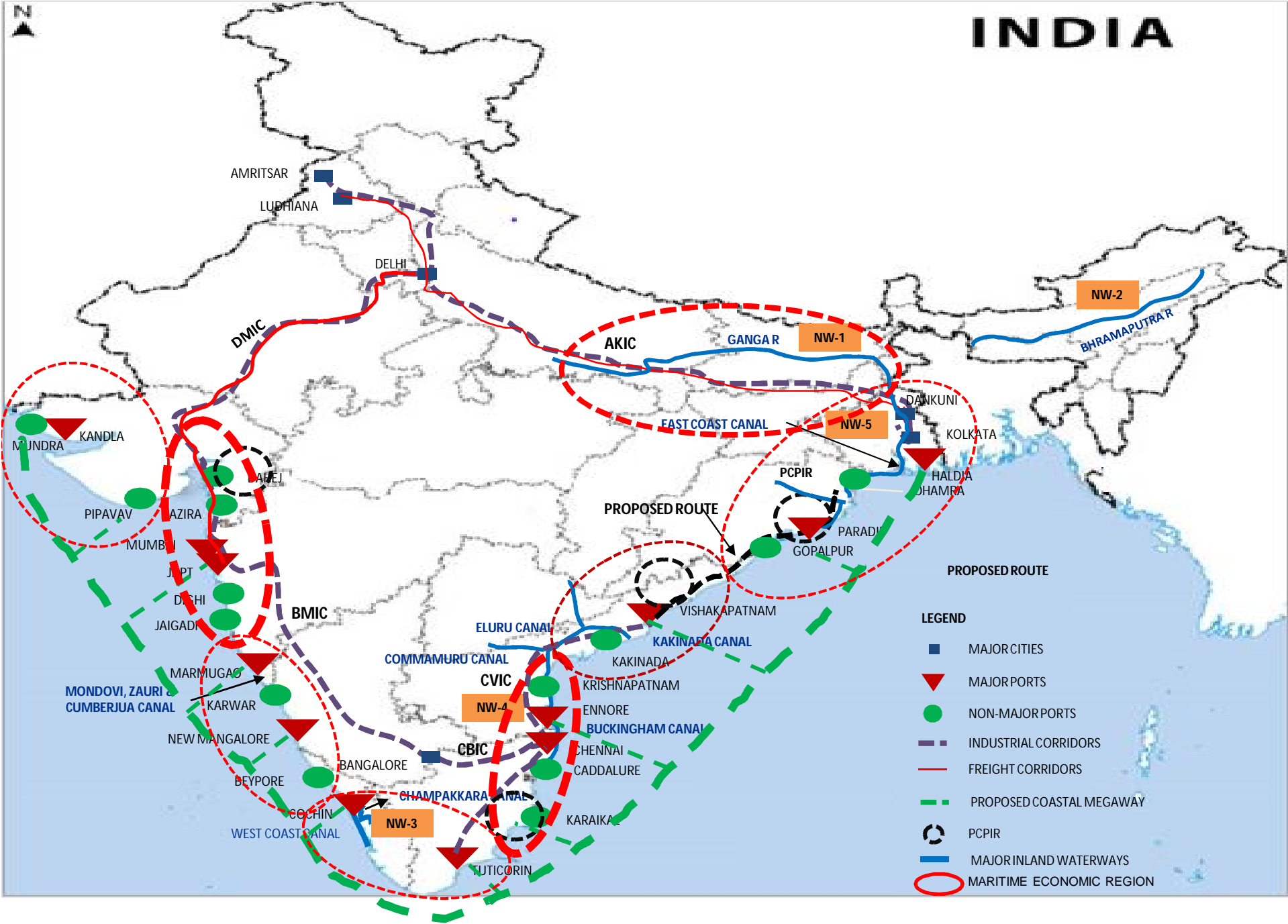
# National Waterway-2

## The Brahmaputra

Sadiya – Dhubri(Bangladesh Border) – 891 km



# INDIA



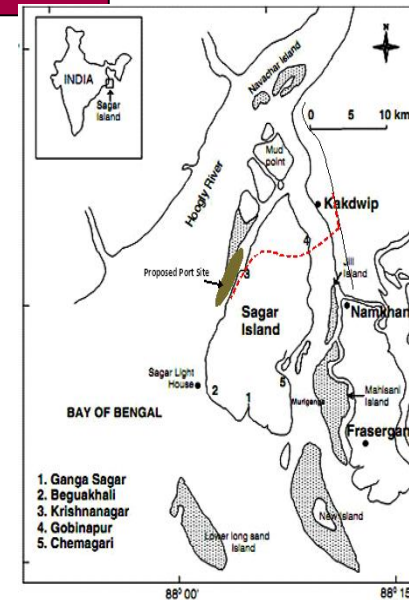
# Project scheduled for award/approval in Major Ports in 2014-15

<b>Name of the Project: Grant of permission for setting up Floating Storage &amp; Regasification Unit/Floating Storage Unit.</b>		
<b>S.No.</b>		
1	<b>Estimated cost of the Project (Rs. in Crores).</b>	<b>Rs. 526 crore (Lowest indication received against EOI)</b>
2	<b>Capacity (MMTPA)</b>	<b>Minimum 1 MMTPA if there is one qualified applicant.</b>
3	<b>Likely date of administrative approval.</b>	<b>February, 2015</b>
4	<b>Likely date of award.</b>	<b>February, 2015</b>
5	<b>Current Status and Progress.</b>	<b>Tenders invited. Last date of receipt of bids extended to 02.02.2015.</b>
6	<b>Reasons for delay, if any, in approval/award of the Project.</b>	<b>Not applicable.</b>
7.	<b>Likely date of commissioning.</b>	<b>Year 2019.</b>



## Sagar Island Identified Port Location

- About 100 km south of Kolkata in the South Twenty-four Parganas district of West Bengal, India.
- Situated near the confluence of the Ganga and the Bay of Bengal.
- Can be reached by crossing channel creek at Harwood point.
- The island is 30 km in length and has a maximum width of 12 km.
- Population of Sagar Island – 1.60 lakhs





## DEEP DRAFTED PORT FACILITY AT SAGAR

- Feasibility Report submitted by M/s. RITES for establishing port facilities at Sagar Island (including rail-road connectivity & construction of a rail-cum-road bridge over river Muriganga) for handling 13.5m drafted vessel (cost Rs. 4806 cr.) and rail-road connectivity (cost Rs. 3014 cr.) with 54 MMTPA projected traffic in 2019-20. Project cost since updated to Rs.11909 crore as per Transaction Adviser.
- Project accorded CCEA clearance in May 2013. TA appointed in Oct 2013.
- GoWB formed a High Powered Committee headed by Chief Secretary to monitor the project.
- SPV documents already approved by KoPT board, sent to Govt of WB for concurrence.
- RITES is preparing DPR for JICA assistance for connectivity portion & Capital dredging at approach channel at a cost of Rs. 4715 crores.
- Land acquisition proposal submitted to DM South 24 Parganas on 2.12.2014.



# FUTURE CONNECTIVITY PROJECTS

## SAGAR PORT:

- Proposed deep drafted port at Sagar Island to be connected via rail from Kashinagar station at Kulpi – Namkhana Station of ER. A Rail-cum-Road Bridge across Muriganga river with estimated Cost of Rs.3000 cr. with possible Viability Gap Funding from GOI, for rail dispersal of cargo through ER, is envisaged while for road dispersal through NH-117, NHAI have been identified for providing the same.
- As regards road connectivity, widening of NH-117, is needed to cater to the cargo traffic to be handled at proposed Sagar Port.

# FUTURE CONNECTIVITY PROJECTS

## SAGAR PORT (contd.):

- As regards rail connectivity, Ministry of Railways sanctioned a new rail route for connecting Sagar Island via ER and SER through Kashinagar Station by laying new track between Kulpi – Gurudasnagar – Pujali – Uluberia which will finally connect Dankuni, the terminal station of Eastern DFC. This connectivity project (cost as obtained from Railways is Rs.761.99 crores) was sanctioned by Railways between 2010-11 & 2012-13.
- Since the above alignment entails requirement of a rail bridge over river Hooghly at Pujali, the height of which is apprehended to create hindrance to ship movement, a Committee comprising officials of KoPT and SER has since modified the same which will take the following route → **Kulpi – Gurudasnagar (DH) – Bakrahat – Chakgopalpur – Nungi – Majerhat – Shalimar – Santragachi** and finally connect to Dankuni.

