# PRCL Pipavav Railway Corporation Limited

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PIPAVAV RAILWAY CORPORATION LIMITED



## Presentation

- **The Macro Economic Picture**
- Demands on infrastructure
- Port hinterland connectivity
- Creation of SPVs
- **PRCL Construction Agreement**
- O&M agreement
- Other highlights

## The Macro Economic Picture

- South & South East Asia emerging as the most significant economic entities both as Manufacturing and Consumption Hubs
- GDP growth rate over 5% across the board with China and India sustaining over 8%.
- Intra-regional trade still limited
- Huge demands on infrastructure in SAARC, BIMSTEC & ASEAN countries
- Lack of matching investments in infrastructure inhibiting growth and development China & India being exceptions
- Transport sector becoming the core of infrastructure necessitating developments & Growth
- Port-hinterland connectivity both rail and road acquiring newer dimensions in the region

## **Port-Hinterland Connectivity**

- Mega ports emerging in South & South East Asia with increased capacity to handle EXIM (container and bulk cargo)
- Long lead movement from ports invariable by road and economical by rail
- Sectoral-Public investment planning inadequate to develop such connectivity
- Cost of surface transport much higher than by sea
- Participation of beneficiaries shipping lines, port authorities, public institutes and government departments required

## Global Surface Transport

- Transport cost of international trade in now over US\$ 1 trillion US\$
- Shipping continues to be the major shareholder of international trade
- Surface transport limited to intra-regional trade primarily by road
- Rail bound cargo limited to bi-lateral and national territories
- Inter-continental rail connectivity being developed through UN, UIC, SAARC, BIMSTEC and other regional initiatives

## **Indian Port Traffic**

- Integration of Indian economy with Global economy.
- Maritime infrastructure to play an ever growing role.
- Indian exports crossed US\$ 100 billion in 2005-06.
- Impressive annual growth of 25%.
- Imports crossed \$140 billion in 2005-06.
- For sustaining this growth port infrastructure alongwith rail and road connectivity is essential
- Containerization of cargo presupposes a seamless link with rail and road network in an end to end transport system.

## **Projections**

- Traffic for all ports likely to grow at CARG of 7.57%
- Major ports at 7.43% and non major ports at 8.47%
- Highest CARG expected in container traffic at 17.30%
- Container traffic to grow from 51 MT in 2003-04 to 251 MT in 2013-14 (3.90 million TEUs to 20.95 million TEUs)
- Evacuation of cargo from port to the hinterlands possible only through an efficient and developed rail and road infrastructure
- Indian Railway freight traffic growing over 9%.
- Target for 2006-07 is 724 MT & for 2011-12 1100 MT
- Necessitating matching growth in IRs network & infrastructure
  - (Source: Planning Commission, Government of India)

## **Rail Connectivity**

- 12 major ports handle 75% of the Maritime cargo.
- An increase from 19.38 MT in 50-51 to 383 by the end of 2004-05.
- GDP growth of over 9% committed in XIth plan, requires quantum growth in port infrastructure, rail connectivity.
- All major ports connected by rail.
- Strengthening of existing network –Gauge conversion, Doubling etc. planned.
- Other ports being provided rail connectivity through PPP arrangements and establishing SPVs
- Participation of port authorities, State Government, Central Government and other beneficiaries.

## Rail Port SPVs

- PPP encouraged by Ministry of Railways through formation of SPVs for rail port connectivity
- SPV (PRCL) established in 2000
- PRCL (joint sector Ministry of Railways and GPPL with 50-50 equity)
- During 2001-06, HMRDC and KRCL set up
- HMRDC connects Hasan with Mangalore port, GC of existing line, handling & coal traffic from April'06.
- Participation of MOR, Karnataka Government, Mangalore Port and beneficiaries.
- KRCL connects Palanpur with Gandhidham and onwards to Kandla/Mundra ports.
- Participation by Government of Gujarat, Kandla port, Mundra Port and MOR through RVNL.
- Two more SPVs being formed, Haridaspur-Paradeep and Kishnapatnam Port.

# Joint Venture in Rail Infrastructure (PRCL)

- MOR and GPPL created a Special Purpose Vehicle (SPV) for the purpose of Pipavav – Surendranagar Rail connectivity;
- 1<sup>st</sup> flagship Joint Venture Company of MOR.
- MOR & GPPL holds 50:50 equity each i.e. Rs.100 crore each.
- Rs.173 crore raised as Term Loan against the Total Cost of Project of Rs.373 crore.
- Governed by Board of Directors.
- First Non Government Railway having the status of a Railway Administration, under Railway Act 1989



## In step with National Economic Growth & Development

...multimodal logistics



single window solution provider

#### PIPAVAV RAILWAY CORPORATION LIMITED

(A joint sector of Ministry of Railways)

### **PRCL**

### The Project Location



## Pipavav Railway Corporation Limited

- The first joint sector company of the Ministry of Railways, with equal equity participation of Gujarat Pipavav Port Limited, registered under the Companies Act 1956
- Has a special approval of the Govt. of India to undertake construction, operation & maintenance of the Broad Gauge Railway line
- Concession Agreement with Ministry of Railways for use of Surenderanagar-Pipavav railway line for 33 years
- Conferred with the rights of a "Railway Adminstration" under the Railways Act, 1989
- PRCL has permission to run container trains on rail corridors serving the Ports of Pipavav, Mundra, Chennai, Ennore, Vizag and Kochi and their hinterland

## PRCL Project - Strength

- Railways departmental charges on construction exempted, which is 12.5 % of cost of construction, saving of Rs. 29 crore.
- PRCL was allowed to purchase all material directly from the market thereby saving huge cost and time for the Company.
- Apportionment of revenue on lines of zonal railways, no separate concession fee.
- As infrastructure Project, benefit of Income Tax exemption for 10 years of operation,
- Railway Staff on zero based principle, number reduced to half,
- Wagon/Loco hire charges at the rates applicable for other zonal railways and not as siding owners,
- Since maintenance by WR, Railway will renew all assets with in their codal life and manage all accident related matters at their cost.

## Pipavav Railway

- Covers a span of 271 Kms.
- 22 Railway Stations
- Newly constructed track with proven technology capable for a commercial speed of 100 Kmph
- Has a carrying capacity of 26 Million Tonnes per annum
- Line capacity of running 26 trains each way
- Highly sophisticated machines for maintenance
- Latest technology for signaling and telecommunication
- Dedicated for all round industrial growth and prosperity of the region
- Brings economic revolution in the area
- Running of double stacked containers trains

## Pipavav Port.... The Gateway Port

- All weather deep draught port located in the Saurashtra region of Gujarat with a capacity to handle 18 million tonnes cargo per annum
- World class multipurpose cargo handling facilities with latest equipment
- Day and night navigation
- 725 meter dry cargo berth
- Dedicated LPG/Liquid cargo berth of 305 meters
- Adequate warehouse facilities for bulk cargo

## Consultancy Services & Project Management

- Feasibility Studies for Rail, Road, Multimodal projects.
- Project reports for National & International Rail Infrastructure.
- **Expertise to undertake Project Management & Construction.**
- Special Studies and surveys for Double Stack and Triple Stack running.
- Containers operations and automobile transportation.

## Various Agreements Signed

- MOU between MOR & GPPL January 2000
- Shareholders' Agreement between MOR and GPPL March 2001
- Concession & Lease Agreement between MOR and PRCL June 2001
- Construction Agreement between PRCL and WR March 2002
- Transportation & Traffic Guarantee Agreement among PRCL, GPPL and WR January 2003
- Operation & Maintenance Agreement between PRCL and WR February 2003
- Pipavav Port Siding Agreement signed with GPPL for supervising of Port Siding, in February 2007

## Memorandum of Understanding

- MOR and GPPL to set up a Special Purpose Vehicle (SPV) to implement the broad gauge link between Surendranagar and Port of Pipavav
- SPV i.e. a joint venture company between MOR and GPPL to have a statue of non-government Railway under Indian Railway Act and is bound by the Companies Act, 1956
- MOR and GPPL to contribute 50% equity each
- Equal number of Directors from MOR & GPPL and Chairmanship remaining with Indian Railways

## Memorandum of Understanding ....

- Land, stations building, MG formation, bridges, etc. shall continue to be the property of IR and is made available on lease to the SPV
- Port of Pipavav guarantees minimum aggregate quantity of traffic to MOR
- MOR guarantees for timely provision of sufficient number of rakes for evacuation of cargo from Port.
- Operation and Maintenance on the SPV will continue to be with WR.
- SPV will receive due apportionment of earning from freight traffic.
- MOR will have access for passenger services free of charge.

## The Concession Package

Agreements	Context	<b>Participants</b>		
Concession	To Construct, Operate & Maintain the Project Line for <b>33 years</b>	MoR & PRCL		
Lease	Lease existing assets at <b>historical cost</b> for the entire concession period	WR & PRCL		
Construction	Construct the Project line on Cost Basis as applicable for inter-depts for Railways	PRCL & WR		
Operation & Maintenance	Operate & Maintain the Project line for CA period seamless operation enhancing efficiency and smooth operations	PRCL & WR		
Transportation & Traffic Guarantee	Guarantees to PRCL  from WR for rolling stock  from GPPL for rail cargo	PRCL, WR & GPPL		

## Shaerholders' Agreement

- MOR & GPPL to contribute Rs.100 crore each towards equity
- GPPL guarantees to PRCL a minimum annual aggregate quantity of Freight to ensure viability to the Project
- MOR guarantees to PRCL to provide sufficient Rolling Stock for evacuation of cargo from Port
- Board of Directors are responsible for management, control and supervision of SPV
- Day to day management of the company by CEO

## **Concession Agreement**

- MOR to lease all the project assets namely land, buildings, P.way, etc. to PRCL for a period of 33 years.
- PRCL to have exclusive right & authority to implement the project and is entitled to the rights, obligation & duties of a Railway Administration under Railways Act 1989.
- PRCL to have right to commercial exploitation of assets, i.e. land, building, etc.
- Right to construct, maintain and operate freight train services on the Project Railway and right to develop additional facilities for the purpose
- Right to Collect freight revenue from non-container traffic and haulage charges from container train operations on the Project Railway
- PRCL to have the first right to refusal at the time of renewal of the Concession Agreement
- PRCL to bear all the costs of Operation & Maintenance of the purpose of freight train services on this line
- MOR having right to run equivalent number of passenger services without any access charge to PRCL. However, new services will require prior permission from PRCL.
- MOR to bear the running and operation cost of passenger services

## Traffic Guarantee Agreement

- GPPL shall guarantee PRCL minimum quantity of cargo, i.e..
  - 1 million ton for the 1st year,
  - 2 million tonne in the 2nd year, and
  - 3 million tonne in the 3rd year.
- Failing which GPPL will pay apportioned freight earning by taking the average prevailing rate of freight per ton km on IR(74 Paise per ton Kms for the year 2002-03)
- Western Railway guarantees to PRCL the supply sufficient rolling Stock for evacuation of cargo from port( within a maximum period of 240 Hrs).
- In case WR fails to supply rolling stock within stipulated time PRCL to get credit of freight tonnage that would have accrued to PRCL had wagons been supplied in time.

## Pipavav Railway Corporation Limited

# CONSTRUCTION AGREEMENT

## **Construction Agreement**

- Signed between PRCL & MOR through Western Railway
- PRCL to appoint WR as Engineering, Procurement and Construction agency to carry out gauge conversion upto Rajula City and to lay new line upto Pipavav Station as a special deposit works
- PRCL to procure and supply all railway material such as rails, sleepers, ballast, fastenings etc. as per RDSO standard
- WR to undertake all works contracts as per standard practice
- PRCL to open ESCROW account to deposit payments which will be operated by the authorized representative of Western Railway
- PRCL to carry out periodic inspections to satisfy quality and progress of construction works
- Project Railway shall be deemed to have been completed and commissioned on issuance of safety certificate by Chief Engineer (Construction)
- No departmental charges payable by PRCL
- Direct & General charges upto the maximum of 6% of cost of detailed estimate to be paid by PRCL
- Project Railway to be fit for 100 Kmph and have gradient of not steeper than 1 in 150

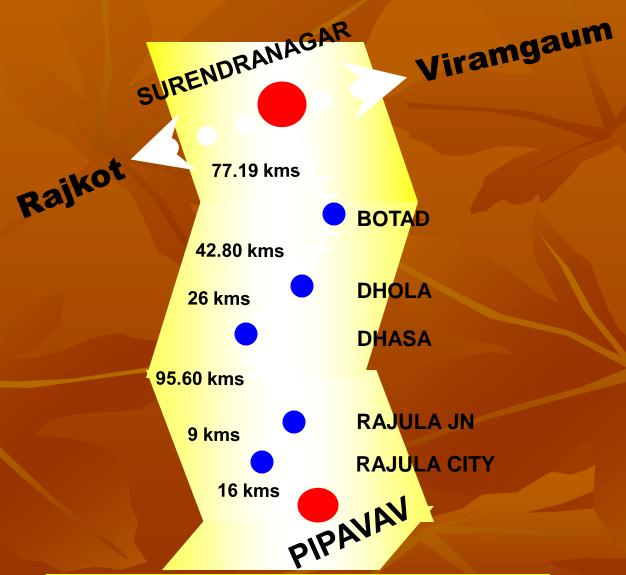
## **Construction Agreement**

- WR has carried out more than 2100 kms of gauge conversion works on the Indian Railways.
- Western Railway (WR) had already commenced the Civil Works as part of the scheduled project of the Indian Railways and has completed 85% of the works as on date.
- PRCL intends to appoint Western Railway as the Construction Agency to undertake the balance construction and commissioning of the Project Railways.
- Draft vetted by the Ministry of Law.
- Agreement covers:
- PRCL to procure the critical material and supply the same as Free Issues to WR.
- WR shall undertake the balance scope of work of track linking and commissioning of the Project Railway.
- The entire scope of work to be completed within the scheduled project Cost of Rs. 294 crores.
- Construction and Commissioning of the Project Railway to be completed by 31<sup>st</sup> December 2002.

### the project location . . . .



## the project route . . . .





### salient technical features . . . .

- Gauge Standards Broad Gauge 1676 mm
- Speed Capacity 100 kmph
- Curves Less than 5 deg, ensures faster and safe movements.
- Standard of Interlocking Std III with Tokenless Block System, dynamic signalling systems
- Ruling Gradient 1 in 150
- Traction Diesel traction
- Power Minimal as locomotives are run on diesel.

• LAND:	Leased to PRCL.	by WR	
• CONSTRUCTION	Western Railway	by WR	
• CIVIL WORKS	Formation, Bridges FOB, ROB, Structures	by WR	
• P-WAY WORKS	Rails, Sleepers, Ballast Points & Xs, etc	by PRCL /WR	
SIGNALLING &     TELECOM	Std III Tokenless Block System	by WR	
• ELEC/MECH	Modifications/Erection	by WR	
BLOCK PERIOD	Track Linking	by WR	
TRIAL RUNS	Clearances	by WR <sub>31</sub>	

### the implementation schedule .....

### **Civil Works**

Earth Work/Formation
Major Bridges
Minor Bridges
Station Buildings, etc



### **Permanent Way Works**

Procurement Activities
Rails
Sleepers/ Ballast
Points & crossings
Electrical Works
Signaling
Telecommunication



### Track Linking

Mega Block - Surendrangar - Botad Mega Block - Botad - Dhasa Mega Block - Dhasa - Pipavav Jul 2002 to Oct 2002Aug 2002 to Nov 2002Apr 2002 to Dec 2002

#### **COMMERCIAL OPERATIONS**

1st January 2003 (Target) 25<sup>th</sup> March, 2003 (Actual)

## **Issues**

- Special works for DFC etc. including ROBs, FOBs being assigned to Western Railway
- A similar work for traffic facility like development of terminals being undertaken directly by PRCL
- Regular upgradation of infrastructure being undertaken
- Doubling not anticipated for a few more years
- Upgradation require to connect the line as a primary feeder route to DFC in a few years time



# OPERATIONS 2

MAINTENANCE

# Operation & Maintenance Agreement

- Western Railway to maintain project railway assets and operate freight services of PRCL on the basis of fully recovered cost.
- WR to bear accident management cost unless if it proved that it is caused due to the negligence of PRCL.
- WR to settle claims, etc. in case of any damage/theft to cargo.
- PRCL will bear the cost of damage by breach, flood, earth quack, etc.
- Joint Survey Committee of WR & PRCL to determine methodology for computing fixed & variable cost.
- PRCL to receive apportioned earning from WR on the basis of interrailway financial adjustment.

## Operation & Maintenance Agreement...

- PRCL to pay wagon and loco hire charges without the element of interest.
- Mechanized maintenance of railway assets on the lines of KONKAN Railway.
- O&M cost consists of -
  - Cost of Railway staff posted on PRCL (Only for freight operation).
  - Cost of material required for maintenance of assets.
  - Variable cost of train operation such as wagon /loco hire charge, cost of crew, fuel etc.
  - Direct & indirect charges such as pensionary benefits, medical, RPF, etc.

### the operations system .....



**Operation & Maintenance to be carried out by Western Railway** 



**Capacity to handle 500 Million Gross Metric Tonnes of traffic** 



Total number of trains per day = 26 trains one way



WR to supply all rolling stock for the smooth operations and maintenance of the Project line, i.e. rakes, wagons, locomotives.



WR to ensure prompt evacuation of the cargo and prompt operation on the Project Railway



WR to give priority for the movement of cargo generated on the Project Line



WR as the carrier, to be fully responsible for all accidents and the claims /liabilities of the consignments

### **MAINTENANCE**

- All Maintenance to be carried out by Western Railway
- Systematic and regular maintenance checks to ensure safety on the Project Railway
- O Immediate attention and prompt action in restoring lines in the event of accidents and other eventualities.
- Replacements to be carried out as per the codal life of the assets

### The replacement life of the critical assets are as follows:

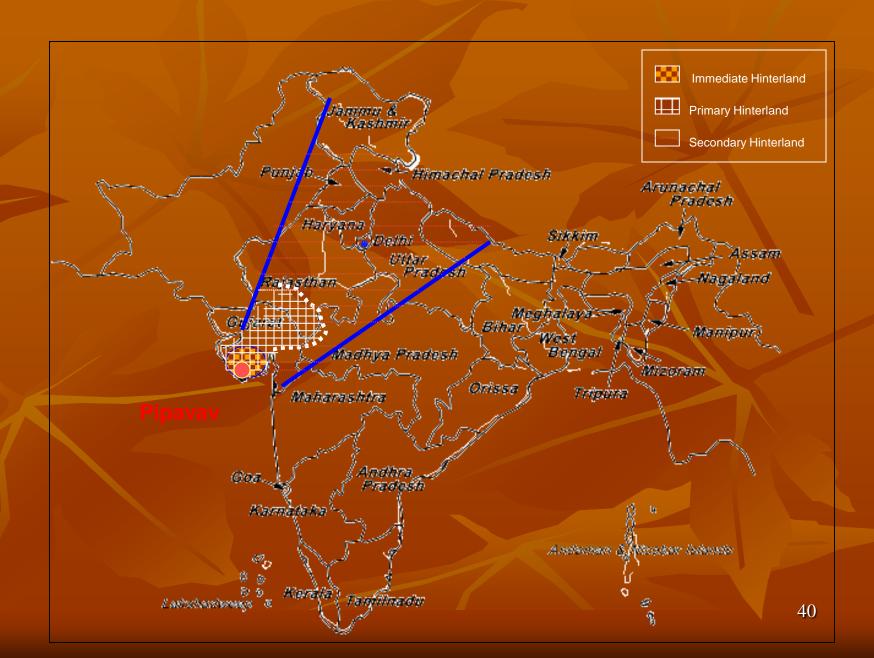
- Rail after covering 560 GMT
- Sleepers after every 40 years
- Fittings after every 5-7 years
- Ballast 5% replacement every year
- Signalling after every 10 years
- Telecommunciations after every 15 years
- Bridges / Culverts after every 60-100 years

## **Traffic Potential**

- Traffic 0.38MT in 2003-04, 0.9MT in 2004-05 & 1.57MT in 2005-06
- **2006-07** to end with 2.25 MT
- Projections for next 6 years :-

Year	Coal	Fertilizer	Bulk	<b>Container Volumes</b>		Total
	MT	MT	MT	TEUs	MT	MT
2007-08	1.52	0.14	1.66	152,308	1.98	3.64
2008-09	1.52	0.28	1.80	164,615	2.14	3.94
2009-10	1.52	0.61	2.13	226,154	2.94	5.07
2010-11	1.52	0.61	2.13	338,462	4.40	6.53
2011-12	1.52	0.61	2.13	338,462	4.40	6.53
1012-13	1.52	0.61	2.13	338,462	4.40	6.53

### the market . . . .



## Issues

- Port development programme under way
- Traffic less than projected despite impressive growth rate
- Debt servicing liability beginning April'07 requires additional resource mobilization
- Deferment of O&M cost by MOR
- Aggressive and unorthodox marketing efforts resulted in additional revenue generation during 2006-07
- DSC & proposed TSC operations will give additional revenue and reduce O&M cost

## New Initiatives by PRCL

- DSC operations from March, 2006
- Plans to operate its own container trains
- As Multimodal Logistics provider for car transportation
- Introduction of DSC under wire and TSC on diesel route
- International project studies and consultancy services
- Development of ICDs and Logistics Parks

## Thank You