

The Deloitte logo, consisting of the word "Deloitte" in a bold, blue, sans-serif font, followed by a small green dot.

Infrastructure



# Roads & Highways – Our service offerings

## Transaction Advisory

PPP / Transaction Structuring  
 Bid Advisory  
 Partner Search  
 Due Diligence  
 Contracting support

## Government Advisory

Inputs to Policy formulation  
 Project conceptualization  
 Program Management  
 Feasibility Analysis  
 Transaction Management  
 Organization Structuring & Capacity Development

## Private Sector Advisory

Strategy Development  
 Opportunity Identification & Analysis  
 Transaction Support & Funding Arrangement  
 Equity Deals, Securitization & Re-financing  
 Project Management Support

We have worked with

NHAI (National Highway Authority of India)	Ministry of Road Transport & Highways	Uttar Pradesh State Industrial Development Corporation
IL&FS Transportation Networks Ltd.	MSRDC	Plus Expressways Berhad-Malaysia
Gamuda Berhad and WCT Engineering Berhad	ISOLUX – Soma Consortium	Grupo Empresarial San Jose S.A.
Govt of Orissa	STUP Consultants	ETA – KMC consortium

# Roads & Highways – Our select credentials

- Preparation, finalization and periodic updating of Financing Plan for NHAI
- Assistance to NHAI on addressing contract management related issues
- Assistance to MoRTH – subgroup on PPP in roads to develop plan document for 12th Five Year Plan
- Assistance to NHAI in consolidating investment guidelines and policies for road sector in India and updating it continuously
- Assistance to NHAI & MoRTH on developing suitable strategy for pilot greenfield expressways in India
- PPP Support scheme for National Highways Development Programme
- Financial consultancy to NHAI on several stretches
- Financial feasibility and structuring on BoT basis for Tuticorin Port Road Connectivity Project
- Financial Analysis & Risk Mitigation strategies of a Rajasthan PPP Road Project for an International Developer
- Financial advisory services for a leading Indian developer for five PPP Highway Projects in India

# Roads & Highways – Our select credentials

## Our team credentials

**Policy:** Advised sole highway development agency in India in developing its corporate plan (USD 80 billion), reviewing and finalizing development models for highway development as well as Model Concession Agreements, Highway Sector Regulation, Five Year Plans etc.

**Transactions:** Advised on more than 35 PPP transactions to NHAI and Private Sector

**Post-transactions:** Advised International and Indian developers / PE firms on strategic investments

Financial Advisory to NHAI on more than 40 stretches

Independent review and finalization of New Model Concession Agreement for NHAI

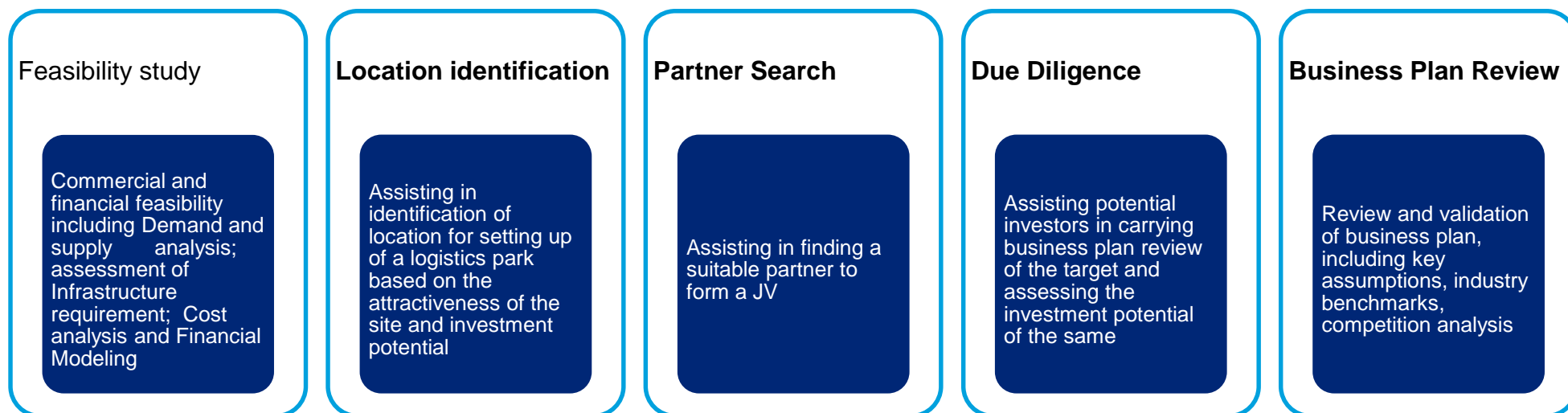
Financial Advisory to Works Department, Orissa on several stretches

Financial Advisory to ETA – KMC consortium for – Upgrading of Jaipur – Gurgaon Section of NH 8

Transaction Advisory for Mumbai Trans-Harbour Link

Financial Advisory to several consortiums/ private bidders

# Logistics – Our service offerings



We have worked with	Container Corporation of India	Adani Group	RVNL (Rail Vikas Nigam Ltd.)
	Wallenius Wilhelmsen Logistics	Phi Advisors Pvt. Ltd.	Innovative Investments
	ETA Freightstar	Khaleeji Commercial Bank	Fung Capital
	Gujarat Pipavav Port Ltd.	HPCL	MP Infralogistics Limited
	World Logistics Council Development	TradeMark, East Africa	

# Logistics – Our select credentials

- Feasibility Study for a logistics park in Sohar Free Zone, Oman
- Feasibility Study for Development of Freight Terminal at Holambi Kalan, Northern Railways
- Feasibility study for Free Trade Warehousing Zone (FTWZ) at Pipavav
- Market Assessment Study of Hyderabad Region for setting up of a Private Freight Terminal
- Development of Integrated Logistics Infrastructure in the State of Madhya Pradesh, India
- Preparation of Techno-economic Feasibility Study for a Container Freight Station near Mundra Port, Gujarat
- Identification of Project Influence Area, Cargo Traffic study and Review of business plan for setting up a Private Freight Terminal
- Enhance the Processes and Tools of the Shipment Efficiency Analysis (SEA)
- Standard Operating Procedures for all aspects of CTO business including the terminals of CTO
- Assistance in Raising funds and negotiations with a Financial Investor

## Our team credentials

Advised Fund capital on investment potential of Future Logistics

Advised Phi Advisors Pvt. Ltd on investment potential of Mahindra Logistics

Advised Khaleeji Commercial Bank on development of Logistics park and Free Trade and Warehousing Zone

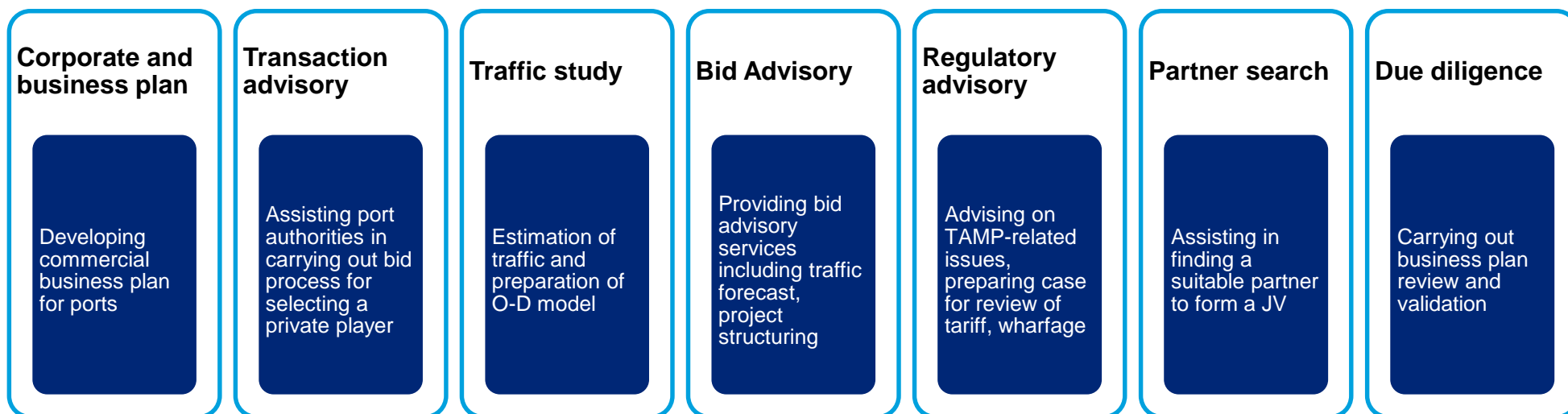
Review the business plan of ETA Freightstar for development of logistics center and operating container trains

Advised Innovative Investments on identification a location for establishing a Logistics Park near Chennai

Reviewed the business plan of CONCOR for setting up of an Integrated Container Transshipment Terminal (ICTT) at Vallarpadam

Reviewed the business plan of a Large Business House for establishing Inland Container Depots / Container Freight Stations in National Capital Region

# Ports – Our service offerings



## We have worked with:

- Government Port Trusts
- Private Terminal Developers
- Private Greenfield Ports
- Financial Institutions
- Development Banks

New Mangalore Port Trust	Marmugao Pot Trust	Tuticorin Port Trust	Directorate of Ports, Kerala
Visakhapatnam Port Trust	Kandla Port Trust	Gujarat Maritime Board	Maharashtra Maritime Board
Hindustan Petroleum	Mumbai Port Trust	Chabahar Port Authority, Iran	
Mundra Ports & SEZ Ltd	DP World	Kakinada Seaports Ltd	
Pondicherry Port	Katupalli Port		

# Ports – Our select credentials

- Business Plan Review and Partner search for Pondicherry Port
- Traffic modelling and feasibility study for Visakhapatnam Port
- Transaction Advisory services to Vizag, Alappuzaha, Kollam, Tuticorin, Mormugao and Azhikkal ports
- Bid Process Management for Private Sector participation in several ports for GMB
- Transaction Advisor for development of Modern Storage terminal in Mumbai on PPP basis
- Preparing Business Plan for Chennai Port Trust



# Ports – Our select credentials

## Our team credentials

**Policy:** Advised key Port Development Authorities and Maritime Development Boards

**Transactions:** Bid advisory, financial close assistance and strategic advise to large Indian / International port developers for development of ports on PPP

Advisory services for two of the largest ports in India

**Post-transactions:** Advised various Private Equity firms and other strategic investors for investing in specific port projects

Feasibility Study and Business Planning for private ports & jetties

International Opportunity Assessment for Mundra Port & SEZ  
(Adani Group)

Traffic Study for Vizag General Cargo Berth for Essar

Business Plan review of an off-shore container terminal in west India

Business Plan for a Greenfield Port in the middle east

Tariff advisory for India's largest port and SEZ – Mundra

Transaction advisor to Kandla Port Trust & New Mangalore Port Trust

Visakhapatnam (Vizag) Port – Competitive Strategy

Government of Sri Lanka – Reforming Import and Export procedures

Strategic Options for Kakinada Port

Business Plan for a leading Ro Ro terminal/Auto logistics player

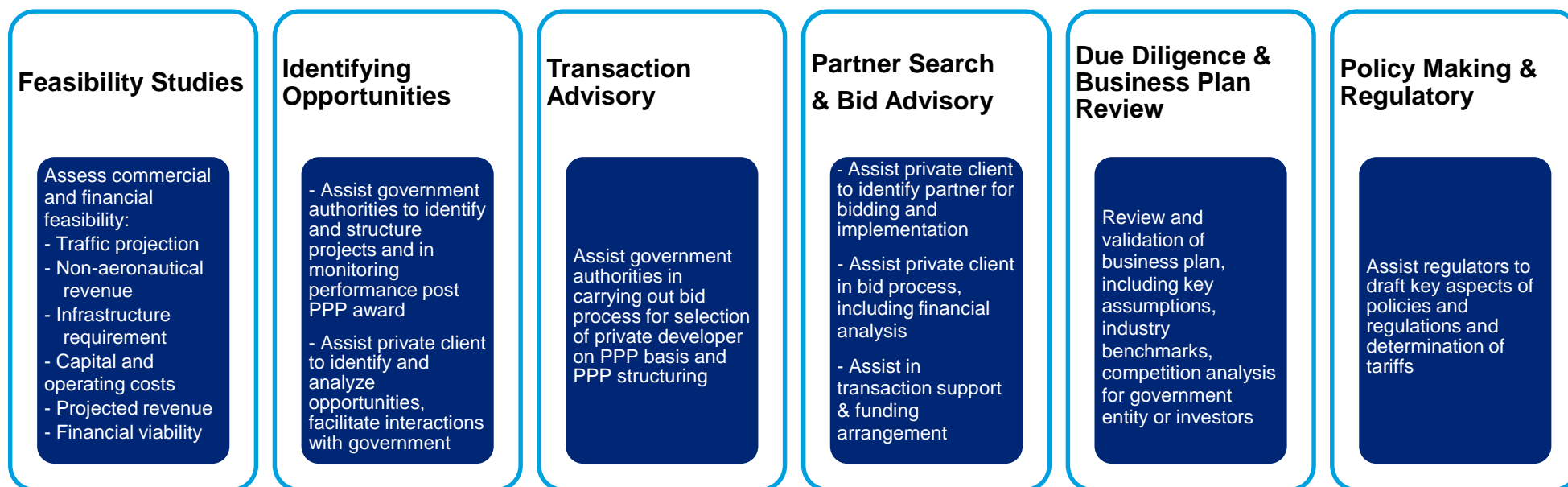
Business Plan Review and Organization structuring for a port developer

Review of business plan of a container terminal in south India

Business Plan for the development of a container transshipment terminal in South India

Business plan review for ports of Gangavaram and Dhamra

# Aviation – our service offerings



We have worked with	Airport Authority of India (AAI)	Airports Economic Regulatory Authority of India (AERA)	Ministry of Civil Aviation, India	Department of Transportation and Communications, The Philippines
	Delhi International Airport Ltd. (DIAL)	Mumbai International Airport Ltd. (MIAL)	Cochin International Airport	Civil Aviation Department, Government of Gujarat
	Infrastructure Corporation of Andhra Pradesh Limited	National Aviation Company of India Ltd. (NACIL)	Pawan Hans Limited	Maharashtra Airport Development Company Limited

# Aviation – our select credentials

- Assistance to DOTC - Feasibility Analysis and PPP Transaction Advisory for 5 airports in the Philippines
- Assistance to AERA - Development of Regulatory Framework for Economic Regulation of Aeronautical Services
- Assistance to AERA - Review of tariff determination proposal for 5 Major Airports in India
- Assistance to Air India - Review of Financial Turnaround Plan including Hive-off of MRO and Ground Handling Business
- Assistance to MOCA - Policy assistance on promotion of Regional and Remote Area Air Connectivity in India
- Assistance to INCAP - Review and program management of agreement executed for Hyderabad Airport under PPP mode
- Assistance to DIAL - Standardization of marketing and sales and procurement/inventory processes at Delhi Airport
- Assistance to Govt. of Gujarat - Development of a policy framework for rapid development of aviation sector in Gujarat
- Assistance to MADC - Preparation of a Vision Document, Business Plan and Financial Projections up to 2025
- Assistance to a Private Investor - Commercial Review of Business Plan for Maintenance, Repair & Overhaul operations

## Our team credentials

Techno Economic Feasibility Study for the Development of 5 Non-Metro Airports in India

Review of Financial Projections and assistance in determination of User Development Fee (UDF) at 6 Non-Metro Airports

Study on vision 2020 for Air Cargo growth in India, Airport Authority of India

Traffic Potential Study of Madurai Airport and Tuticorin Airport

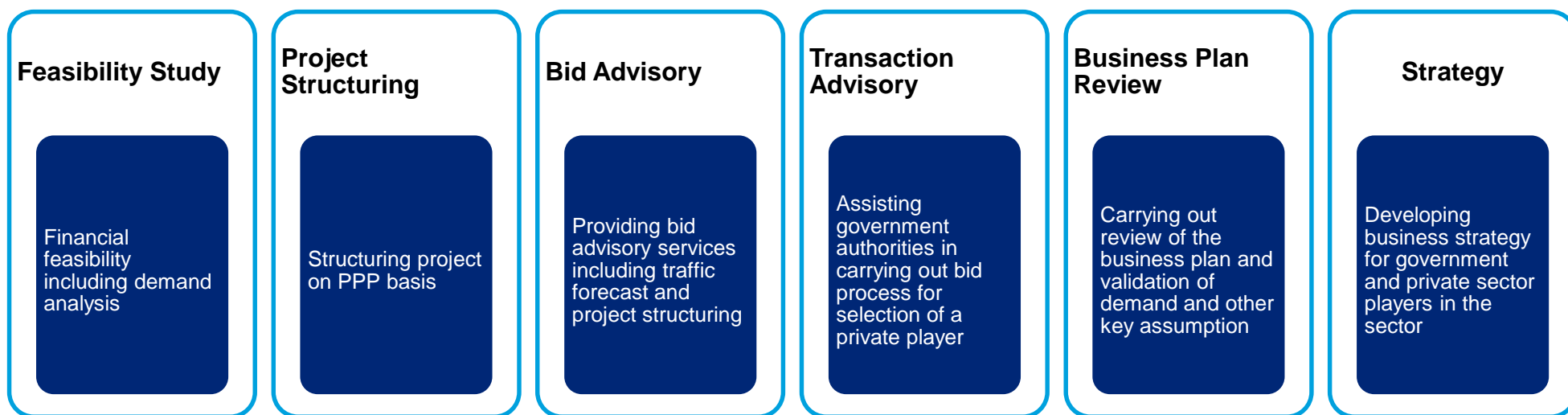
Review of the Business Plan for Delhi International Airport Limited (DIAL) – a PPP initiative, as part of their program for mobilizing funds

Financial feasibility study & preparation of project report for establishment of New International Civil Air Terminal Complex, at Mohali (Chandigarh)

Bid Advisory for Mumbai Airport Modernization PPP project including review of Financial Model and transaction structure and concession terms

Bid preparation for duty free shops at Delhi and Mumbai Airports

# Railways – Our service offerings



We have worked with	Hyderabad Metro Rail Limited	CONCOR	Indian Railways
	RVNL	RITES	Bangladesh Railway
	I-Deck	Pipavav Railway Corporation Ltd.	MMRDA
	GIS Trans Corporation, USA	Bangalore Mass Rapid Transit	Kenya Railways
	Jaipur Metro Rail Corporation Ltd.	Japan Bank for International Cooperation	Maharashtra Airport Development Company Limited
	Dedicated Freight Corridor Corporation of India Limited (DFCCIL), World Bank	Chennai Metro Rail Limited (CMRL)	Nigeria Railway Corporation
	Indian Railway Station Development Corporation		

# Railways – Our select credentials

- Financial Consultant and Transaction Adviser for Hyderabad Metro Rail and Stage II of Jaipur Metro Rail Project
- Bankability Study for Development of several new lines / electrification / doubling in various Railway Zones
- Traffic Potential at Pipavav and Inland Rail Cargo Movement
- All India shipper analysis survey for domestic cargo for Indian Railways
- Pre-feasibility study for transportation hub at Dadri for Domestic Cargo for CONCOR
- Review of agreements for development of Rail terminal for MADC
- Evaluation of opportunities in railways and metro to explore possibility of using India as a export hub to other developing markets
- Assessment of opportunities for metro, monorail and LRT sector in India for MTR corporation
- Public Private Partnerships Options Strategic Study for development of Dedicated Freight Corridors including Pilot transaction
- Study on Principles of Tariff Determination for Chennai Metro
- Setting up of a New Rail Coach Factory at Kanchrapara, West Bengal, India
- Formulating a Public Private Partnership (PPP) policy framework for doubling projects with Indian Railways for JSPL
- Advisory services on Public Private Partnership for the re-modelling of major railway stations to incorporate modern commercial outlets
- PPP Options Study, Transaction Structure Design and Advisory Services for Passenger Train Services And Luxury Steam Safaris
- Advisory services for preparation of Business Plan, including analysing the potential revenue generating areas for IRSDC

# Railways – Our select credentials

## Our team credentials

Bangladesh Railway Reform Project

Mumbai Elevated Mass Rapid Transit System

Bangalore Mass Rapid Transit System

Advisory on development strategy for Indian Railways

Validation of tariff model for RITES Ltd.

Advisory on bid process management for selection of developers for : New main line passenger coach factory; New mainline diesel locomotive factory; New mainline electric locomotive factory; New wheel disc factory

Technical, marketing and financial feasibility study for: Panvel-Jasai-JNPT section of Central Railway Daund – Gulbarga section of Central Railway; Pune – Guntakal section of Mumbai-Chennai mainline

RVNL – Bankability Studies relating to six railway projects comprising doubling and electrification

# Urban Transport – Our service offerings



We have worked with	Ministry of Urban Development, GoI	West Bengal State Transport Corp.	Transport for London (TfL)
	Institute of Urban Transport	Karnataka State Road Transport Corporation	Durban Urban Transport Authority
	Uttar Pradesh Road Transport	Karnataka Directorate of Urban Land Transport	Daimler AG
	Uttar Pradesh State Road Transport Corporation	Andhra Pradesh State Road Transport Corporation	Vinci Consortium

# Urban Transport – Our select credentials

- Development of Operational Manual for Urban Metropolitan Transport Authority and Urban Transport Fund
- Preparation of Business Plan for Urban Transport (IUT)
- Transaction Advisory Support for Selection of Private Operators to Operate Stage Carriage Buses in Uttar Pradesh, India
- Financial Consultant and Transaction Adviser for Jaipur Metro Rail Project
- Business Plan for Mumbai Metropolitan Region (MMR)
- Mainstreaming of PPPs in Urban Transportation, DULT
- Capacity Building for Karnataka State Road Transport Corporation
- Development of Model Concession Agreement for selection of Bus Operators in PPP mode (world bank)

## Our team credentials

Hyderabad Metro Rail Project

Hyderabad Multimodal Transportation System

Restructuring of GoWB owned State Transport Undertakings

IUTP in Kerala- Study of Future Strategy & Financing Options

Durban Urban Transport Restructuring Project

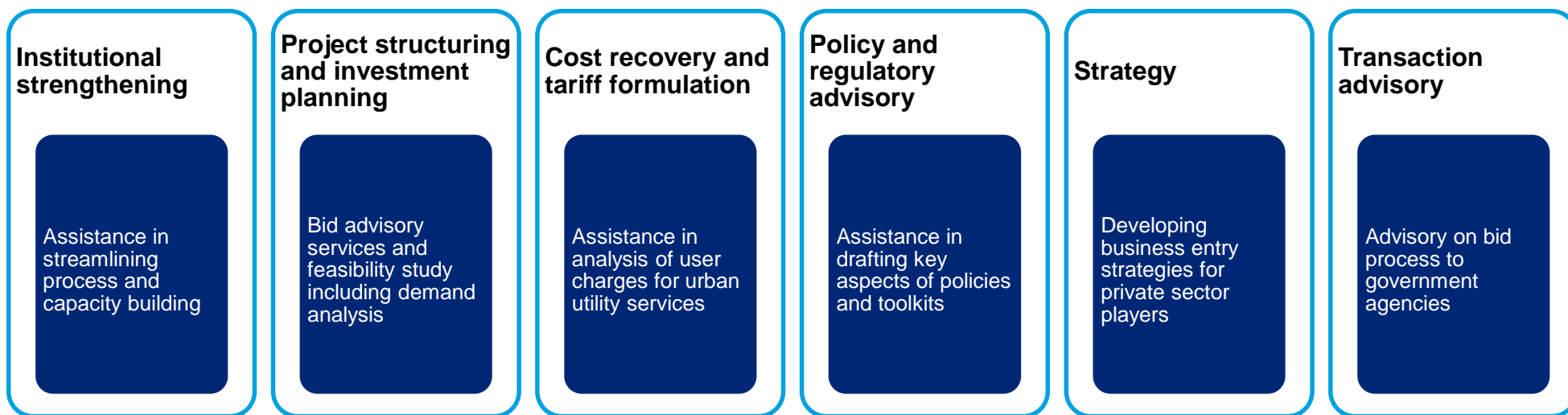
London Congestion Analysis Project : Collaboration with Transport for London(TfL) planners, allowing them to transform road-planning expertise into functional software capable of delivering a unique view of traffic conditions across London

Financial advisor to Department of Infrastructure, Planning and Natural Resources for a financial feasibility study of the Central Sydney Light Rail project proposed on PPP; detailed analysis of several different options to extend the current light rail infrastructure from Central Station to Circular Quay

Conducting a study on the public-private-partnership efficiency with respect to public transportation projects in Canada



# Water, Sewerage and Sanitation – Our service offerings



We have worked with	The World Bank Group	ADB	DfiD	JICA	USAID
	Ministry of Drinking Water Supply & Sanitation , Gol	Ministry of Urban Development, Gol	PHED, Jaipur	MCGM, Mumbai	Delhi Jal Board
	Tamil Nadu Water Supply and Drainage Board	Government of Punjab	Karnataka Urban Infrastructure Development and Finance Corporation	Hyderabad Metro Water Supply and Sewerage Board	Uttar Pradesh Jal Nigam
	Ahmedabad Municipal Corporation	Gujarat Infrastructure Development Board	Aditya Birla Capital Advisors	Tata Projects Limited	Maharashtra Environmental Engineering Training & Research Academy (MEETRA)

# Water, Sewerage and Sanitation – Our select credentials

- Identification and Evaluation of Options for Implementation of the National Urban Sanitation Policy (NUSP) at the State Level
- Preparation of RWSS National Program for Low Income States, India
- Identifying Structural Reforms in Delhi Jal Board
- Action plan to set up an independent Water Supply and Sewerage Utility for Municipal Corporation of Greater Mumbai, India
- Ring fencing the Water Supply and Sanitation Services of Bhubaneswar (Phase I and II)
- Jaipur City Water System Institutional Arrangement Support and Preparation of Business Plan for Water Utility

## Our other select team credentials

Institutional Development Study of RWSS Program in Karnataka

Preparation of a Flexible Financial Model and Detailed Implementation Plan for an Incentive-Based Reform Program for Urban Water Supply and Sanitation in Maharashtra

Design of Performance Monitoring and Benchmarking System for Delhi Jal Board

Strategic Options Study for Developing Rural Water Supply Systems with Private Sector Participation in Four States (Assam, Bihar, Jharkhand and Uttar Pradesh)

Development of Outline M&E Program for the Rural Water Supply and Sanitation Project for Low Income States (RWSSP-LIS)

Urban Water Supply and Sanitation in Maharashtra- Preparation of a Flexible Financial Model and Detailed Implementation Plan for an Incentive-Based Reform Program

Assessment & Developing an Appropriate Plan of Action to Strengthen MEETRA of WSSD over Short term & Long term Period

Assessment of Urban and Rural Water Supply in State of Haryana

Punjab Rural Water Supply and Sanitation (RWSS) Project

Preparation Study, Delhi Water Supply & Sewerage Project – Delhi Jal Board

Study of tariff & financing urban water supply and sanitation for Ministry of Urban Development, Government of India

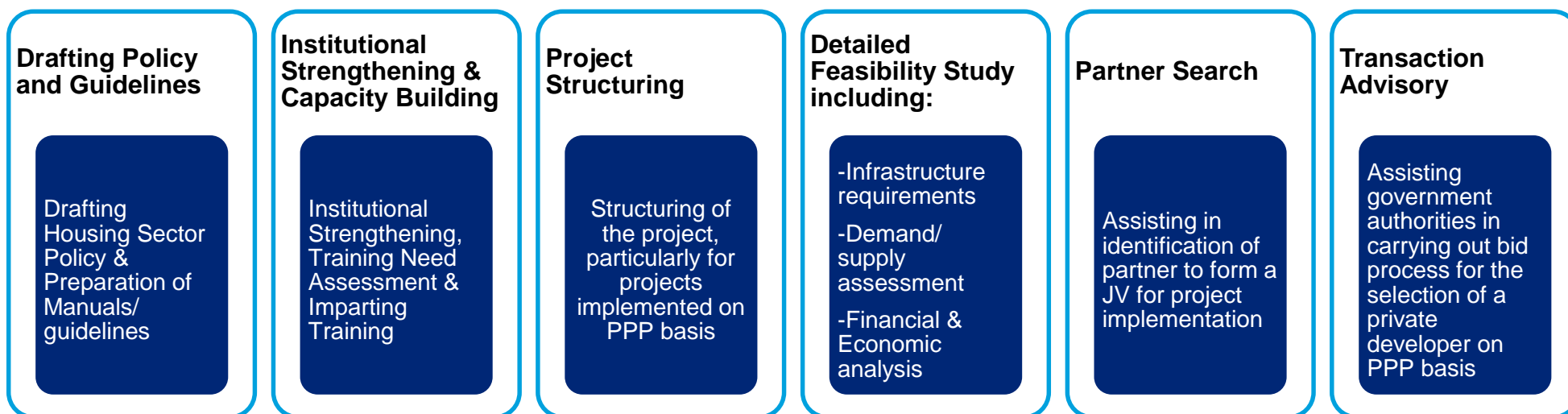
Assistance in appointment of agency for setting up solid waste treatment facility in Ahmedabad and Appraisal of proposals for Solid Waste Management in Ahmedabad city

Assistance to U.P. Jal Nigam for implementation of Solid Waste Management PPP projects in 11 cities of U.P

# Water Resources, Stewardship and Hydro-economic Analysis

- Hydro-economic Analysis for water for the state of Karnataka- Industry and Urban sectors
- Preliminary Hydro-economic analysis for the state of Maharashtra- focused on agri-water efficiency
- Identification of Public-Private Partnership concept projects in natural resource management areas including water resources
- Training on Public-Private Partnership models in natural resource management including water resources

# Real estate, Housing and SEZ – Our service offerings



We have worked with	Bihar State Housing Board	IFC & World Bank	Emirate of Ras-Al-Khaimah	JBIC (now JICA)	Emirate of Ras-Al-Khaimah
	Bhubaneshwar Development Authority	Government of UP	IT&C Department, GoAP	Bangladesh Export Processing Zone	SUN – Apollo Real Estate Fund
	Emaar MGF Land Pvt. Ltd.	TIDCO	GIDC	IFFCO	Bengal Port Limited
	Housing Development and Infrastructure Ltd.	Lavasa Corporation Ltd.	Adani Ports Ltd.	IL&FS	Gulf Finance House
	MoHUPA, GoI	Opto Infrastructure Ltd.	Universal Success Enterprises Ltd.	Indiabulls Real Estate Ltd.	Sea King Infrastructure Ltd.
	Municipal Affairs Dept., GoWB	MuthootPapachan Group (MPG)	Claridges Group	Brandix	GMR Group

# Real estate, Housing and SEZ – Our select credentials

- Development of Affordable Housing Project in PPP mode for Bhubaneswar Development Authority (IFC – World Bank)
- Transaction advisory and private investor search for development of large scale 12,500 acre integrated township in Pune district to Lavasa Corporation Limited
- Institutional Strengthening & Transaction Advisory Support for Development of Integrated Township to Bihar State Housing Board
- Development of the Biotechnology SEZ at Bangalore, Karnataka, on a PPP basis
- Pre-feasibility for developing an Integrated Industrial Township in UP
- Market viability for a 105-acre Integrated Township in the IT hub of Bangalore

## Our team credentials

Transaction advisory for development of housing units for Central Paramilitary forces for Ministry of Home Affairs, Govt at 250 locations in India in PPP mode

Technical and management support for Setting up of Project Management Unit (PMU) under Kolkata Urban Services to the Poor (KUSP) - Change Management Unit (CMU)

Demand assessment and development of market entry strategy for Muthoot Papachan Group to enter the micro-mortgages business in low cost affordable housing segment

Market assessment, policy assistance and recommendations to Ministry of Housing & Urban Poverty Alleviation (MoHUPA), Govt. of India on the affordable housing task force

Market assessment, master plan development, technical and financial feasibility and preparation of a Detailed Project Report (DPR) for the proposed integrated township on 140 acres of land, Tirupati

Feasibility study and pre money valuation for an 80-acre integrated township in Visakhapatnam

Financial advisory and regulatory clearance for GMR Hyderabad Airport Based SEZ

Action plan for selection of suitable location for SEZ or Industrial Zone development in India - (JBIC)

Business plan of Ennore SEZ, Kulpi SEZ, Positra SEZ, Sinnar-Nashik SEZ

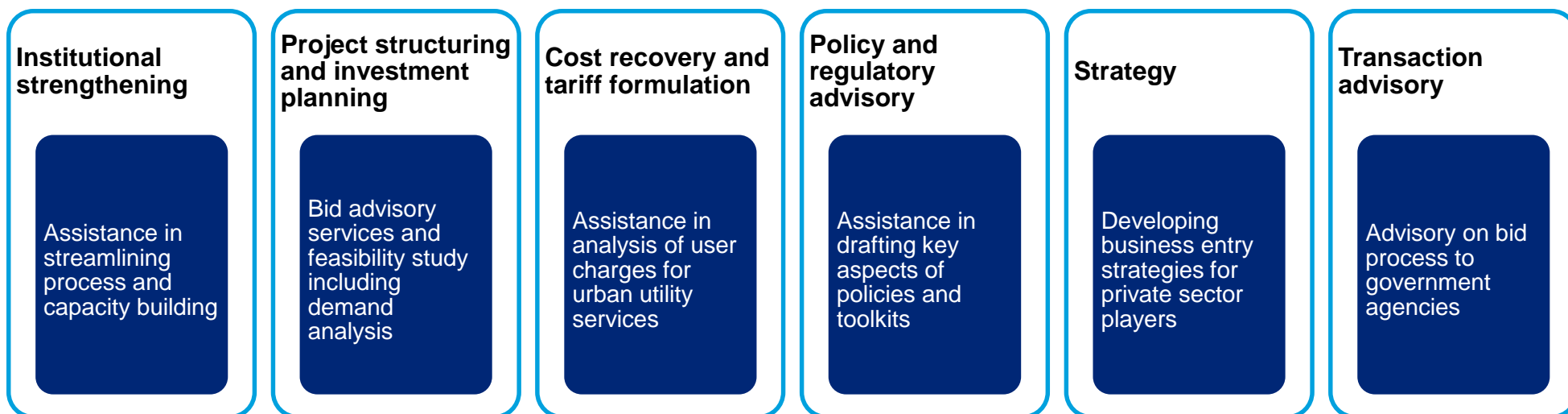
Financial advisory for SEZs at Vasai – Virar, Ambernath, Nashik, Aurangabad and Pune

Financial Advisory Krishnagiri Special Economic Zone, India

Pre-financial feasibility study for a Special Economic Zone at Nellore, India

Partner search for SEZ at Nashik

# Urban infrastructure – Our service offerings



We have worked with	USAID	DfID	World Bank	ADB	JBIC (now JICA)
	AusAID	Ministry of Urban Development	Kolkata Municipal Corporation	MCGM	MMRDA
	AP Urban Finance and Infrastructure Development Corporation	Tamil Nadu Water Supply and Drainage Board	Kerala Water Authority	Hyderabad Metro Water Supply and Sewerage Board	Municipal Corporation of Hyderabad
	Subhash Projects & Marketing Ltd	GIDB	Govt of Rajasthan	Kanpur Development Authority	Government of Punjab

# Urban infrastructure – Our select credentials

- Preparing a flexible Financial Model and implementing an Action Plan for Maharashtra Sujal Nirmal Abhiyan
- Appraisal of Urban reforms recommended under the Jawaharlal Nehru National Urban Renewal Mission
- Preparing the Business Plan and institutional strengthening of the Institute of Urban Transport, India
- Transaction advisory to MMRDA for a proposed integrated e-waste facility for the Mumbai Metropolitan Region
- Preparing the Urban Reform agenda for Arunachal Pradesh
- Preparing the Organisation Development Strategy, under the Capacity Building Programme for Kolkata Municipal Corporation

## Our team credentials

Support for Jawaharlal Nehru National Urban Renewal Mission (JNNURM) Project

Water and Waste Entry Strategy for a leading Indian construction company

Assessment of opportunities in industrial water and waste for a leading Japanese conglomerate

Shillong and South Asia Regional, Water Supply and Sanitation Programme AusAID

Development of Infrastructure Projects in the Urban Local Bodies in Andhra Pradesh under PPP Mode

Consultancy Services for Improvement of Water Supply & Sewerage System for Towns of Gujarat

Preparation of CDP for JNNURM for twin cities of Ajmer and Pushkar

Assessment of Urban and Rural Water Supply in State of Haryana

Punjab Rural Water Supply and Sanitation (RWSS) Project

Preparation Study, Delhi Water Supply & Sewerage Project – Delhi Jal Board

North Karnataka Urban Sector Investment Programme for KUIDFC

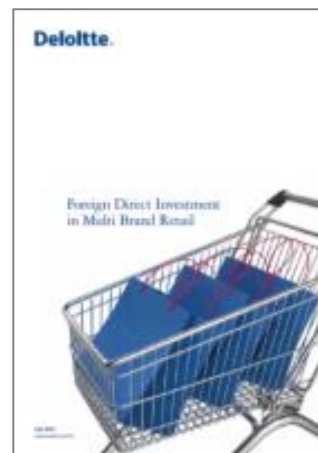
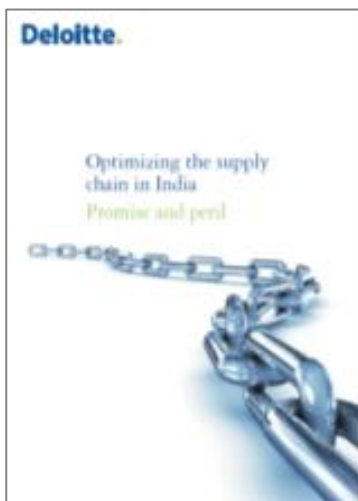
Business Plan Validation – Subhash Projects & Marketing Ltd.

Developed Vision for Kanpur City for Kanpur Development Authority

# Our select thought leadership

From an array of thought-provoking reference materials to up-to-the-minute releases on the most recent developments, Deloitte shares its intellectual capital with its clients. Some examples are listed below

## Consulting





**Deloitte.**