



**Invest India**

NATIONAL INVESTMENT  
PROMOTION AGENCY



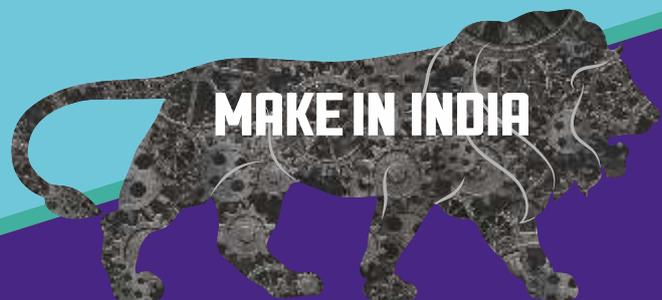
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# KEY INVESTMENT OPPORTUNITIES IN INDIA

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INFRASTRUCTURE SECTOR

MAY- 2016



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# AIRPORTS

## Airports

Project Name	Modernisation of Chennai Airport Ph.II
Project Location	Chennai Airport
Project Type	Terminal Building, Cargo Terminal, MLCP
Concerned Agency	Airport Authority India (AAI)
Mode of Implementation	Calling of Tender
Project Cost(in USD Million)	439.54 Million
Project Status A. Current Status B. Anticipated Project Timelines	Detailed planning and design - PIB Approval required. Year 2020-21
Mode of Funding and Funding Agency	Internal Resources
Contact Information (Name, Email, Telephone)	Shri A.K.Pathak, ED(Plg.) <a href="mailto:edplg@aai.aero">edplg@aai.aero</a> 91-11-24654084

Project Name	Construction of New Integrated Terminal Building
Project Location	Guwahati Airport
Project Type	Integrated Terminal Building
Concerned Agency	Airport Authority India (AAI)
Mode of Implementation	Calling of Tender
Project Cost(in USD Million)	143 Million
Project Status A. Current Status B. Anticipated Project Timelines	Detailed planning and design - PIB Approval required. Year 2020-21
Mode of Funding and Funding Agency	Internal Resources
Contact Information (Name, Email, Telephone)	Shri A.K.Pathak, ED(Plg.) <a href="mailto:edplg@aai.aero">edplg@aai.aero</a> 91-11-24654084

Project Name	Development of Agatti Airport.
Project Location	Agatti Airport
Project Type	Extn. Of Runway, Terminal Building, Apron for 2 Nos. ATR-72 type of Aircraft, 2 Nos. Helicopter Bays, ATC Tower cum Technical Block, Fire Station, etc.
Concerned Agency	Airport Authority India (AAI)
Mode of Implementation	Calling of Tender
Project Cost(in USD Million)	225 Million
Project Status C. Current Status D. Anticipated Project Timelines	Detailed planning and design - PIB Approval required. Year 2020-21
Mode of Funding and Funding Agency	Internal Resources
Contact Information (Name, Email, Telephone)	Shri A.K.Pathak, ED(Plg.) <a href="mailto:edplg@aai.aero">edplg@aai.aero</a> 91-11-24654084

Project Name	Construction of New Integrated Terminal Building
Project Location	Lucknow Airport
Project Type	Integrated Terminal Building
Concerned Agency	Airport Authority India (AAI)
Mode of Implementation	Calling of Tender
Project Cost(in USD Million)	154 Million
Project Status E. Current Status F. Anticipated Project Timelines	Detailed planning and design - PIB Approval required. Year 2020-21
Mode of Funding and Funding Agency	Internal Resources
Contact Information (Name, Email, Telephone)	Shri A.K.Pathak, ED(Plg.) <a href="mailto:edplg@aai.aero">edplg@aai.aero</a> 91-11-24654084

Project Name	Construction of New Integrated Terminal Building
Project Location	Jaipur International Airport
Project Type	Integrated Terminal Building
Concerned Agency	Airport Authority India (AAI)
Mode of Implementation	Calling of Tender
Project Cost(in USD Million)	154 Million US Dollar
Project Status A. Current Status B. Anticipated Project Timelines	Detailed planning and design - PIB Approval required. Year 2020-21
Mode of Funding and Funding Agency	Internal Resources
Contact Information (Name, Email, Telephone)	Shri A.K.Pathak, ED(Plg.) <a href="mailto:edplg@aai.aero">edplg@aai.aero</a> 91-11-24654084



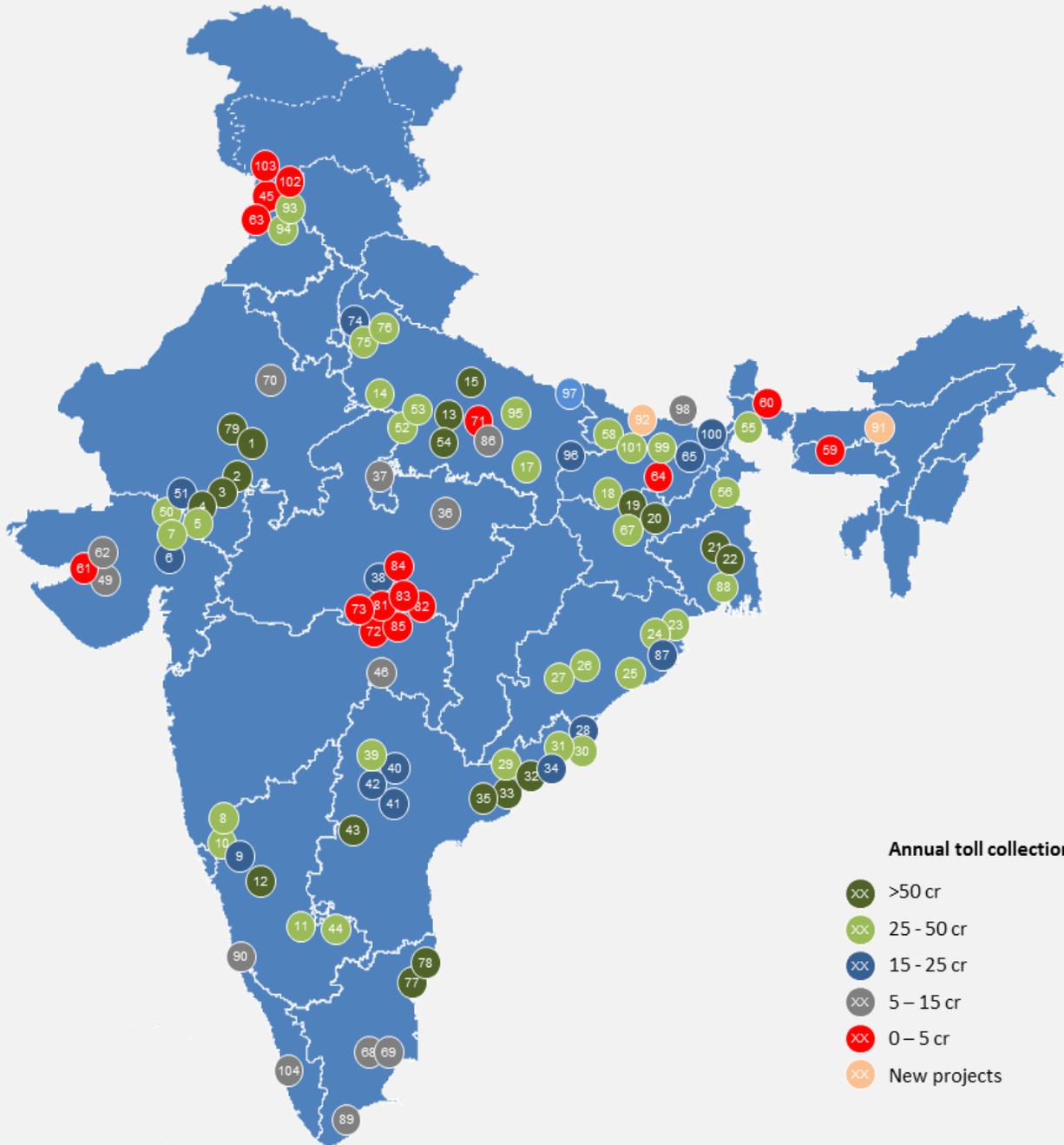
# HIGHWAYS

## Highways

Project Name	Delhi Jaipur Expressway
Project Location	Delhi Rajasthan
Concerned Agency	National Highways Authority of India
Mode of Implementation	PPP/EPC
Project Cost (in USD Million)	1500
Project Status <b>A. Current Status</b> <b>B. Anticipated Project Timelines</b>	Preconstruction activities in progress
Mode of Funding and funding Agency	PPP/EPC
Contact Information (Name, Email, Telephone)	Sh. Shashank Kumar, General Manager (Expressway)  Phone - 91-11-25074100; Extn. -1365  kumarshashank@nhai.org
Project Details	Delhi-Jaipur Expressway (a Greenfield project) takes off in North-West direction from km 20 of NH-8 (existing Delhi-Jaipur National Highway) (South of New Delhi, Indira Gandhi International Airport) near Shiv Murthy and ending at km 242 NH-8 on Jaipur bypass near Daulatpura.

Project Name	Monetization of National Highways (TOT Mode)
Project Location	77 Projects on National Highways
Concerned Agency	National Highways Authority of India
Mode of Implementation	TOT Model
Project Cost (in USD Million)	5000 Million
Project Status A. Current Status B. Anticipated Project Timelines	77 Projects  2016-2017
Project Cost	NIL  TOT model of monetization
Mode of Funding and funding Agency	Investment funds
Contact Information (Name, Email, Telephone)	Ms. Nivedita Srivastava, CGM (Fin)  Phone 91-11-25074100-Extn. No. 1309  Email id: <a href="mailto:niveditasrivastava@nhai.org">niveditasrivastava@nhai.org</a>
Project Details	Bundled packages of National Highway length approx. 5000km in operation phase.
Refer map below for detailed spots of these 77 ToT projects.	

**TOT projects**



<b>Project Name</b>	<b>Length in KMs</b>	<b>Toll collection/Project completion cost</b>
Kishangarh-Bhilwara	101.000	43%
Bhilwara-Chittorgarh	82.900	43%
Kherwara-Ratanpur	40.180	35%
Ankapalli -Vishakhapatnam	40.707	33%
Tambaram- Tindivaram (Annuity)	46.500	30%
Udaipur-Kherwara	70.000	28%
Tambaram- Tindivaram (Annuity)	46.500	25%
Chittorgarh Bypass	29.600	24%
Rithola-Udaipur (Auctioned)	99.170	23%
Himmatnagar-Chiloda	52.000	21%
Garamore - Samakhiyali	52.497	20%
Purnea-Dalkhola	62.140	19%
Sunakhala - Puintola	57.600	17%
Srikakulam - Chilakpalem	48.000	16%
Tundla-Makhanpur	50.873	16%
Visakhapatnam-Champawati	46.340	15%
Ichchapuram-Puintola	57.454	15%
Rajamundry-Tuni (Annuity)	84.400	15%
Jalandhar-Pathankot	59.600	15%
Handia-Rajatalab	72.389	15%
Nadigama- Ichchapuram	63.000	14%
Garhmukteshwar-Moradabad	56.250	14%
Orai-Bara	66.813	13%
Ratanpur-Himatnagar	54.820	13%
Gorhar - Barwa Adda	78.750	13%
Bommuru- Gondugolanu	107.611	13%
Hapur - Garhmuketeshwar	35.000	13%
Budbud-Pulsit	67.750	13%
Fatehpur - Khokharaj	58.000	12%
Ghaziabad-Hapur & Hapur Bypass	32.245	12%
Aurangabad - Barachatti	60.000	11%
Chetia-Bhadrak	74.500	11%
Gabbur - Devegiri	64.000	11%
Palsit-Dankuni*	63.749	11%
Chakeri - Usrania (Thariwan)	81.210	11%
Hadadi - Devgiri	80.00	10%
Ichchapuram-Srikakulam	66.150	10%
Abu road - Pindwara	31.000	10%
Palanpur/ Khemana - Aburoad	45.000	10%
Sunakhala - Bhubaneshwar	76.665	10%
Barachatti - Gorahar	80.000	10%
Bhadrak - Balasore	62.641	10%
Doddasiddanahally - Hadadi	71.00	10%
Gorakhpur-Kasia	41.00	10%

Project Name	Bangalore-Chennai Expressway
Project Location	Karnataka
Concerned Agency	National Highways Authority of India
Mode of Implementation	PPP/EPC
Project Cost (in USD Million)	1000 Million
Project Status A. Current Status B. Anticipated Project Timelines	The alignment passes within 10km of notified Wild Life Boundary. NOC from Standing Committee pre-construction activities of National Wild Life Board is required. (under process with CCF)
Mode of Funding and funding Agency	PPP/EPC
Contact Information (Name, Email, Telephone)	Mr. Shashank Kumar, General Manager (Expressway) Phone. – 91-11-25074100; Extn. -1365 kumarshashank@nhai.org
Project Details	Bangalore-Chennai Expressway is a green field alignment and will be operated with a closed toll system. The Project is at Feasibility-cum-Preliminary Design Report Stage. There are two existing road connecting Bangalore-Chennai. One is via Hoskote (Bangalore) Hosur (Tamil Nadu) then to Chennai (nearly 350 km). The alignment of proposed expressway is passing in between these two stretches. In another word, it is roughly parallel to both the stretch length of Expressway is 262 km but Bangalore to Chennai distance would be 319 km (262+57km)

Project Name	Vadodra-Mumbai Expressway Phase II
Project Location	Maharashtra
Concerned Agency	National Highways Authority of India
Mode of Implementation	PPP/EPC
Project Cost (in USD Million)	1600 Million
Project Status	Preconstruction activities in progress
Mode of Funding and funding Agency	PPP or EPC
Contact Information (Name, Email, Telephone)	Sh. Shashank Kumar, General Manager (Expressway) Phone. 91-11-25074100; Extn. -1365 kumarshashank@nhai.org
Project Details	<p>The expressway will link Ahmedabad Vadodra Expressway to Mumbai Pune Expressway thus providing Expressway connectivity from Ahmedabad to Pune for a length of about 650km.</p> <p>Km 26.320 to km 140.700 (Virar to Talasari)</p> <p>Km 0.000 to km 94.390 (Spur to JNPT NH-4B)</p> <ul style="list-style-type: none"> <li>i) Main Alignment – km 26.32 to km 35.00=8.68km</li> <li>ii) Spur Alignment km 0.00 to km 15.00=15 km</li> <li>iii) Km 90.00 to km 94.290=4.290km (Karnala Bird Sanctuary)</li> <li>iv) Total length=8.68km + 15.00 km +4.290 km = 27.97 km</li> </ul>

<b>Project Name</b>	Vadodra-Mumbai Expressway Phase II Part B
<b>Project Location</b>	Gujarat, Dadar & Nagar Haveli, Maharashtra
<b>Concerned Agency</b>	National Highways Authority of India
<b>Mode of Implementation</b>	BOT/EPC
<b>Project Cost (in USD Million)</b>	1600 Million
<b>Project Status</b>	Preconstruction activities in progress
<b>Mode of Funding and funding Agency</b>	PPP or EPC
<b>Contact Information (Name, Email, Telephone)</b>	Sh. Shashank Kumar, General Manager (Expressway) Phone – 91-11-25074100; Extn. -1365 kumarshashank@nhai.org
<b>Project Details</b>	The expressway will link Ahmedabad Vadodra Expressway to Mumbai Pune Expressway thus providing Expressway connectivity from Ahmedabad to Pune for a length of about 650km.  (Talasari to Kim) km 104.700 to km 254.430  Km 104.700 to km 254.430 (149.73 km)

<b>Project Name</b>	Vadodra-Mumbai Expressway Phase I Part A (Kim to Vadodra)
<b>Project Location</b>	Gujarat
<b>Concerned Agency</b>	National Highways Authority of India
<b>Mode of Implementation</b>	BOT/EPC
<b>Project Cost (in USD Million)</b>	700 Million
<b>Project Status</b> <b>A. Current Status</b> <b>B. Anticipated Project Timelines</b>	MoEF Clearance & CRZ Clearance accorded on 23.12.2015  Forest Clearance (Part A-21.388 ha, Part B-75.013 ha)  Main Expressway-km 104+700 to km 378+722 (260.4 km in Gujarat; 5/5 km in DNH & 8.1 km in Maharashtra) Total Length- 274.022  3 Nos. GAD approved
<b>Mode of Funding and funding Agency</b>	PPP or EPC
<b>Contact Information (Name, Email, Telephone)</b>	Sh. Shashank Kumar, General Manager (Expressway)  Phone. 91-11-25074100; Extn. -1365  kumarshashank@nhai.org
<b>Project Details</b>	The expressway will link Ahmedabad Vadodra Expressway to Mumbai Pune Expressway thus providing Expressway connectivity from Ahmedabad to Pune for a length of about 650km.  Km 254.43 to Km 378.72 (124.29 km length)

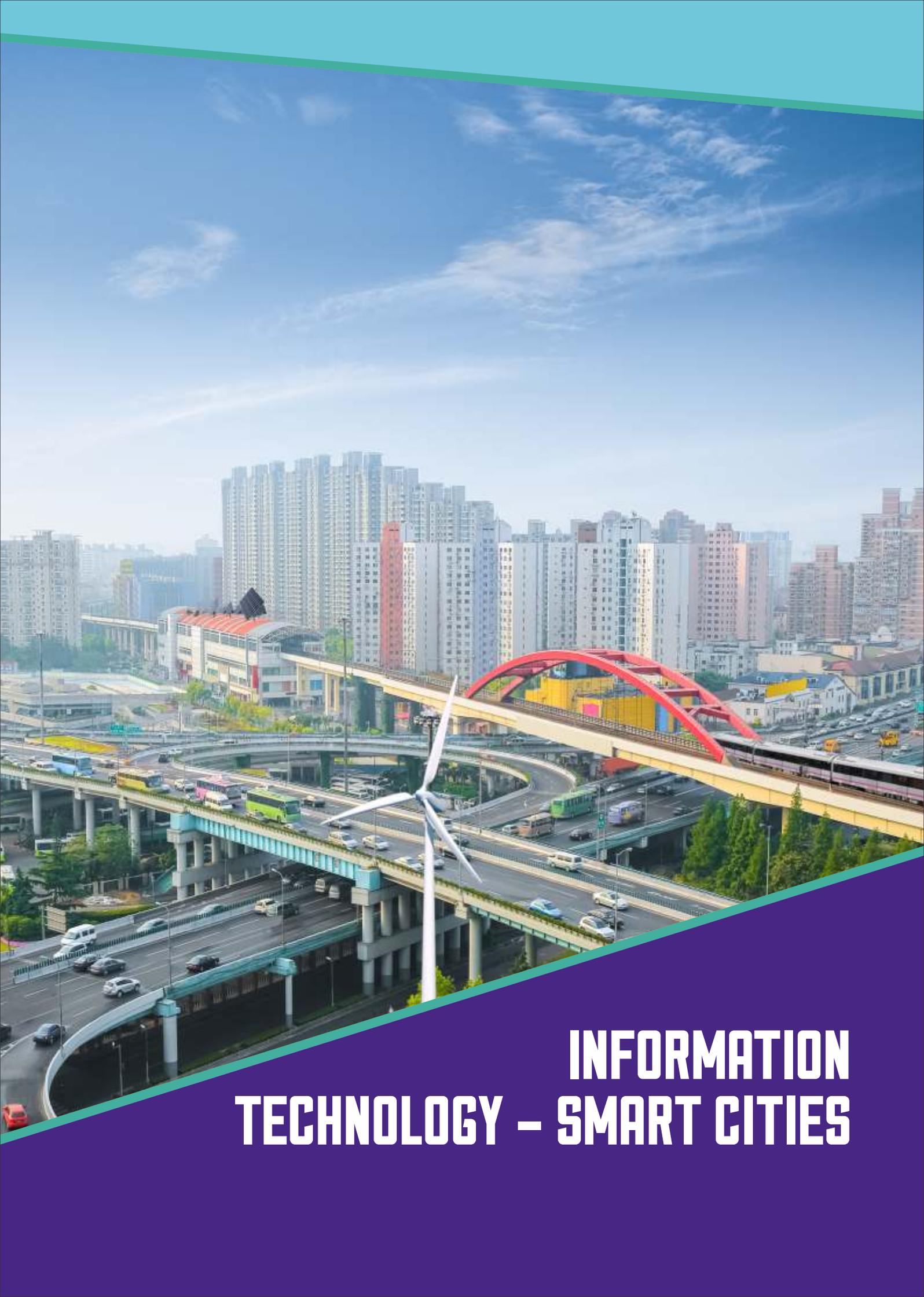
<b>Project Name</b>	Baleshwar – Chandikhole
<b>Project location</b>	Baleshwar district to Jajpur district, Orissa 
<b>Project Type</b>	Construction of National Highway (6-laning)
<b>Concerned Agency</b>	National Highway Authority of India (NHAI)
<b>Mode of Implementation</b>	Build Operate Transfer (BOT) - Toll
<b>Project Cost (in USD mn)</b>	325 Million
<b>Project Status</b> A. Current Status B. Anticipated Project Timelines	A. The project has been approved by Cabinet Committee of Economic Affairs; expected to be awarded in FY2016-17 B. Project expected to get completed in ~3 years; Concession period to last ~20 years after completion
<b>Contact Information</b>	Sh. Raghav Chandra, Chairman, NHAI Contact #: 91-11-25093503/1601 (Ext)
<b>Project Details</b>	Length: 138 kms Lanes: 6-lane Other details: Land valuation completed for 100% of land

<b>Project Name</b>	Dharwad - Chitradurga
<b>Project location</b>	Dharwad district to Chitradurga district, Karnataka 
<b>Project Type</b>	Construction of National Highway (6-laning)
<b>Concerned Agency</b>	National Highway Authority of India (NHAI)
<b>Mode of Implementation</b>	Build Operate Transfer (BOT) - Toll
<b>Project Cost (in USD mn)</b>	400 Million
<b>Project Status</b> <b>A. Current Status</b> <b>B. Anticipated Project Timelines</b>	A. The project is expected to be awarded in FY2016-17 B. Project expected to get completed in ~3 years; Concession period to last ~20 years after completion
<b>Contact Information</b>	Sh. Raghav Chandra, Chairman, NHAI Contact #: 91-11-25093503/1601 (Ext)
<b>Project Details</b>	Length: 246 kms Lanes: 6-lane Other details: Land valuation completed for 100% of land

<b>Project Name</b>	Delhi – Meerut Expressway
<b>Project location</b>	Delhi to Meerut district, Uttar Pradesh 
<b>Project Type</b>	Construction of Expressway (6/8-laning)
<b>Concerned Agency</b>	National Highway Authority of India (NHAI)
<b>Mode of Implementation</b>	Hybrid Annuity mode
<b>Project Cost (in USD mn)</b>	>400 Million
<b>Project Status</b> <b>A. Current Status</b> <b>B. Anticipated Project Timelines</b>	A. Bids have been received in Dec-15 for 2 out of 4 sections; All sections expected to be awarded in FY2016-17 B. Project expected to get completed in ~3 years; Concession period to last ~20 years after completion
<b>Contact Information</b>	Sh. Raghav Chandra, Chairman, NHAI Contact #: 91-11-25093503/1601 (Ext)
<b>Project Details</b>	Length: 96.4 kms Lanes: 4-lane for 27.5 kms stretch Other details: Includes new alignment on ~46 kms stretch, 6-laning on ~22 kms stretch

<b>Project Name</b>	Vodadara – Mumbai Expressway
<b>Project location</b>	 <p>Vadodara district, Gujarat to Raigarh (Mumbai) district, Maharashtra</p>
<b>Project Type</b>	<p>Construction of National Highway (6/8-laning in three phases)</p> <p>(a) Vadodara to Kim (near Surat) – 124.292 Km.  (b) Kim to Talasari (near Guj/MH Border) – 149.730 Km.  (c) Talasari to Mumbai &amp; JNPT Spur - 172.770 Km.</p>
<b>Concerned Agency</b>	National Highway Authority of India (NHAI)
<b>Mode of Implementation</b>	Build Operate Transfer (BOT) - Toll
<b>Project Cost (in USD mn)</b>	3850 Million
<b>Project Status</b> <b>A. Current Status</b> <b>B. Anticipated Project Timelines</b>	<p><b>A.</b> The three phases of this project are expected to be awarded in FY2016-17</p> <p><b>B.</b> Project expected to get completed in ~3 years; Concession period to last ~20 years after completion</p>
<b>Contact Information</b>	<p>Sh. Raghav Chandra, Chairman, NHAI</p> <p>Contact #: 91-11-25093503/1601 (Ext)</p>
<b>Project Details</b>	<p>Length: 450 kms  Lanes: 6/8-lane  Other details: Current estimated traffic in Bharuch – Surat stretch is 60,000 – 70,000 Daily Passenger Car Units (PCUs)</p>

<b>Project Name</b>	Aunta – Simaria (including Bridge on River Ganga at Mokama)
<b>Project location</b>	Patna district to Begusarai District, Bihar 
<b>Project Type</b>	Construction of National Highway (4-laning) including 6-lane Ganga Bridge
<b>Concerned Agency</b>	National Highway Authority of India (NHAI)
<b>Mode of Implementation</b>	Hybrid Annuity
<b>Project Cost (in USD mn)</b>	200 Million
<b>Project Status</b> <b>A. Current Status</b> <b>B. Anticipated Project Timelines</b>	A. The project is expected to be awarded in FY2016-17 B. Project expected to get completed in ~3 years; Concession period to last ~15 years after completion
<b>Contact Information</b>	Sh. Raghav Chandra, Chairman, NHAI Contact #: 91-11-25093503/1601 (Ext)
<b>Project Details</b>	Length: 8.150 kms Lanes: 4/6-lane Other details: Land valuation almost completed



# INFORMATION TECHNOLOGY – SMART CITIES

## IT Projects – Smart Cities

IT Project Type	Smart Cities Identified
ITS / ITS for traffic and bus management / Smart Signaling	Jaipur, Kochi, Ahmedabad, Jabalpur, Visakhapatnam, Solapur, Davanagere, Indore, Belagavi, Chennai, Bhopal
Seamless wifi connectivity / Wifi Hotspots	Pune, Jaipur, Kochi, Ahmedabad, Indore, Coimbatore, Udaipur, Guwahati, Bhopal
Travel Card for city travel	Pune, Jaipur, Ahmedabad
Citizen App (grievance redressal, citizen reporting)	Pune, Jaipur, Surat
e-Buses	Pune, Visakhapatnam
GIS based property and land management system	Pune, Jaipur
Air Quality monitoring App / AQM	Jaipur, Surat
Integration of mobility card for monument entry payments	Jaipur
Heritage app	Jaipur

IT Project Type	Smart Cities Identified
Smart IPT Stands and App	Jaipur
Implement E-patashala / digital learning in 24 schools	Kakinada
Smart bus shelters with e-toilets	Kakinada
Mobile App for Tourism	Udaipur
Hydrological Information system for flood forecasting	Guwahati
Integrated GIS based utilities management	Chennai

## PAN City Proposal – Components Inventory

S.no	Component	Cities	Count
1	<b>Centralised command and control centre</b>	Bhubaneswar, Surat, Kochi, Ahmedabad, Jabalpur, Visakhapatnam, Bhopal, Davanagere, Indore, Coimbatore, Belagavi, Udaipur, Ludhiana,	13
2	<b>Transit operations system (maintenance and tracking)</b>	Bhubaneswar, Pune, Jaipur, Ahmedabad, Indore, Solapur, Davanagere, Indore, Kakinada, Udaipur, Guwahati	10
3	<b>Smart parking system</b>	Bhubaneswar, Pune, Jaipur, Davanagere, Indore, Coimbatore, Kakinada, Udaipur, Guwahati, Chennai, Bhopal	11
4	<b>Common card (payment and operations)</b>	Bhubaneswar, Jaipur, Surat, Ahmedabad, Indore, Udaipur, Guwahati	7
5	<b>Area based traffic control</b>	Bhubaneswar, Pune, Ahmedabad, Davanagere, Indore, Coimbatore, Kakinada	7
6	<b>Leak identification system (SCADA/ and AMR)</b>	Pune, Ahmedabad, Solapur, NDMC, Kakinada, Udaipur	6
7	<b>Platform for citizen engagement and all citizen services; city dash board</b>	Kochi, Visakhapatnam, Solapur, Davanagere, Indore, Bhopal	6
8	<b>Traffic mobile app</b>	Pune, Jaipur, Ahmedabad, Indore, Guwahati	5
9	<b>Smart metering (water)</b>	Pune, Kochi, Vizag, Solapur, NDMC, Coimbatore, Belagavi, Udaipur	8
10	<b>CCTV surveillance</b>	Pune, Ahmedabad, Devangere, Indore, Coimbatore, Guwahati, Bhopal	7
11	<b>Emergency response</b>	Bhubaneswar, Surat, Ahmedabad, Visakhapatnam, Coimbatore, Udaipur	6
12	<b>Public Information system</b>	Pune, Ahmedabad, Davanagere, Indore,	4

13	<b>Public transit and traffic operations and management centre</b>	Jaipur, Surat, Ahmedabad, Devangere, Vizag, Indore, Belagavi, Udaipur	8
14	<b>GPS tracking and optimisation of routes of garbage trucks</b>	Jaipur, Jabalpur, Indore, Kakinada	4
15	<b>Wifi- IT connectivity</b>	Pune, Surat, Kochi, Coimbatore, Belagavi, Guwahati	6
16	<b>NMT infrastructure</b>	Devanagere, Belagavi, Udaipur, Guwahati, Chennai, Bhopal	6
17	<b>LED street lighting</b>	Coimbatore, Guwahati, Chennai, Bhopal	4
18	<b>Traffic analysis or roads and video surveillance inside bus using CCTV surveillance</b>	Pune, Indore, Kakinada	3
19	<b>Mobile app based SWM and cleanliness monitoring</b>	Jaipur, Jabalpur, Indore	3
20	<b>Fleet management system</b>	Jaipur, Ahmedabad, Indore,	3
21	<b>Automatic fare collection system (transport)</b>	Bhubaneshwar, Jaipur, Surat, Ahmedabad, Indore,	5
22	<b>Variable message sign boards</b>	Ahmedabad, Indore, Bhopal	3
23	<b>Optical fibre enabled communication</b>	Ahmedabad, Indore, Bhopal	3
24	<b>Pedestrian infra</b>	Belgavi, Udaipur, Guwahati	3
25	<b>Smart bulk metering at WTPs</b>	Pune, Surat, Kochi	3
26	<b>24x 7 water supply</b>	Pune, NDMC, Belagavi	3
27	<b>Grievance redressal through web, app and phone</b>	Pune, Vizag, Kakinada, Chennai, Bhopal	5
28	<b>SWM operations and management centre/ system</b>	Jaipur, Jabalpur, Indore, Belagavi	4
29	<b>Smart card for all service payments</b>	Surat, Ahmedabad, Kochi, Indore,	4
30	<b>Smart Bus stops</b>	Pune, Jaipur, Devanagere, Belagavi	4
31	<b>Smart meters for electricity</b>	NDMC, Udaipur	2
32	<b>Solar power capacity implementation</b>	NDMC, Belagavi, Guwahati	3

33	<b>e-healthcare</b>	Vizag, NDMC, Coimbatore, Kakinada	4
34	<b>Air quality monitoring sensors</b>	NDMC , Coimbatore, Bhopal	3
35	<b>City buses</b>	Bhubaneshwar, Pune, Devangere, Udaipur, Guwahati	5
36	<b>Hydraulic information system/ flood monitoring</b>	Guwahati, Chennai	2
37	<b>In-bus information system and wifi</b>	Pune	1
38	<b>Private bus aggregator</b>	Pune	1
39	<b>Intelligent road asset management</b>	Pune	1
40	<b>Give up “water subsidy” campaign</b>	Pune	1
41	<b>ICT enabled billing and recovery department</b>	Pune, Surat	2
42	<b>e-challans for traffic violations</b>	Bhubneshwar, Pune	2
43	<b>ICT and social media based 2 way communication with citizens</b>	Jaipur	1
44	<b>ERP with GIS platform for corporation</b>	Surat	1
45	<b>Ticket vending machines and value machines</b>	Ahmedabad	1
46	<b>Water accounting at community level</b>	Ahmedabad	1
47	<b>RFID tags for SWM</b>	Jabalpur, Coimbatore, Bhopal	3
48	<b>Street sweeping and dusting machines</b>	Jabalpur	1
49	<b>Capacity building of staff</b>	Jabalpur, Ludhiana	2
50	<b>Institutionalizing SLB</b>	Solapur	1
51	<b>Mapping of utilities</b>	Solapur	1
52	<b>Data analytics centre</b>	Solapur, Coimbatore, Bhopal	3
53	<b>Intelligent solar powered lights</b>	Devanagere, Belgavi	2
54	<b>Bicycle pods with PIS</b>	Devanagere	1

55	<b>Smart paving (capture energy from movement)</b>	Devanagere	1
56	<b>One website, app and call centre</b>	Devanagere	1
57	<b>Pedestrian and bicycle activated signals</b>	Indore	1
58	<b>Supervision of waste processing facility</b>	Indore	1
59	<b>Smart grid and energy management</b>	NDMC	1
60	<b>Mini STP</b>	NDMC	1
61	<b>Rainwater harvesting</b>	NDMC	1
62	<b>Smart classrooms</b>	NDMC	1
63	<b>Virtual hospital</b>	NDMC	1
64	<b>Weighing machines with RFIS/ NFC</b>	Kakinada	1
65	<b>GPS for geofencing garbage bins</b>	Indore, Coimbatore, Kakinada	3
66	<b>Handheld biometric system</b>	Coimbatore, Kakinada	2
67	<b>Kiosks (for urban services and grievance)</b>	Kochi, Devangere, Kakinada, Ludhiana	4
68	<b>Junction improvement</b>	Belgavi	1
69	<b>Para-transit facility</b>	Belgavi	1
70	<b>Bus terminal</b>	Belgavi	1
71	<b>Cleaner fuels</b>	Belgavi	1
72	<b>Solar panels on bus top roof</b>	Guwahati	1
73	<b>Tourism mobile app</b>	Guwahati	1
74	<b>Bus bays</b>	Guwahati	1
75	<b>Cycle sharing</b>	Devangere, Chennai	2

76	Parking management (pricing)	<b>Chennai</b>	<b>1</b>
77	<b>Online system of water connections</b>	Chennai	1
78	<b>Smart E- Rickshaw with charging station</b>	Ludhiana	1
79	<b>GIS enabled revenue collection (land)</b>	Ludhiana	1
80	<b>Water level sensors</b>	Kakinada, Guwahati, Chennai, Bhopal	4
81	<b>Intelligent shopping apps</b>	Bhopal	1



# PETROLEUM & NATURAL GAS

## Petroleum and Natural Gas

Project Name	Ennore LNG Project
Sector	Oil & Gas
Developer/Company	Indian Oil LNG Pvt. Ltd.,- Joint Venture Company (JVC) promoted by Indian Oil Corporation Ltd.
Project Location	Ennore (Near Chennai), Tamil Nadu
Physical Parameters	
a. Project Capacity	5 MMTPA (with a provision to expand up to 10 MMTPA)
b. Scheduled completion date	2018
c. Present Status	Construction works recently started
d. Project tie-ups including implementation methodology, raw material tie-ups, off-take arrangements, approvals & Clearances etc	<p>The project is being implemented by a private JVC promoted by IndianOil in the name of IndianOil LNG Pvt. Ltd. Tamil Nadu Industrial Development Corporation Ltd. (TIDCO) would join JVC after taking approval from Govt. of Tamil Nadu.</p> <p>The project is being executed through three major Engineering, Procurement, Construction &amp; Commissioning (EPCC) Contracts viz. LNG Storage Tanks, Regasification Facilities and Marine Facilities.</p> <p>The project has been accorded Environmental &amp; CRZ Clearance by Ministry of Environment &amp; Forests, New Delhi on 10.02.2014. Also, In-principle approval has been obtained from PESO for the Terminal.</p>

e. Delay vis-à-vis original schedule	Nil
f. Reasons for delay	N.A.
<i>(i) State Govt. related</i>	
<i>(ii) Central Govt. related</i>	
<i>(iii) Financial related</i>	
<i>(iv) Others</i>	
Financial Parameters	
a. Project Cost (INR Billion)	Rs. 51.51 Billion ; As per Initial Financial appraisal
b. Expenditure Incurred & Means of Finance (INR Billion)	Rs. 1.75 Billion as on 31.12.2015. The funding of the project is being arranged through short-term loans from IndianOil and subscription of Compulsory Convertible Debentures (CCDs) by Financial institutions. Further, funding for the project is being arranged through Debt and Equity.
c. Funds required for project completion	The funding to the project is being met through subscription of Compulsorily Convertible Debentures (CCDs) by Financial Institution & IndianOil for first two years. In the meantime, the JVC would rope in Equity/ Strategic Partners to complete the financial closure.
d. Amount & Reasons of overrun (if any)	N.A.
e. Amount of funding available	
<i>(i) Debt</i>	Approx. Rs. 3434 crore ; As per initial financial appraisal.

<i>(ii) Equity</i>	Approx. Rs. 1717 crore (As per initial financial appraisal), where in IndianOil would remain lead partner).
Amount of Investment Required (INR Billion)	Approx. Rs. 85.85 Billion ; Equity Investment from IndianOil
Investment Rationale	<p>This project would meet the clean fuel requirement of southern states of India, particularly Tamil Nadu and some parts of Karnataka &amp; Andhra Pradesh. It would spur industrial growth and overall development of the area.</p> <p>The project will provide Re-gasified Natural Gas (RLNG) as a fuel and feedstock to the various existing &amp; upcoming industries such as power plants, fertilizer plants, refineries, petro-chemical plants, ceramic, glass, etc. through pipeline network and also make available RLNG for City Gas Distribution as a CNG in transport sector, for cooking in houses and Commercial sector etc.</p>

Project Name	Integrated Refinery Expansion Project at Kochi Refinery (IREP)
Sector	Petroleum
Developer/Company	BPCL
Project Location	Kochi, Kerala
Physical Parameters	
a. Project Capacity	Expansion of refining capacity from 9.5 MMTPA to 15.5 MMTPA alongwith associated facilities such as DCU, Petro FCCU,VGO,HDT,DHDT, SRU, TGT, NHT/ISOM (revamp), HGU.
b. Scheduled completion date	May 2016 (Mechanical completion)
c. Present Status	2062/2000 equipment reced,1486 erected on foundations. Stack module erection completed for Heater A in DCU.3 <sup>rd</sup> section of C3 stripper erected at FCCU. Physical Progress: Actual 91.55%; Scheduled 93.50%.
d. Project tie-ups including implementation methodology, raw material tie-ups, off-take arrangements, approvals & Clearances etc	<ul style="list-style-type: none"> <li>• Tie ups <ul style="list-style-type: none"> <li>○ Tie up are made with international Process Licensors like, Shell, UOP, Lummus, Halder Topsoe, Stone &amp; Webster, EIL etc. for the Technology</li> <li>○ Project management consultancy is tied with M/s EIL</li> <li>○ Project execution is tied up with more than about 50 major contractors</li> </ul> </li> <li>• Raw material tie-ups, off-take arrangements, <ul style="list-style-type: none"> <li>○ Construction raw material tie ups are in the contractors scope</li> <li>○ Crude Oil is the main raw material. Crude tie ups and off take arrangements of the products will be carried out in the same</li> </ul> </li> </ul>

	channels as are being done for the existing units All main approvals and clearances from MoEF, State PCB, local bodies etc. have been obtained.
e. Delay vis-à-vis original schedule	On schedule
f. Reasons for delay	
<i>i. State Govt. related</i>	
<i>ii. Central Govt. related</i>	
<i>(iii) Financial related</i>	
<i>(iv) Others</i>	
<b>Financial Parameters</b>	
a. Project Cost (INR Billion)	Rs.165.04
b. Expenditure Incurred & Means of Finance	Exp. till Dec.`15 Rs.9397.86crores USD Bond 2012 – 1644.61, OIBD – 1333.00, USD Bond 2015 – 2880.44
c. Funds required for project completion	Rs.165.04 Billion
d. Amount & Reasons of overrun (if any)	
e. Amount of funding available	
<i>i. Debt</i>	2:1
<i>ii. Equity</i>	
Amount of Investment Required	Rs.47.37 Billion
Investment Rationale	Approved Project for Capacity Expansion

Project Name	Propylene Derivatives Petrochemical Project (PDPP) at Kochi Refinery
Sector	Petroleum
Developer/Company	BPCL
Project Location	Kochi, Kerala
Physical Parameters	
a. Project Capacity	Production of niche petrochemicals (Acrylic Acid, Oxo Alcohols & Acrylates) utilizing Polymer Grade Propylene produced from the Petro FCCU of IREP.
b. Scheduled completion date	May 2018 (Mechanical completion)
c. Present Status	EC received pm 12.5.2015. BDEP preparation in progress. Steam power integration study in advance stage. Site grading in progress. Fin. Progress: Actual 3.81%
d. Project tie-ups including implementation methodology, raw material tie-ups, off-take arrangements, approvals & Clearances etc	<ul style="list-style-type: none"> <li>• Tie ups <ul style="list-style-type: none"> <li>○ Tie up are made with international Process Licensors like, Air liquid, JM Davey, Mitsubishi etc. for the Technology</li> <li>○ Project management consultancy is tied up with M/s EIL</li> <li>○ Project execution is being awarded to Contractors</li> </ul> </li> <li>• Raw material tie-ups, off-take arrangements, <ul style="list-style-type: none"> <li>○ Construction raw material tie ups are in the contractors scope</li> <li>○ Propylene is the main raw material, which will be sourced from the IREP- FCC unit. Product marketing will be done through BPCL- Industrial &amp; Commercial marketing team.</li> </ul> </li> </ul>

	Clearances from MoEF are obtained. Applications for Approvals and clearances from State PCB, local bodies etc. are submitted and are being closely followed up
e. Delay vis-à-vis original schedule	On Schedule
f. Reasons for delay	
<i>i. State Govt. related</i>	
<i>ii. Central Govt. related</i>	
<i>iii. Financial related</i>	
<i>iv. Others</i>	
<b>Financial Parameters</b>	
a. Project Cost (INR Billion)	Rs.45.89 Billion
b. Expenditure Incurred & Means of Finance	Exp. till Dec.`15 Rs.174.74 crores USD Bonds 2015 – 164.50
c. Funds required for project completion	Rs.45.89 Billion
d. Amount & Reasons of overrun (if any)	
e. Amount of funding available	
<i>i. Debt</i>	2:1
<i>ii. Equity</i>	
Amount of Investment Required	Rs.30.59 Billion
Investment Rationale	Approved Project for Petro chemicals

Project Name	Mumbai Refinery Expansion Project (MREP)
Sector	Oil & Gas
Developer/Company	Hindustan Petroleum Corporation Limited
Project Location	HPCL Mumbai Refinery, Mahul, Mumbai, Maharashtra
Physical Parameters	
a. Project Capacity	Maximization of Crude refining capacity (6.5 to 9.5 MTPA) and upgradation of MS / HSD to BS V quality at Mumbai Refinery & Construction of Tankage Farm in the land adjacent to Mumbai Refinery.
b. Scheduled completion date	36 months from Environmental Clearance (EC)
c. Present Status	DFR completed & BDEP is in progress. Application submitted to Maharashtra Pollution Control Board (MPCB) for conducting Public Hearing for expansion. Tankage Project awaiting Environmental Clearance from MoEF.
d. Project tie-ups including implementation methodology, raw material tie-ups, off-take arrangements, approvals & Clearances etc.	Construction of all Units and Utilities in conventional mode of execution except HGU which will be done on LEPC mode of execution.  Project has been approved by Board.  Environmental Clearance (EC) is required for starting the Project.
e. Delay vis-à-vis original schedule	Not Applicable

f. Reasons for delay	-
<i>(i) State Govt. related</i>	-
<i>(ii) Central Govt. related</i>	Environmental Clearance awaited
<i>(iii) Financial related</i>	-
<i>(iv) Others</i>	-
Financial Parameters	
a. Project Cost	Rs. 41.99 Billion.
b. Expenditure Incurred & Means of Finance	Rs. 1.3 Million (as on Dec'2015) Through debts & equity
c. Funds required for project completion	Rs.41.99 Billion.
d. Amount & Reasons of overrun (if any)	Not Applicable
e. Amount of funding available	Debt : Equity Ratio - 2:1
<i>(i) Debt</i>	Rs.27.99 Billion (to be tied up)
<i>(ii) Equity</i>	Rs.14.00 Billion
Amount of Investment Required	Rs.27.99 Billion
Investment Rationale	Maximization of Crude refining capacity ( 6.5 to 9.5 MMTPA) and upgradation of MS / HSD to BS V quality at Mumbai Refinery & Construction of Tankage Farm in the land adjacent to Mumbai Refinery.

Project Name	Visakh Refinery Modernization Project
Sector	Oil & Gas
Developer/Company	Hindustan Petroleum Corporation Limited
Project Location	Visakh Refinery, Malkapuram, Visakhapatnam, Andhra Pradesh
Physical Parameters	
a. Project Capacity	Visakh Refinery capacity expansion from 8.33 to 15 MMTPA)
b. Scheduled completion date	To be finalized subsequent to Environmental clearance and HPCL Board approval.
c. Present Status	DFR Completed. EIA/QRA study completed. Pre Project activities like licensor selection & Site clearance etc. are in progress.  Environmental clearance from GOI & HPCL Board approval to be obtained.
d. Project tie-ups including implementation methodology, raw material tie-ups, off-take arrangements, approvals & Clearances etc.	Environmental clearance awaited. (EAC meeting conducted on 17-Dec-15) and HPCL Board approval awaited.
e. Delay vis-à-vis original schedule	Not Applicable
f. Reasons for delay	-
<i>(i) State Govt. related</i>	-

<i>(ii) Central Govt. related</i>	-
<i>(iii) Financial related</i>	-
<i>(iv) Others</i>	-
Financial Parameters	
a. Project Cost (INR Billion)	Rs. 184.12 Billion
b. Expenditure Incurred & Means of Finance	Rs. 554 Million (as on Dec'2015) Through debt & equity
c. Funds required for project completion	Rs.184.12 Billion
d. Amount & Reasons of overrun (if any)	Not Applicable
e. Amount of funding available	Debt: Equity ratio - 2:1
<i>(i) Debt</i>	Rs.122.75 Billion (to be tied up)
<i>(ii) Equity</i>	Rs.61.37 Billion
Amount of Investment Required	Rs.122.75 Billion
Investment Rationale	Modernization and expansion of Visakh Refinery from the existing 8.33 MMTPA to 15 MMTPA along with fuel quality upgradation to BS-V/VI.

Project Name	Upgradation of Process Units of Refinery to meet BS VI norms for MS & HSD
Sector	Oil & Gas
Developer/Company	MRPL
Project Location	Mangalore, Karnataka
Physical Parameters	
a. Project Capacity	No change in existing capacity
b. Scheduled completion date	April 2020
c. Present Status	Configuration Study in progress.
d. Project tie-ups including implementation methodology, raw material tie-ups, off-take arrangements, approvals & Clearances etc	Being worked out.
e. Delay vis-à-vis original schedule	Not applicable, as Project yet to be approved
f. Reasons for delay	N/a, as on date.
<i>(i) State Govt. related</i>	
<i>(ii) Central Govt. related</i>	
<i>(iii) Financial related</i>	
<i>(iv) Others</i>	
Financial Parameters	

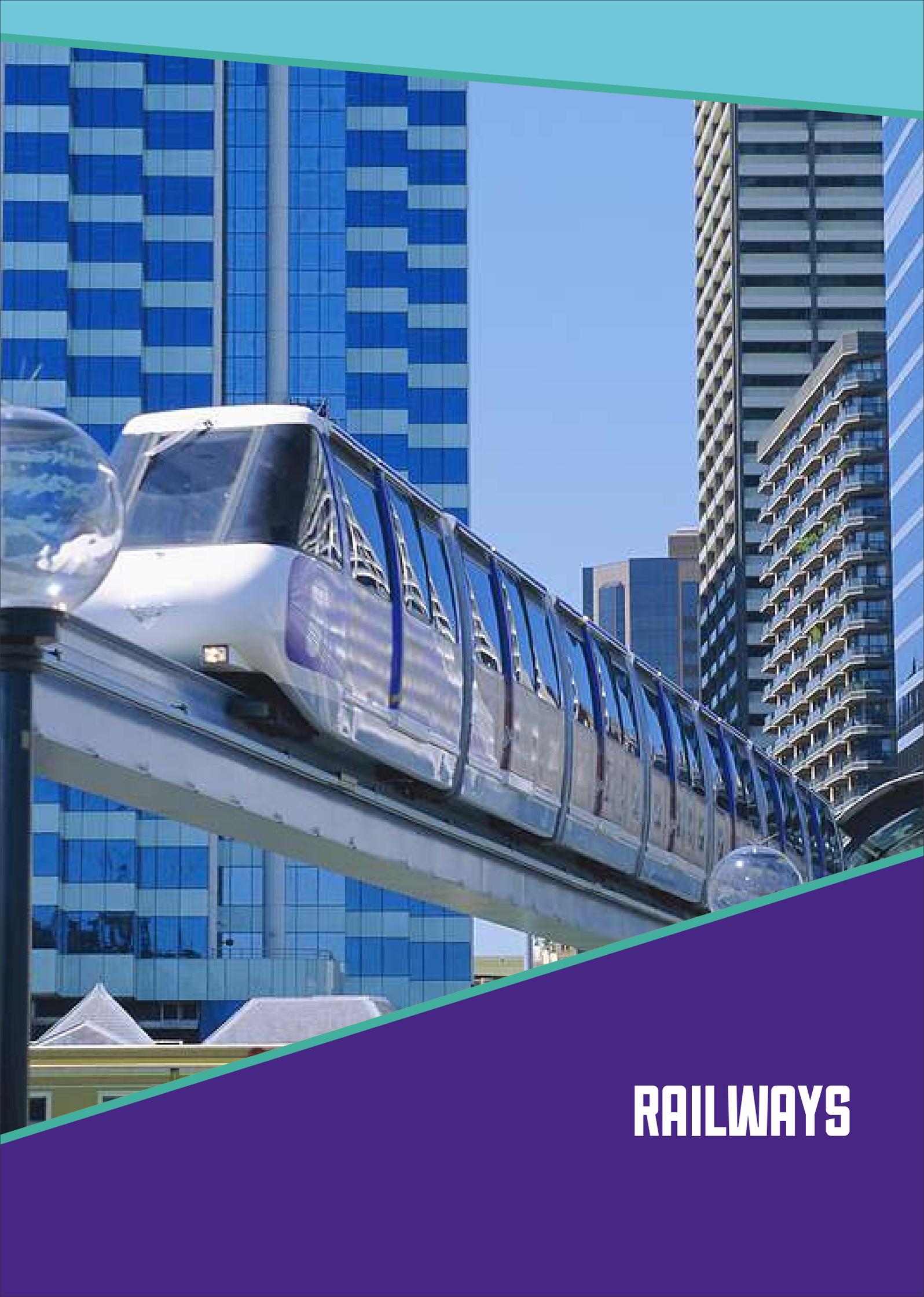
a. Project Cost (INR Billion)	Rs.45 Billion
b. Expenditure Incurred & Means of Finance	Nil
c. Funds required for project completion	Rs.45 Billion
d. Amount & Reasons of overrun (if any)	Not applicable
e. Amount of funding available	
<i>(i) Debt</i>	Rs.30 Billion
<i>(ii) Equity</i>	Rs.15 Billion
Amount of Investment Required	Rs.30 Billion
Investment Rationale	Quality up-gradation of Process Units to meet BS VI norms for MS & HSD by April 2020.

Project Name	Phulpur-Haldia Pipeline Project Phase-I
Sector	Natural Gas
Developer/Company	GAIL (India) Ltd.
Project Location	Uttar Pradesh & Bihar
Physical Parameters	
a. Project Capacity	7.44MSCMD
b. Scheduled completion date	December 2018
c. Present Status	Work is under progress
d. Project tie-ups including implementation methodology, raw material tie-ups, off-take arrangements, approvals & Clearances etc	<ol style="list-style-type: none"> <li>1. Project is being implemented in phases in-synchronization with customer tie-ups and their readiness to take gas.</li> <li>2. Linepipe partly available from other projects inventory and balance is being procured along with other line materials.</li> <li>3. Approvals &amp; clearances are partly available (around 35%) and balance permissions are being obtained.</li> </ol>
e. Delay vis-à-vis original schedule	No Delay
f. Reasons for delay	NA
(i) State Govt. related	-
(ii) Central Govt. related	-
(iii) Financial related	-
(iv) Others	-
Financial Parameters	

a. Project Cost (INR Billion)	Rs. 35.61 Billion
b. Expenditure Incurred & Means of Finance	Rs. 250 Million. Expenditure incurred till date and commitment of Rs. 5.23 Billion has been done against the Laying & construction work contracts, procurement of material etc.
c. Funds required for project completion	Rs. 35.36 Billion
d. Amount & Reasons of overrun (if any)	-
e. Amount of funding available	
(i) Debt	70% Debt
(ii) Equity	30% Equity
Amount of Investment Required	Rs. 24.92 Billion.
Investment Rationale	To cater the requirement of various industries/sectors in Fertilizer, electricity, city gas etc.

Project Name	Vijaipur- Auraiya- Phulpur Pipeline Project
Sector	Natural Gas
Developer/Company	GAIL (India) Ltd.
Project Location	Madhya Pradesh & Uttar Pradesh
Physical Parameters	
a. Project Capacity	8.9 MMSCMD
b. Scheduled completion date	36 months from 3(1) notification.
c. Present Status	Work is under progress
d. Project tie-ups including implementation methodology, raw material tie-ups, off-take arrangements, approvals & Clearances etc	<ol style="list-style-type: none"> <li>1. Project is being implemented in phases in-synchronization with customer tie-ups and their readiness to take gas.</li> <li>2. Linepipe partly available from other projects inventory and balance is being procured along with other line materials.</li> <li>3. Approvals &amp; clearances are being obtained.</li> </ol>
e. Delay vis-à-vis original schedule	No Delay
f. Reasons for delay	NA
(i) State Govt. related	-
(ii) Central Govt. related	-
(iii) Financial related	-
(iv) Others	-

Financial Parameters	
a. Project Cost (INR Billion)	Rs. 43.09 Billion
b. Expenditure Incurred & Means of Finance	Commitment of Rs. 30 Million. has been done against the pre-project activities like crossing permissions contract etc.
c. Funds required for project completion	Rs. 43.09 Billion
d. Amount & Reasons of overrun (if any)	-
e. Amount of funding available	
<i>(iii) Debt</i>	70% Debt
<i>(iv) Equity</i>	30% Equity
Amount of Investment Required	Rs. 30.16 Billion
Investment Rationale	To cater the requirement of various industries/sectors in Fertilizer, electricity, city gas etc.



**RAILWAYS**

## Railways

### Suburban Corridor Projects

Project Name	CSTM- Panvel
Kms	49
Cost (INR Billion)	140
Probable Mode of Execution	DBFOT
Bidding Parameter	Premium/ Viability Gap Funding (VGF)

### High Speed Train Projects

Project Name	Chennai- Bangalore- Mysore
Probable Mode of Execution	DBFOT/ G2G Cooperation
Bidding Parameter	Premium/ Viability Gap Funding (VGF)

### Freight Lines

Project Name	Dankuni- Gomoh
Kms	282
Cost (INR Billion)	45
Probable Mode of Execution	BOT/ Annuity
Bidding Parameter	VGF/Annual Premium

Project Name	Whitefiled- Kolar
Kms	52.9
Cost (INR Billion)	3.5
Probable Mode of Execution	BOT/ Annuity
Bidding Parameter	VGf/Annual Premium

Project Name	North-South DFC
Probable Mode of Execution	BOT/ Annuity
Bidding Parameter	VGf/Annual Premium

Project Name	Ajmer-Bangurgram
Kms	48.43
Cost (INR Billion)	1.45
Probable Mode of Execution	BOT/ Annuity
Bidding Parameter	VGf/Annual Premium

Project Name	Durg- Rajnandgaon
Kms	31
Cost (INR Billion)	1.53
Probable Mode of Execution	BOT/ Annuity
Bidding Parameter	VGf/Annual Premium

Project Name	Wardha (Sewagram)- Nagpur 3rd line
Kms	76.3
Cost (INR Billion)	2.98
Probable Mode of Execution	BOT/ Annuity
Bidding Parameter	VGf/Annual Premium

Project Name	Kazipet- Vijaywada 3rd line with electrification
Kms	219.6
Cost (INR Billion)	10.54
Probable Mode of Execution	BOT/ Annuity
Bidding Parameter	VGf/Annual Premium

Project Name	Bhadrak- Nergundi
Kms	80
Cost (Rs Crore)	8.37
Probable Mode of Execution	BOT/ Annuity
Bidding Parameter	VGf/Annual Premium

Project Name	Sambalpur- Talcher
Kms	174.1
Cost (INR Billion)	6.79
Probable Mode of Execution	BOT/ Annuity
Bidding Parameter	VGf/Annual Premium

Project Name	Manoharpur- Bondamanda 3rd line
Kms	30
Cost (INR Billion)	2.58
Probable Mode of Execution	BOT/ Annuity
Bidding Parameter	VGf/Annual Premium

Project Name	Rajkharswan- Chakradharpur 3rd line
Kms	20
Cost (INR Billion)	1.7
Probable Mode of Execution	BOT/ Annuity
Bidding Parameter	VGF/Annual Premium

### Rolling Stock

(Train sets, locomotives or coach manufacturing and maintenance facility)

Project Name	Periodic overhauling of wagons at Sonpur
Amount	180 wagons per annum
Cost (INR Billion)	4
Probable Mode of Execution	BOT/BOO/JV/Annuity
Bidding Parameter	lowest price of POH per wagon

Project Name	Midlife rehabilitation of coaches at Anara
Amount	250 coaches per annum
Cost (INR Billion)	1.85
Probable Mode of Execution	BOT/BOO/JV/Annuity
Bidding Parameter	lowest price of rehabilitation per coach

Project Name	Locomotive maintenance depots
Amount	Barauni (ECR) Daud (CR) Mughal-sarai (ECR) Bonda- munda (SER)
Cost (INR Billion)	3
Probable Mode of Execution	BOT/BOO/JV/Annuity
Bidding Parameter	lowest maintenance cost per locomotive

### Railway Electrification Projects

Project Name	Katwa-Azimganj-Nalhati & Azimganj- Tildanga/ New Farakka
Kms	200
Cost (INR Billion)	2.3
Probable Mode of Execution	BOT/Annuity
Bidding Parameter	VGF/Annual Premium

## Signaling System

Project Name	Agra-Gwalior A Route
Kms	118
Project Details	Provision of automatic signaling along with train protection system to enhance line capacity
Cost (INR Billion)	2.5
Probable Mode of Execution	BOT/Annuity
Bidding Parameter	VGF/ Annual Premium

Project Name	Gwalior- Burhpura A route
Project Details	Provision of automatic signaling along with train protection system to enhance line capacity
Kms	126
Cost (INR Billion)	2.8
Probable Mode of Execution	BOT/Annuity
Bidding Parameter	VGF/Annual Premium

Project Name	Burpura- Bina, A Route
Project Details	Provision of automatic signaling along with train protection system to enhance line capacity
Kms	126
Cost (Rs Crore)	270
Probable Mode of Execution	BOT/Annuity
Bidding Parameter	VGF/Annual Premium

### Railway Technical Training Institutes

Project Name	Advanced training institute (ATI) for training Technical Staff and Loco Pilots
Amount	6 training centers- With Driving simulators Mughalsarai (ECR), Kurla (CR), Asansol (ER), Vishakapatnam (ECoR), Kanpur (NCR), Avadi (SR)
Cost (INR Billion)	1.2
Probable Mode of Execution	BOT/BOO/JV/Annuity
Bidding Parameter	Lowest cost for identified quantity

## Mechanized Laundry

Project Name	Mechanized laundries at identified locations of different capacities
Amount	1T/2T/3T/5T per day
Cost (INR Billion)	1
Probable Mode of Execution	BOT/BOO/JV/Annuity
Bidding Parameter	Lowest cost for identified quantity

## Re-Development Projects

<b>Project Name</b>	Re-Development of Habibganj Railway Station in Indian railway Network
<b>Project Location</b>	Habibganj
<b>Project Type</b>	Re-Development
<b>Concerned agency</b>	(1) M/S Bansal Constructions work PVT ltd.(Lead member) (2) M/s Prakash Ashphaltings of Tell Highway (India) Ltd. (Consortium member)
<b>Mode of Implementation</b>	PPP
<b>Project Cost (in INR Billion)</b>	Commercial development – 4.9 (Approximate) Station development/Re-development – 1.0 (Approximate)
<b>Project Status</b> <b>A. Current Status</b>	LOI issued on 10.03.2016

<p><b>B. Anticipated project Timelines</b></p>	<p>3 years after signing of agreement.</p>
<p><b>Mode of Funding and Funding Agency</b></p>	<p>M/S Bansal Constructions work PVT ltd.(Lead member)  M/s Prakash Ashphaltings of Tell Highway (India) Ltd. (Consortium member)</p>
<p><b>Contact Information (Name, Email, Telephone)</b></p>	<p>Sh. Anil Bansal – Tel. – 91-755-2423736  E-mail - bcwgroup@yahoo.in</p>
<p><b>Project Details</b></p>	<p>Total Land area - 296000 sqm.  Area for commercial development – 113494 sqm  Area under station development – 16676 sqm  No. of Passengers – 80000 (2053)  Departing passenger after buying the ticket moves to concourse area after security check for waiting. On schedule time passengers move to the platform through VCE's. Whereas, arrival passenger move through dedicated underpass as per the submitted proposal. However, Railway have instructed to conceptually change the exit of arriving passenger through FOB's arrangement which are being worked out.</p>

<b>Project Name</b>	Re - Development of Chandigarh Railway Station in Indian railway Network
<b>Project Location</b>	Chandigarh
<b>Project Type</b>	Re-Development
<b>Concerned agency</b>	Developer is to be appointed.
<b>Mode of Implementation</b>	PPP
<b>Project Cost (in INR Billion)</b>	Commercial development – 6.32 (Appox.) Station development/Re-development – 3.0 (Appox.)
<b>Project Status</b> A. Current Status B. Anticipated project Timelines	Master Plan has been approved by Northern Railway and UT. Administration Chandigarh. RFQ is to be finalized shortly. 3 years after signing of agreement.
<b>Mode of Funding and Funding Agency</b>	Funding shall be done by probable Developer.
<b>Contact Information (Name, Email, Telephone)</b>	CEO – Sh S K Lohia (M) 91-9310733896 E.mail - <a href="mailto:ceo@irsdc.com">ceo@irsdc.com</a>  COO–Sh. Parag Verma(M) 91-9560595061 E-mail - <a href="mailto:parag.verma@irsdc.com">parag.verma@irsdc.com</a>  DGM/G Sh S. P Sharma (M) 91-9910081521 E-mail - <a href="mailto:sp.sharma@irsdc.com">sp.sharma@irsdc.com</a>  DGM/C Sh. Matabar Singh (M) 91-8130990764 E-mail- <a href="mailto:matabar.singh@irsdc.com">matabar.singh@irsdc.com</a>

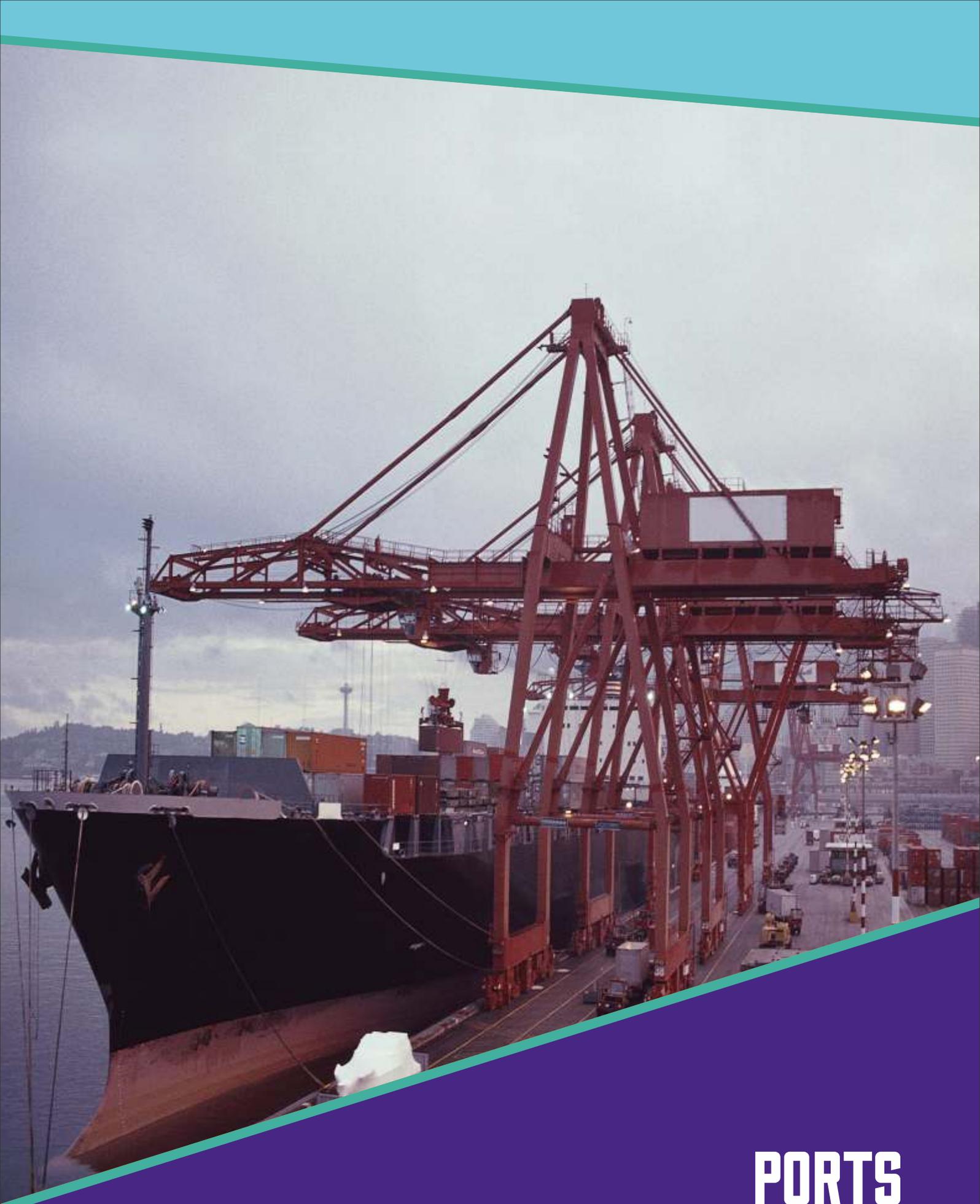
<b>Project Details</b>	<p>Total Land Area - 1997340 sqm Area under Railway Operation – 748453 Area under Real Estate development – 414072 sqm No. of Passenger - 90000 (2053)</p> <p>Provided Departing passenger after buying the ticket moves to concourse area after security check for waiting. On schedule time passengers move to the platform through VCE's. Whereas, arrival passenger move through dedicated underpass</p>
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<b>Project Name</b>	Development of Bijwasan Railway Station- New Delhi in Indian Railway Network
<b>Project Location</b>	Bijwasan – New Delhi
<b>Project Type</b>	Development
<b>Concerned agency</b>	Developer is to be appointed.
<b>Mode of Implementation</b>	PPP
<b>Project Cost (in INR Billion)</b>	Commercial development – 6. (Appox.) Station development - 3. (Appox.)
<b>Project Status</b> A. Current Status B. Anticipated Timelines <b>Project</b>	RFQ opened on 22.02.2016 3 years after signing of agreement
<b>Mode of Funding and Funding Agency</b>	Funding shall be done by probable Developer.
<b>Contact Information (Name, Email, Telephone)</b>	CEO – Sh S K Lohia (M) 91-9310733896 E.mail - <a href="mailto:ceo@irsdc.com">ceo@irsdc.com</a> COO–Sh. Parag Verma(M)91-9560595061 E-mail - <a href="mailto:parag.verma@irsdc.com">parag.verma@irsdc.com</a> DGM/G Sh S. P Sharma (M)91-9910081521 E-mail - <a href="mailto:sp.sharma@irsdc.com">sp.sharma@irsdc.com</a> DGM/C Sh. Matabar Singh (M)91- 8130990764 E-mail- <a href="mailto:matabar.singh@irsdc.com">matabar.singh@irsdc.com</a>
<b>Project Details</b>	Total Land area – 1449800 sqm

	<p>Total Built-up Area under Comml. Development – 122262 sqm</p> <p>No. of future passengers – 138000 (2053)</p> <p>Total Built-up area of station Building – 150437 sqm</p> <p>Provided Departing passenger after buying the ticket moves to concourse area after security check for waiting. On schedule time passengers move to the platform through VCE's. Whereas, arrival passenger move through dedicated underpass</p>
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<b>Project Name</b>	Re - Development of Anand Vihar Railway Station- New Delhi in Indian Railway Network
<b>Project Location</b>	Anand Vihar – New Delhi
<b>Project Type</b>	Re-Development
<b>Concerned agency</b>	Developer is to be appointed.
<b>Mode of Implementation</b>	PPP
<b>Project Cost (in INR billion)</b>	Commercial development – 6.38 (Appox.) Station development/Re-development – 2.0 (Appox.)
<b>Project Status</b> A. Current Status B. Anticipated Project Timelines	RFQ opened on 22.02.2016  3 years after signing of agreement
<b>Mode of Funding and Funding Agency</b>	Funding shall be done by probable Developer.
<b>Contact Information (Name, Email, Telephone)</b>	CEO – Sh S K Lohia (M)91-9310733896 E.mail - <a href="mailto:ceo@irsdc.com">ceo@irsdc.com</a>  COO–Sh. Parag Verma(M)91-9560595061 E-mail – parag.verma@irsdc.com  DGM/G Sh S. P Sharma (M)91-9910081521 E-mail – <a href="mailto:sp.sharma@irsdc.com">sp.sharma@irsdc.com</a>  DGM/C Sh. Matabar Singh (M)91- 8130990764 E- mail- matabar.singh@irsdc.com

<b>Project Details</b>	Total Land area – 567000 – sqm Built up Area under comml. Development – 170010 sqm No. of Passenger – 210393 (2038) Built-up area for station Building – 1 28261 sqm Concourse area – 23587 sqm Area for Parking – 10952 sqm
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**PORTS**

## Ports

### Sagarmala Port Development

S. No	Project Name	Project Cost in USD million	Project Proponent
1	Development of Cochin Outer Harbour	760.6	CoPT
2	Setting up of a container terminal (2.19 Million TEUs ) at Tuna Tekra, Kandla Port	346.2	KPT
3	Development of 14th multipurpose berth on BOT basis, Kandla Port.	36.70	KPT
4	Development of 16th multipurpose cargo berth on BOT basis, Kandla Port.	36.70	KPT
5	Development of Multi-Purpose Cargo Berth at Tuna Tekra on BOT basis, Stage-II Kandla Port.	192.3	KPT
6	Development of JD East berths for handling bulk cargoes at Chennai Port	55.4	ChPT
7	Development of BD II as Coal Terminal at Chennai Port	27.4	ChPT
8	Setting up of Single Point Mooring Terminal at Chennai	184.6	ChPT
9	Development of Multi-User Liquid Terminal II (3 MMTPA) for handling POL products	88.6	KPL

10	Development of Liquid cargo berth and one coastal Berth at Vasco Bay	46.2	MgPT
11	Development of two berths in Vasco bay with connecting flyover for Navy/Coast Guard	76.0	MgPT
12	Development of Outer Harbour at Paradip Port	769.2	PPT
13	Development of LNG Terminal/FSRU at New Mangalore Port	461.5	NMPT
14	Development of Outer Harbour (82.50 MMTPA Capacity addition) at V.O. Chidambaranar Port (Phase I)	1803	VoCPT
15	Development of Green Field port at Colachel (Enayam) in the State of Tamil Nadu	1011.6	VoCPT
16	Development of Additional Container Berths in Inner Harbour of V.O. Chidambaranar Port	184.6	VoCPT
17	Creation of 2nd Transloading arrangement within KoPT limits and at Konica Sands (Paradip Limit)	46.2	KoPT (Haldia)
18	Improving the capacity utilization of OR1 &OR2 and Fertilizer Berth at Vishakapatnam Port	83.1	VPT
19	Development of Multipurpose Berth outside the Dock Basin at Kolkata	30.8	KoPT (Haldia)
20	Setting up of a fully mechanized cargo handling jetty with back up facility (cargo terminal-I) at Haldia Dock-II, Shalukkhali	69.2	KoPT(Haldia)

21	Setting up of a Multipurpose dry cargo handling jetty with back up facility (cargo terminal-II) at Haldia Dock-II, Shalukkhali	61.5	KoPT (Haldia)
22	Setting up of a fully mechanized cargo handling jetty with back up facility (cargo terminal-III) at Haldia Dock-II, Shalukkhali	69.2	KoPT(Haldia)
23	Development of New Major Port at Sagar Island, West Bengal	225.2	KoPT(Kolkata)
24	Development of LPG Import Terminal In Gujarat	76.92	MoP&NG
25	Development of LNG Import Terminal in Kakinada in Andhra Pradesh	461.54	MoP&NG
26	Development of LPG Import Terminal In Eastern Ports	123.08	MoP&NG
27	Multipurpose Terminals in Uran Mudflats at JNPT	153.85	JNPT
28	Development of 5th Container Terminal at JNPT	846.15	JNPT
29	Terminals in Nhava Creek at JNPT	92.31	JNPT
30	Construction and Commissioning of additional Liquid Bulk Berth for handling POL at Visakhapatnam Port Trust	15.38	VPT
31	Setting of Edible Oil Terminal at Cochin Port Trust	1.54	CoPT
32	Development of an Oil Jetty outside dock basin at Haldia	15.38	KoPT (Haldia)

33	Finger Jetty at Vasco Bay for Liquid Cargo, Passenger and Fishing at Mormugao port	12.31	MgPT
34	Development of Container yard & cargo handling at Mc-Therson Island near PhongiBalu.	307.69	ALHW
35	Development of Satellite port for JNPT at Vadhavan (DahanuTaluka, Palghar District)	1410.31	JNPT/MMB
36	Development of Satellite Port at Bellekeri (North Kanara)	769.23	NMPT/Govt. of Karnataka
	<b>Total</b>	<b>10951.5</b>	

### Sagarmala Port Modernization

S. No	Project Name	Project Cost in USD million	Project Proponent
1	Mechanisation of berth CJ6 for import of fertilizers, Kandla Port	31	KPT
2	Mechanisation of barge jetties in Bunder basin to support coal lighterage operations, Kandla Port	15.38	KPT
3	Deepening and Widening of Mumbai Harbour Channel and JN Port Channel (Phase-II)	312.2	JNPT
4	Development of Integrated Common Rail Yard at JNPT for containers.	30.8	JNPT

5	Development of North Anchorage at JNPT	7.7	JNPT
6	Augmentation of Fixed Fire Fighting System at Oil Dock as per OISD 156 norms	10.2	ChPT
7	Capital Dredging Phase-V at Kamarajar Port Limited	46.2	KPL
8	Deepening of Approach Channel to Second / First Chemical Berth at Mumbai Port	23.1	MbPT
9	Mechanisation of CQ 1 to CQ 2 berths at Paradip Port	169.8	PPT
10	Modification and Improvement to the Existing Iron Ore Handling Plant at Paradip Port	26.92	PPT
11	Expansion of the Mechanized Coal Handling Plant (MCHP) stackyard for additional coal storage	23.07	PPT
12	Mechanisation of Berth No.8 for handling container and other clean cargoes	30.8	NMPT
13	Dredging in front of North Cargo Berth-III, North Cargo Berth-IV, 5 Nos of SDB berths and SEPC berth at V.O.Chidambaranar Port	117	VoCPT
14	Installation of Marine Unloading Arms for handling LPG at 1st, 2nd and 3rd oil jetty of Haldia Dock Complex	23.1	KoPT (Haldia)
15	Mechanisation of Berth 3 at Kolkata Port	23.1	KoPT (Haldia)
16	Utilisation of full capacity at North Cargo Berth 1 at V O Chidambaranar Port	116.92	VoCPT

17	Dredging of ~ 5 km common channel of Magdalla and Sewagram in Gujarat to facilitate coastal movement of cement	4.62	SDC/GMB
18	Re-arrangement of yard for improving the efficiency of Port's Container Terminals and allow for inter terminal movement at JNPT	30.77	JNPT
19	Additional coal stackyard for VGCB to increase the terminal capacity at Visakhapatnam Port	23.08	VPT
20	Conversion of OCT to handle Steel cargo and Cars at Mumbai Port	15.38	MbPT
21	Mechanised Food grain Handling Facility at Cochin Port	18.46	CoPT
22	Mechanised Fertilizer Handling Facility at Cochin Port	23.85	CoPT
23	Mechanised Fertilizer Handling Facility at New Mangalore Port	23.85	NMPT
24	Mechanised Food grain Handling Facility at New Mangalore Port	18.46	NMPT
25	Up gradation of Coal Jetty II (CJ-II) at VOC Port, Tuticorin	38.46	VoCPT
26	Circulation Plan for Ease of movement of break bulk cargo at Mormugao port	7.69	MgPT
27	Establishment of Vessel Traffic Management Service (VTMS) at Karwar	1.79	DGLL
28	Extension and Raising of Breakwater by 300 meter at Campbell Bay in Great Nicobar	92.30	ALHW

29	Extension of Mus Island Breakwater with additional Wharf along with shore	92.30	ALHW
30	Augmentation of Kandla LPG Import Terminal	46.15	IOCI& KPT
31	Mechanisation of berth CJ2 for Export of Food grains at Kandla	23.85	KPT
32	Modernisation of Sassoon Dock fishing Harbour in Mumbai Port	8.03	MbPT / MoAFW
	<b>Total</b>	<b>1476.33</b>	

### Sagarmala Port Led Development

S. No	Project Name	Project Cost in USD million	Project Proponent
1	Development of Free Trade Warehousing Zone (FTWZ) near Cochin Port	92.3	CoPT
2	Development of Cochin Smart Port City	461.5	CoPT
3	Development of Port Based Special Economic Zone (Phase - I) at JNPT	72.1	JNPT
4	Development of Free Trade Warehousing Zone on DBFOT basis at KPL	136.8	KPL
5	Power complex in Andhra Pradesh	1076.9	SDC/ MoP
6	Power complex in Maharashtra	1076.9	SDC/ MoP
7	Power complex in Tamil Nadu	1076.9	SDC/ MoP

8	Development of an integrated export based leather and footwear cluster in Kolkata/Bantala	276.9	SDC/MCI& DIPP
9	Development of an integrated export based leather and footwear cluster in Perambur	276.9	SDC/MCI& DIPP
10	Development of an integrated export based leather and footwear cluster in Muzaffarpur	276.9	SDC/MCI& DIPP
11	Export based electronics cluster in northern Maharashtra	538.5	SDC/ MoCIT
12	Export based electronics cluster in TN/AP	538.5	SDC/ MoCIT
13	Export based apparel cluster in Vidarbha	538.5	SDC/MoT
14	Export based apparel cluster in Central AP	538.5	SDC/MoT
15	Export based apparel cluster in Saurashtra	538.5	SDC/MoT
16	Development of marble based furniture cluster in Kutch	353.8	SDC/MCI& DIPP
17	Development of wooden furniture cluster in Kerala	353.8	SDC/MCI& DIPP
18	Development of bamboo based furniture hub in Assam	353.8	SDC/MCI& DIPP
19	Development of Cement cluster in Gujarat	107.7	SDC/MCI& DIPP
20	Development of Cement cluster in Central AP	107.7	SDC/MCI& DIPP
21	Development of Steel cluster in Southern Maharashtra/ Goa	1615.4	SDC/Ministry of Steel

22	Development of Steel cluster at Ennore	1615.4	SDC/Ministry of Steel
23	Development of Automotive cluster at Sanand	707.7	SDC/MCI
24	Development of Port-based Mega food processing park in Southern Maharashtra	361.5	SDC/MoFPI
25	Development of Port-based Mega food processing park in Kakinada	361.5	SDC/MoFPI
26	Petrochemical cluster at Ennore	769.23	SDC/ MoP&NG
27	Petrochemical cluster at Gujarat	769.23	SDC/ MoP&NG
28	Petrochemical cluster at Kakinada	769.23	SDC/ MoP&NG
29	Petrochemical cluster at Mangalore	769.23	SDC/ MoP&NG
30	Development of Greenfield refinery at Tamil Nadu	3846.15	SDC/ MoP&NG
31	Development of Greenfield refinery at Maharashtra	3076.92	SDC/ MoP&NG
32	Development of Smart Industrial Port City (SIPC) at Paradip		PPT
33	Development of Smart Industrial Port City (SIPC) at Kandla- Gandhidham- Adipur Complex.		KPT
	<b>Total</b>	<b>23454.89</b>	

## Shipbuilding, Ship Repair and Ship Breaking

S. No	Project Name	Project Cost in USD million	Project Proponent
1	Supplying, operating and maintaining 2 Nos. of 50 T Bollard Pull Tug on hiring basis	26.9	NMPT
2	Construction of Floating Dry Docking facility on DBFOT basis through PPP mode at V.O.C. Port	30.8	VoCPT
3	Modernization of Ship Repairing Facilities at Kolkata Dock System	15.4	KoPT (Kolkata)
4	Development of Marine cluster at Ennore	630.77	SDC
5	Building Barge Jetties to Support the Anchorage Operations at Haldia	18.46	KoPT
6	Dry Docking Facilities at Mumbai Port Trust	7.69	MbPT
7	New Dry Dock facility at Cochin Shipyard Ltd, Kochi	230.77	CSL
8	International Ship Repair Facility (ISRF) Project at Cochin Port Trust premises, Kochi	149.23	CSL
9	Providing Ship Repair facility (Ship-lift /slipway) capable of handling 5000 DWT vessels, at Port Blair Port	76.92	PMB
10	Extension of Dry Dock-II at Marine Dockyard in Port Blair	14.8	ALHW
11	Development of new Dry Dock at Bambooflat (For Mainland Vessels)	70	ALHW

12	Acquisition of 2 nos. Suezmax tankers	129.84	SCI
13	Procurement of 8000 Cu.M hopper capacity Trailer Suction Hopper Dredger	69.23	DCI
	<b>Total</b>	<b>1470.81</b>	

### Maritime Education, Training and Skill Development

S. No	Project Name	Project Cost in USD million	Project Proponent
1	Development of Gujarat Maritime University	132.07	GMB
2	Setting up Logistics and Maritime University at Kakinada, Andhra Pradesh	46.2	Govt. of AP
3	Procurement of VTS Simulator for Training Centre at Kolkata	0.46	DGLL
4	Capacity building of workers involved in ship recycling activities at Alang, Gujarat	4.61	GMB
	<b>Total</b>	<b>183.34</b>	

## Inland Water Transportation and Coastal Shipping

S. No	Project Name	Project Cost in USD million	Project Proponent
1	Development of IWT Terminal at Paradip Port	46.2	PPT
2	Setting up of Outer Riverine Terminal (OT-1) at Kolkata Port	63.6	KoPT (Haldia)
3	Setting up of Outer Riverine Terminal (OT-2) at Kolkata Port (Haldia Dock)	29.2	KoPT (Haldia)
4	Construction of IWT jetties in lieu of existing Inland Vessel Wharves/ jetties of KoPT on River Hooghly near Kolkata	18.5	KoPT (Kolkata)
5	Capacity Augmentation of Navigational Infrastructure of National Waterway-I	61.5	KoPT (Kolkata)
6	Dedicated coastal berth for food grain imports at V O Chidambaranar Port in Tuticorin	12.31	VoCPT
7	Development of Coastal Berth for Liquid Cargo at JNPT	3.08	JNPT
8	Development of coastal food export berth for rice in Kakinada Anchorage Port	30.77	FCI
9	Movement of 3 MMTPA imported coal from Bay of Bengal to NTPC Barh, Bihar for a period of 10 years.	169.2	IWAI
10	Development of GR Jetty and BISN jetty through PPP mode in Kolkata on National Waterway - 1	15.69	IWAI

11	Development of Ro-Ro Terminals on Brahmaputra (NW-2) for providing Ro-Ro Services.	12.66	IWAI
12	Construction of new navigation lock gate at Farakka.	52.98	IWAI
13	Assured Depth Contract between Bhagalpur-Farakka Stretch	31.23	IWAI
14	Construction of Multimodal Terminal at Ghazipur	30.77	IWAI
15	Construction of Multimodal Terminal at Haldia	71.54	IWAI
16	Construction of Terminal at Patna	30.77	IWAI
17	Construction of Multimodal Terminal at Tribeni/Kalyani	30.77	IWAI
18	Consultancy for Supporting Services for Design of Inland Vessels for Capacity Augmentation of National Waterway – 1	0.65	IWAI
19	Fairway Development on Krishna River in NW-4	12.31	IWAI
20	Development of IWT for transportation of cargo on Ghagra River	63.1	IWAI
21	Development of IWT for transportation of cargo on Gandak River	78.46	IWAI
22	Development of IWT for transportation of cargo on Kosi River	42.31	IWAI
23	Development of Indo Bangladesh Protocol route for day night navigation on the Sunderbans River	3.85	IWAI

24	Development of IWT for transportation of cargo on Mandovi, Zuari and Cumberjua River	58	IWAI
25	Development of IWT for transportation of cargo on Barak River	18.46	IWAI
26	Development of Multimodal Inland Water Transport terminal at Sahibganj in Jharkhand	82.15	IWAI
27	Ro – Pax Ferry Services between Gogha and Dahej in Gulf of Cambay	78.31	IWAI
<b>Total</b>		<b>1148.37</b>	

### Investment Opportunities in Maritime States

S. No	Project Name	Project Cost in USD million	Project Proponent
1	Providing alternative Road from Bhavnagar to Sosiya - Alang Ship Recycling Yard	13.8	GMB
2	Azhikkal Port - Proposed NH – Bypass and widening of 2 km	9.38	Govt of Kerala
3	Upgrading of Manginapudi Beach Road to a 4 lane road	9.23	Govt. of AP
4	Upgrading 24 Km road to four lane that connects Nellore City (NH-16) to Krishnapatnam Port in Andhra Pradesh	53.85	Govt. of AP

5	Development of Four lane green field road from Machilipatnam South Port to NH-9 in f Andhra Pradesh	70.5	Govt. of AP
6	Development of Four Lane green field road from Machilipatnam North Port to NH-SH-46 in Andhra Pradesh	35.7	Govt. of AP
7	Development of 7.2Km green field road connecting NH 65 to Machilipatnam Port in Andhra Pradesh	26.9	Govt. of AP
8	Development of Four lane of Kakinada Anchorage Port Uppada beach road connection upto NH-16 in East Godavari District of Andhra Pradesh	150.8	Govt. of AP
9	Formation of New By-pass parallel Road west of NFCL and CFL in Kakinada, Andhra Pradesh	10.8	Govt. of AP
10	Upgrading existing R&B road from Chilakuru to Power plants near Krishnapatnam Port in Andhra Pradesh	46.2	Govt. of AP
11	Construction of two Nos. of four lane ROBs at (i) Dummulapeta and (ii) Old Port area in Kakinada, Andhra Pradesh	12.3	Govt. of AP
12	Development of 5Km long Green field Road connecting South and North industrial cluster of Khandaleru creek Near Krishnapatnam Port Andhra Pradesh	13.8	Govt. of AP
13	Augmentation of road connectivity to Cuddalore	92.77	TNMB

14	Development of Fisheries Harbour at Kulai, Mangalore, Karnataka	35.4	Govt. of Karnataka
15	Doubling of the existing rail link connecting Dhamra Port to Bhadrak on Chennai- Howrah main line	230.8	Dhamra Port
16	Connectivity to NH – 17 – Upgrading of SH 92, 96, 97 to connect NH17 to North and South banks of Dighi Port	92.3	Dighi Port
17	Up gradation of SH 164 (Nivli to Jaigad) to connect Jaigad Port to NH 17 at Nivali (PE69)	51.2	JSW Jaigarh Port Ltd
18	Four Lane green field road to Krishnapatnam Port from Naidupeta in Andhra Pradesh	103.1	Govt. of AP
19	Development of four lane bypass road for existing Gangavaram Port connectivity road in Visakhapatnam District in Andhra Pradesh	12.3	Govt. of AP
20	Upgradation of existing B.T. Roads and backup area in to C.C. Pavement in the Anchorage Port area of Kakinada Port in Andhra Pradesh	4.8	Govt. of AP
21	Upgrading of the existing four lane road connecting to NH16 to Gangavaram Port in to six lane road in Andhra Pradesh	7.7	Govt. of AP
22	Development of Fishing Harbour in Juvvaladinne for Coastal Community in SPSR Nellore District in Andhra Pradesh.	15.38	Govt. of AP
23	Four lane road connectivity for the existing two lane road from Kakinada Port to NH16 at Rajanagaram in East Godavari District, Andhra Pradesh.	92.30	Govt. of AP

24	Four lane road connectivity for the existing two lane road from Achampeta Junction to joining NH 16 at Kathipudi in East Godavari District Andhra Pradesh	76.92	Govt. of AP
25	Development of River Chapora for eco-friendly tourism activities and inland water transport.	15.38	Govt. of Goa
26	2nd stage development of Karwar Port in Uttara Kannada District	384.62	Govt. of Karnataka
27	Development of Green Field, Deep Draft Modern Port at Tadri in Uttara Kannada District	461.54	Govt. of Karnataka
28	Planning, Designing and Development of a Captive Port at Pavinakurve in HonnavarTaluka of Uttara Kannada District	153.85	Govt. of Karnataka
29	Development of Honavar Port in Honnavartaluka of Uttara Kannada District	78.62	Govt. of Karnataka
30	Providing Infrastructure to Facilitate Ro-Ro Pax Services and construction of Break Water at Mandwa, Tal. Alibag, Maharashtra	20	MMB
31	Development of ChettinadTharangambadi Captive port in Nagapattinam district	153.84	TNMB
32	Development of port – based Special Investment Region (SIR) at Navlakhi.		GMB
33	Development of coastal jetty by GMB at Navlakhi and Porbandar	46.15	GMB
34	Development of Maritime Cluster in Gujarat	57.38	GMB

35	Development of Nargol Port in Gujarat	615	GMB
36	Development of Dahej Port in Gujarat	384.77	GMB
37	Bahabalpur Port at Bahabalpur in Balasore District, Odisha	704	Govt. of Odisha
38	Bahuda Port at Bahuda in Ganjam District, Odisha	531.38	Govt. of Odisha
39	Development of Infrastructure facilities at Cuddalore Non Major Port.	15.11	TNMB
40	Development of Infrastructure facilities at Kanniyakumari Port.	3.08	TNMB
41	Construction of Bridge from Rajachak to Nandigram over Haldi River in Purba Mednipur	76.92	Govt. of West Bengal
42	West Bengal North- South Road Corridor Project (SASEC Port Connectivity)	722.62	Govt. of West Bengal
43	Renovation and Upgradation of 103 Nos of Jetties over the rivers of Haldi, Bhagirathi and Hooghly	32.31	Govt. of West Bengal
44	Water Transportation Facility from Kolkata to Digha including construction of a jetty at Digha	3.08	Govt. of West Bengal
45	Construction of Marine Aquarium/Museum at Digha	3.08	Govt. of West Bengal
46	Establishment of Off-shore Transshipment of Bulk Cargo in the Andaman Islands.	76.92	A&N Administration
	<b>Total</b>	<b>5807.88</b>	

## Cruise Shipping and Light House Tourism

S. No	Project Name	Project Cost in USD million	Project Proponent
1	International Cruise Terminal at Cochin Port	153.8	CoPT
2	Modernizing the cruise Terminal at Indira Dock to International Standards	8.3	MbPT
3	Ropeway service between Sewree Fort and Elephanta island in Mumbai Harbour	23.1	MbPT
4	Operation and Maintenance of Cruise Terminal at Mormugao Port	1.4	MgPT
5	Development of Marina on DBFOT basis through PPP mode at V.O.C.Port for a period of 30 years	5.2	VoCPT
6	Seaplane operations on Hooghly River	0.9	KoPT(Kolkata)
7	Development of mega-cruise terminal in Mumbai	92.30	SDC
8	Development of Cruise tourism on National Waterways	15.38	IWAI
9	Development of Tourism at 78 Lighthouses	192.3	DGLL
	<b>Total</b>	<b>492.68</b>	

## Hinterland Connectivity & Multi Modal Logistics

S. No	Project Name	Project Cost in USD million	Project Proponent
1	Developing a Dry Port at Jalna	61.5	JNPT
2	Development of Dry Port at Nagpur	61.5	JNPT
3	Development of Road Facilities For Cargo Evacuation inside the Chennai Port	15.4	ChPT
4	Connectivity from Sheela Nagar junction to Anakapalli – Sabbavaram/ Pendurti Anandapuram Road NH16 (Former NH5) Phase-III	77.7	VPT
5	Direct Connectivity to Mindi Yard in Visakhapatnam Port from Eco.Railway	18	VPT
6	New ICD Development in South Uttarakhand	13.08	SDC/MCI
7	New ICD Development in North MP/CG border (Singrauli)	13.08	SDC/MCI
8	New ICD Development in Central Rajasthan (Nagaur))	13.08	SDC/MCI
9	New ICD Development in Hyderabad	13.08	SDC/MCI
10	New ICD Development in North Bengal (Darjeeling)	13.08	SDC/MCI
11	New ICD Development in Raipur	13.08	SDC/MCI
12	Connection of western DFC to Mundra	538.46	SDC/MOR

13	Connection of western DFC to Pipavav	384.62	SDC/MOR
14	Connection of western DFC to Hazira	461.54	SDC/MOR
15	Expressway from Whitefield industrial cluster (Bangalore) to Chennai	1538.46	SDC/MoRTH
16	Expressway from Whitefield industrial cluster (Bangalore) to Enayam	3076.92	SDC/MoRTH
17	Expressway from Sarkhej (Ahmedabad) to Pipavav	1384.62	SDC/MoRTH
18	Expressway from Tirupur industrial cluster (Coimbatore) to Enayam	2000	SDC/MoRTH
19	Expressway from Sanathnagar industrial cluster (Hyderabad) to Vodarevu	1538.46	SDC/MoRTH
20	Expressway from Sarkhej (Ahmedabad) to Mundra	1538.46	SDC/MoRTH
21	Expressway from Panagarh (Durgapur) to Haldia	1384.62	SDC/MoRTH
22	Expressway from Sanathnagar industrial cluster (Hyderabad) to Jawaharlal Nehru Port Trust	3384.62	SDC/MoRTH
23	Expressway from Dighi Industrial Cluster (Pune) to Jawaharlal Nehru Port Trust	692.31	SDC/MoRTH
24	Expressway from Ahmedabad to Jawaharlal Nehru Port Trust	2769.23	SDC/MoRTH
25	Salaya Mathura crude pipeline expansion	153.85	MoP&NG/IOCL
26	Product pipeline from Paradip to Hyderabad	461.54	MoP&NG/IOCL

27	Flyovers at Y junction, approaches to existing terminals to improve flow of containers movement	30.77	JNPT
28	Flyover for GTI Entry/Exit over the Rail Tracks for seamless traffic movement at Jawaharlal Nehru Port Trust	10.77	MoP&NG/IOCL
29	Four lane road from Northern gate of Kamarjar port to Thachur, outer ring corridor - 6 laning with service roads	41.70	SDC
30	Northern Rail Link connecting north of Minjur to Kamarajar Port Limited	35.08	KPL
31	Hare Island - Red Gate - TTPS Circle Road Connectivity	16.15	VoCPT
32	Evacuation road to the standalone Container Terminal (330m extension to DPW terminal) upto Karal	18.46	JNPT
33	Improvement of existing road connecting Kolkata Port Trust to NH6 and nearby Industrial Clusters	3.46	KoPT
34	Rail connectivity between proposed Port at Sagar Island and Kashinagar Rail station	41.54	KoPT
35	Road connectivity between proposed Port at Sagar Island and Muriganga bridge & between Muriganga bridge and proposed Rail yard at Kashinagar	26.30	KoPT
36	New ICD development in Jharsuguda	13.08	SDC/MCI
	<b>Total</b>	<b>21857.6</b>	

## Green Port Initiatives

S. No	Project Name	Project Cost in USD million	Project Proponent
1	Development of 14.5 MW Wind Farm ,Chennai Port	14.6	ChPT
2	Setting up of 25 MW Solar power plant at Jawaharlal Nehru Port Trust	23.07	JNPT
3	Setting up of 14 MW solar power plant at Kandla Port Trust	12.9	KPT
4	Setting up of 15 MW renewable power plant at V. O. Chidambaranar Port Trust	13.84	VoCPT
	<b>Total</b>	<b>64.41</b>	



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please write to [query@investindia.org.in](mailto:query@investindia.org.in)



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