

PUBLIC PRIVATE PARTNERSHIP IN RAILWAYS
- Essential Features, Background & Indian
Railway Experience

BIMSTEC PROGRAMME
RAILWAY STAFF COLLEGE
5th March 2013

THIS SESSION

- **BASIC CONCEPTS OF PPP**
- **BACKGROUND – WHY THE NEED FOR PPP**
- **PRIVATIZATION /PPP EXPERIENCE ON VARIOUS RAILWAY SYSTEMS**
 - **DEVELOPING COUNTRIES - LATIN AMERICA/AFRICA**
 - **DEVELOPED COUNTRIES – UK, JAPAN...**
- **INDIAN RAILWAY EXPERIENCE**
- **CASE OF BHARUCH DAHEJ RAILWAY CO. LTD.**
- **CONCLUSION**

BASIC CONCEPTS OF PPP

DEFINITION OF PPP

- ***“Provision of a public service or good by a private partner who has been conceded the right (the “Concession”) for the purpose for a specified period of time on the basis of pre-determined revenue stream/s that allow for commercial return on investment/market-determined management fee”***

ANOTHER DEFINITION OF PPP

- ***“Public-Private Partnership (PPP) Project means a project based on a contract or a concession agreement between a Government or statutory entity on the one side and a private sector company on the other side, for delivering an infrastructure service on payment of user charges.”***

WHAT PPP IS ABOUT

- Private sector involvement in building infrastructure assets and in providing services derived from those assets.
- PPP contracts stress long-term service delivery rather than asset creation only.
- Services which may be provided to the Government or directly to final consumers.

WHAT PPP IS NOT

- PPP is not Public Investment in Private Infrastructure
- PPP is not Private Investment in Private Infrastructure
- PPP is not Private investment in other than providing a public service or good
- PPP is not transferring responsibility from Government to the Private Sector

DIFFERENCE BETWEEN PPP & OTHER INITIATIVES

PUBLIC FINANCE	PUBLIC PRIVATE PARTNERSHIP	PRIVATIZATION
INFRASTRUCTURE FUNDED AND FINANCED BY THE PUBLIC SECTOR	INFRASTRUCTURE INITIATIVE BY THE GOVERNMENT PROJECT FINANCED BY THE PRIVATE SECTOR -USER PAYMENT -AVAILABILITY PAYMENT	INFRASTRUCTURE INITIATIVE BY PRIVATE SECTOR FINANCED BY THE PRIVATE SECTOR

PRIVATE SECTOR PARTICIPATION

- OUTSOURCING
- PRIVATELY OWNED RAILWAY STOCK
- SERVICE CONTRACT
- PRIVATE OPERATOR
- FRANCHISE
- CONCESSION
- PRIVATELY OWNED RAILWAY

BACKGROUND TO NEED FOR PPP

**NEED FELT FOR PRIVATE
SECTOR PARTICIPATION**

**SEVERE FUNDING PROBLEMS
TO UP GRADE &
EXPAND RAIL SYSTEM. ROAD
COMPETITION. RISING DEBT
LATE 20th CENTURY**

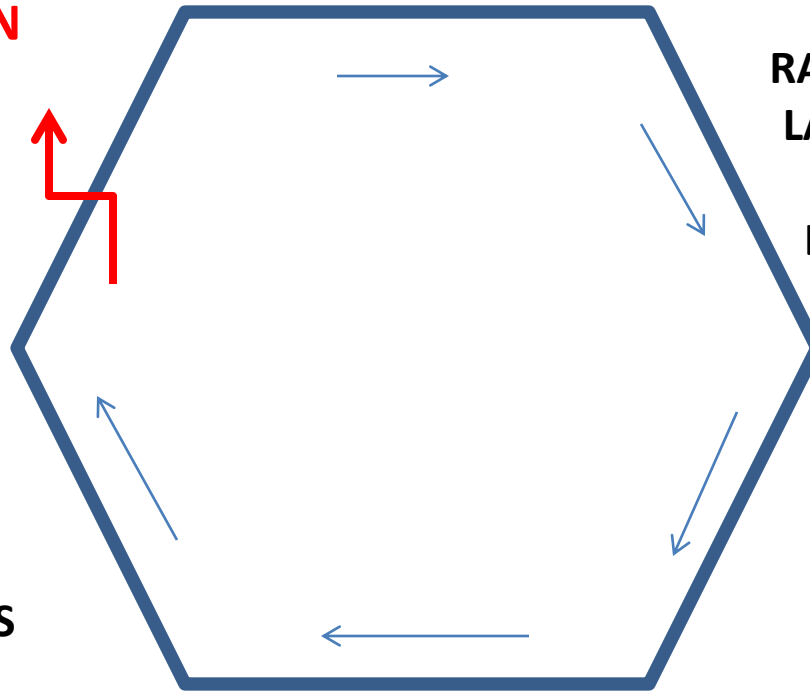
**NATIONALIZATION
OF RAILWAY SYSTEMS
MID 20th CENTURY**

**DEVELOPMENT OF RAILWAYS
BY PRIVATE ENTERPRISE
MID 19th CENTURY**

**RAPID CONSTRUCTION
LACK OF STANDARDS
MANY GAUGES
LATE 19th CENTURY**

**BEGINNING OF
GOVERNMENT
REGULATION. PERIOD
OF GROWTH
EARLY 20th CENTURY**

**RAIL SYSTEMS SUFFER
IN WW I & WW II**



RANGE OF RAILWAY PPP CONCESSIONS

	FIXED INFRASTRUCTURE		ROLLING STOCK	
	FINANCE & BUILD	OPERATE & MAINTAIN	FINANCE & MAINTAIN	OPERATE TRAIN SERVICES
TRAIN AVAILABILITY CONTRACT	PUBLIC	PUBLIC	PRIVATE	PUBLIC / PRIVATE (Hire from Private)
TRAIN OPERATING CONCESSION	PUBLIC	PUBLIC	PRIVATE	PRIVATE (Access Charge)
INFRASTRUCTURE BUILD CONCESSION	PRIVATE	PUBLIC / PRIVATE	PUBLIC / PRIVATE	PUBLIC / PRIVATE
INFRASTRUCTURE BUILD & OPERATE CONCESSION	PRIVATE	PRIVATE	PUBLIC / PRIVATE	PUBLIC / PRIVATE
INTEGRATED CONCESSION	PRIVATE	PRIVATE	PRIVATE	PRIVATE

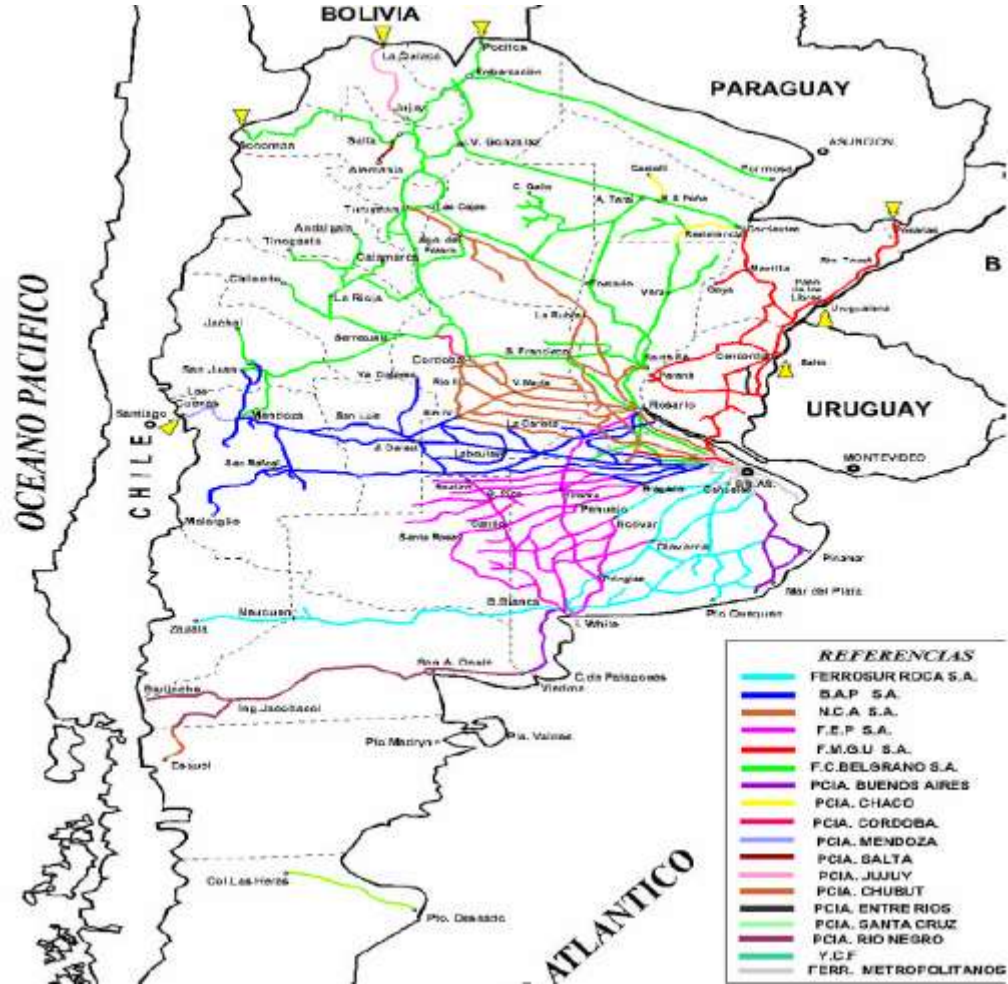
Source: Based on Presentation by R. Bullock, World Bank

GLOBAL EXPERIENCE

SOUTH AMERICAN RAILWAY SYSTEMS



ARGENTINA



SOME FEATURE OF CONCESSIONS

- CONCESSIONAIRE GIVEN RIGHTS TO OPERATE & MANAGE THE RAILWAY SYSTEM FOR VARYING PERIODS OF TIME.
- OWNERSHIP OF THE INFRASTRUCTURE WITH GOVT.
- EACH SYSTEM DIVIDED INTO SEVERAL CONCESSIONS
- VERTICALLY INTEGRATED WITH SOME THIRD PARTY OPERATING RIGHTS

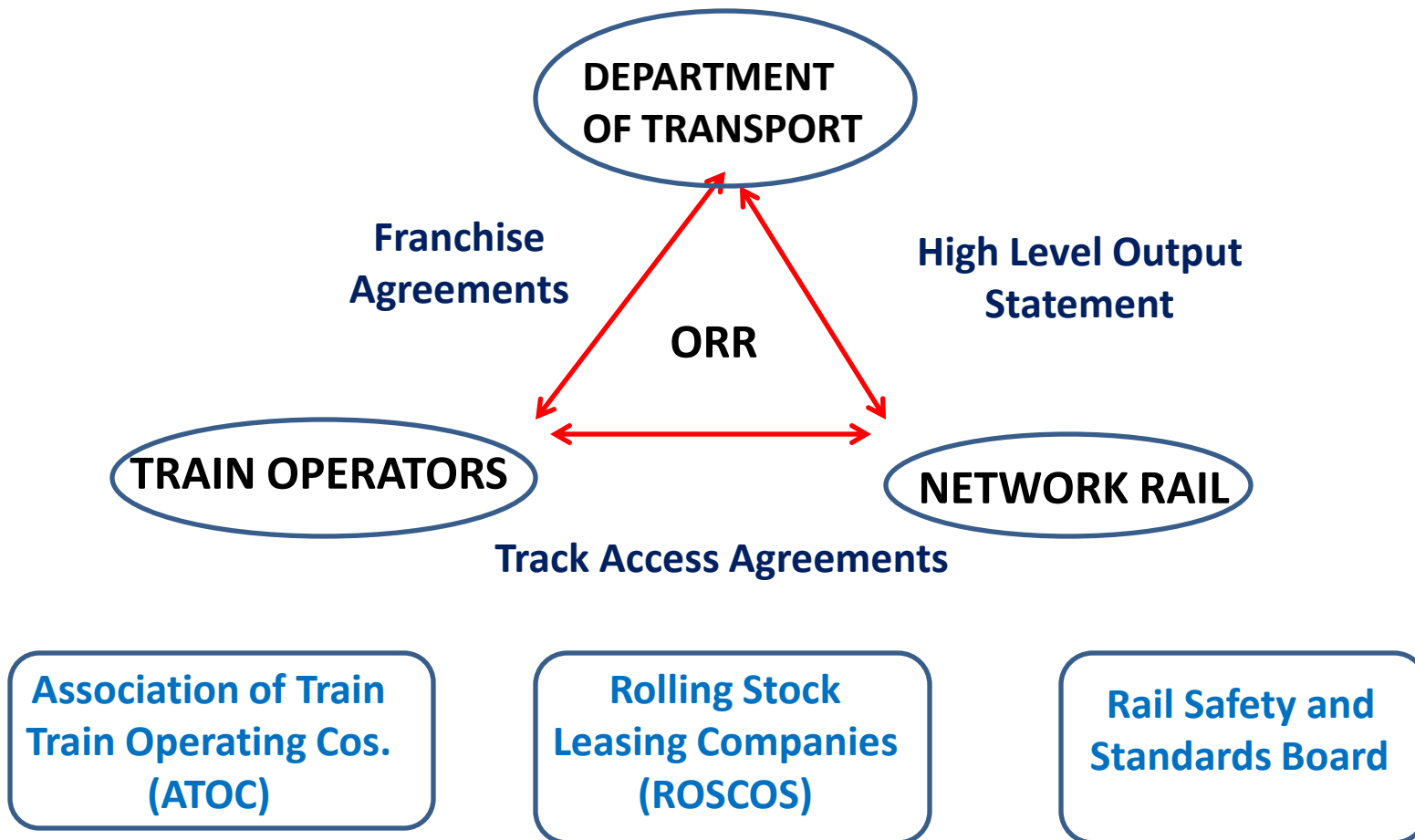
PERFORMANCE OF SOUTH AMERICAN CONCESSIONS

- **MODERATE ECONOMIC SUCCESS**
- **IMPROVEMENT IN EFFICIENCY**
- **INVESTMENT COMMITMENTS NOT MET**
- **STAFF REDUNDANCIES (95,000 TO 15000)**
- **INCREASE IN TARIFFS**
- **CONTINUED NEED FOR SUBSIDIES**
- **REDUCTION IN SERVICES**
- **SHRINKAGE OF SYSTEM (35000 TO 8500)**
- **LESSON: PPP MUST BE DRIVEN BY VALUE FOR MONEY PRINCIPLE FOR THE USER**

AFRICAN EXPERIENCE

CONCESSION	COUNTRY	YEAR	INFRASTR UCTURE	ROLLING STOCK	OPERA TIONAL	FINAN- CIAL
SITARAIL	IVORY COAST, BURKINAFASO	1995	PUBLIC	PRIVATE	GOOD	AVG.
CAMRAIL	CAMEROON	1999	PUBLIC	PRIVATE	FAIR	GOOD
CEAR	MALAWI	2000	PRIVATE	PRIVATE		
RSZ	ZAMBIA	2002	PRIVATE	PRIVATE	AVG.	AVG.
MADARAIL	MADGASCAR	2003	PUBLIC	PRIVATE	FAIR	AVG.
TRANSRAIL	SENEGAL/ MALI	2003	PRIVATE	PRIVATE	AVG.	POOR
BEIRA RAIL	MOZAMBIQUE	2005	PRIVATE	PRIVATE		
TRANSGABONAI	GABON	2005	PRIVATE	PRIVATE	FAIR	AVG.
NACALA RAIL	MOZAMBIQUE	2005	PRIVATE	PRIVATE	AVG.	POOR
KRC-URC	KENYA UGANDA	2006	PRIVATE	PRIVATE		
TRC	TANZANIA	2007	PRIVATE	PRIVATE	POOR	POOR
SNCC	DR CONGO	2011	PUBLIC	PVT./PUB	POOR	POOR

BRITISH (UK) MODEL



JAPANESE PRIVATIZATION

- JNR ESTABLISHED 1949 – ‘PUBLIC ENTERPRISE’
- DECLINING MKT. SHARE, LOSSES, MOUNTING DEBT
- JNR BECAME A MONOLITHIC ORGANIZATION WITH A WORKFORCE OF 400,000
- REFORMS
 - REGIONAL DIVISION
 - SEPERATION OF INFRASTRUCTURE & TRAIN OPERATION

JAPANESE REFORMS

- SIX PASSENGER RAILWAYS FORMED BY REGION
- FOCUS OF EACH ON REGIONAL OPERATION. SOME LONG DISTANCE SERVICES
- 2 NON OPERATING COMPANIES VIZ. RAILWAY TECHNICAL RESEARCH INSTITUTE & RAILWAY INFORMATION SYSTEMS CO. LTD.
- COMMON TICKETING RULES INTEGRATED RESERVATION

JAPANESE RAIL REFORM

- INITIALLY IN 1987 OWNERSHIP OF ALL OPERATING COMPANIES WITH GOVT.
- BY 2006 SHARES OF THREE COMPANIES OWNED BY PUBLIC VIZ JR-EAST, JR CENTRAL & JR WEST
- OWNERSHIP OF REMAINING COMPANIES, JR KYUSHU, JR SHIKUKO, JR HOKKAIDO & JR FREIGHT WITH JR CONSTRUCTION, TECHNOLOGY CO. A STATE INSTITUTION.

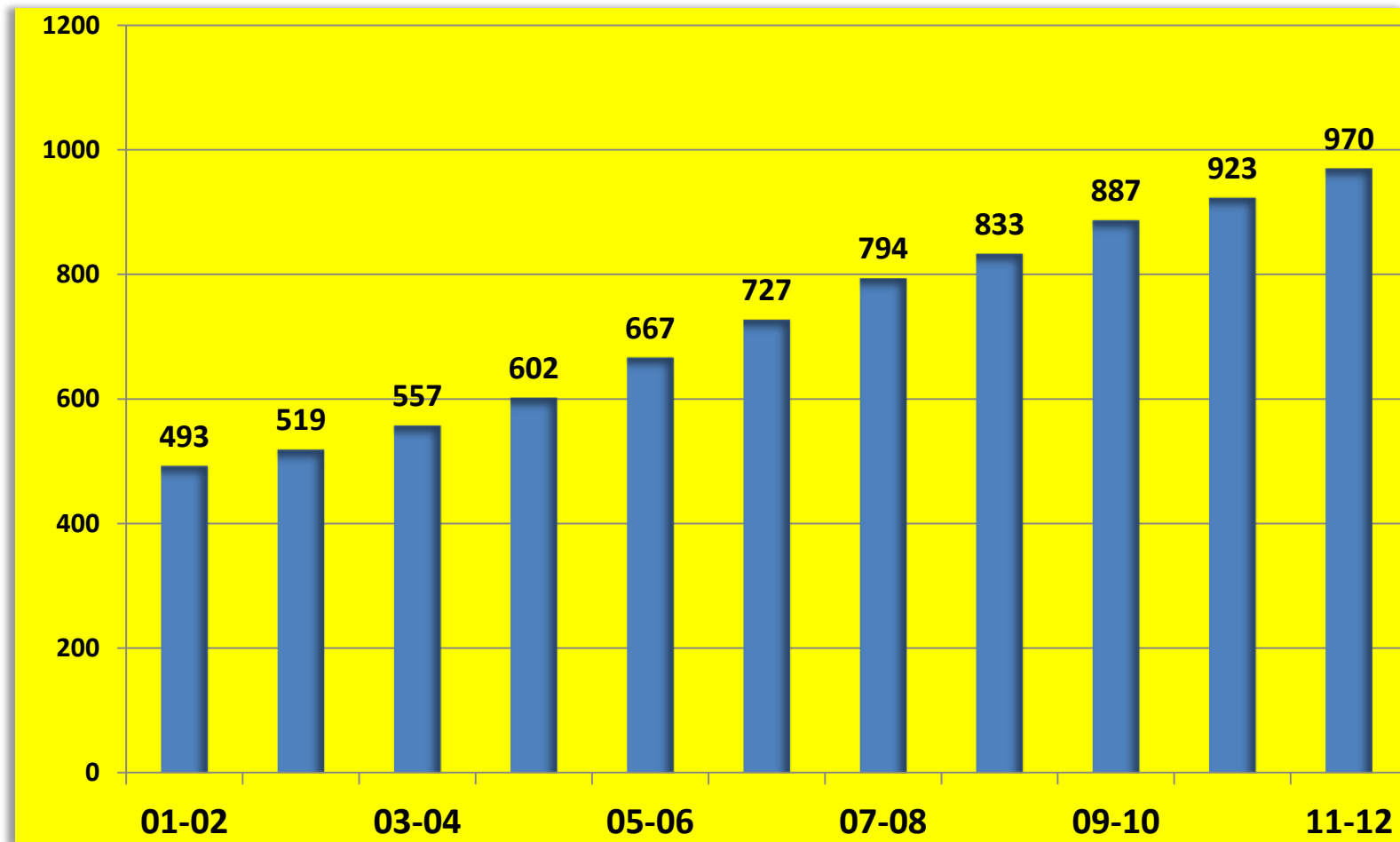
JAPANESE RAIL REFORM

- DEBT BURDEN TRANSFERRED PARTIALLY JR EAST, JR WEST & JR CENTRAL
- REMAINING DEBT TRANSFERRED TO JNR SETTLEMENT CORPORATION
- NATIONWIDE DRIVE TO EMPLOY SURPLUS STAFF.
- NEW COMPANIES EMPLOYED 30% MORE THAN REQUIREMENT, 71,000 STAFF RE-EMPLOYED ELSEWHERE OR RETIRED
- 40% OF DEBT OBLIGATION & 25% STAFF REDUCED

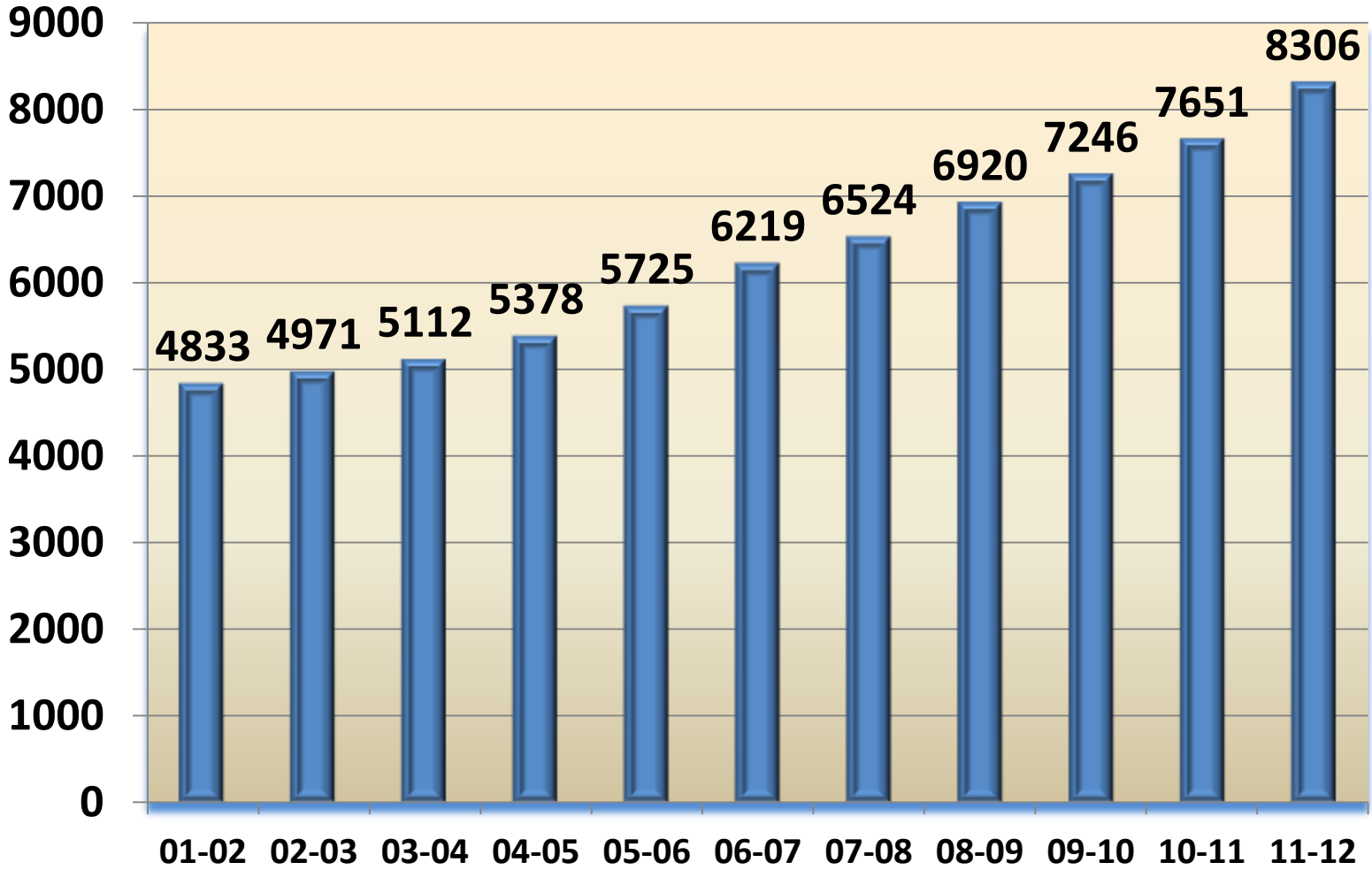
INDIAN RAILWAY EXPERIENCE

GROWTH IN FREIGHT TRAFFIC

ORIGINATING MILLION TONNES



GROWTH IN ORIGINATING PASSENGERS IN MILLIONS



TARGETS FOR XII PLAN

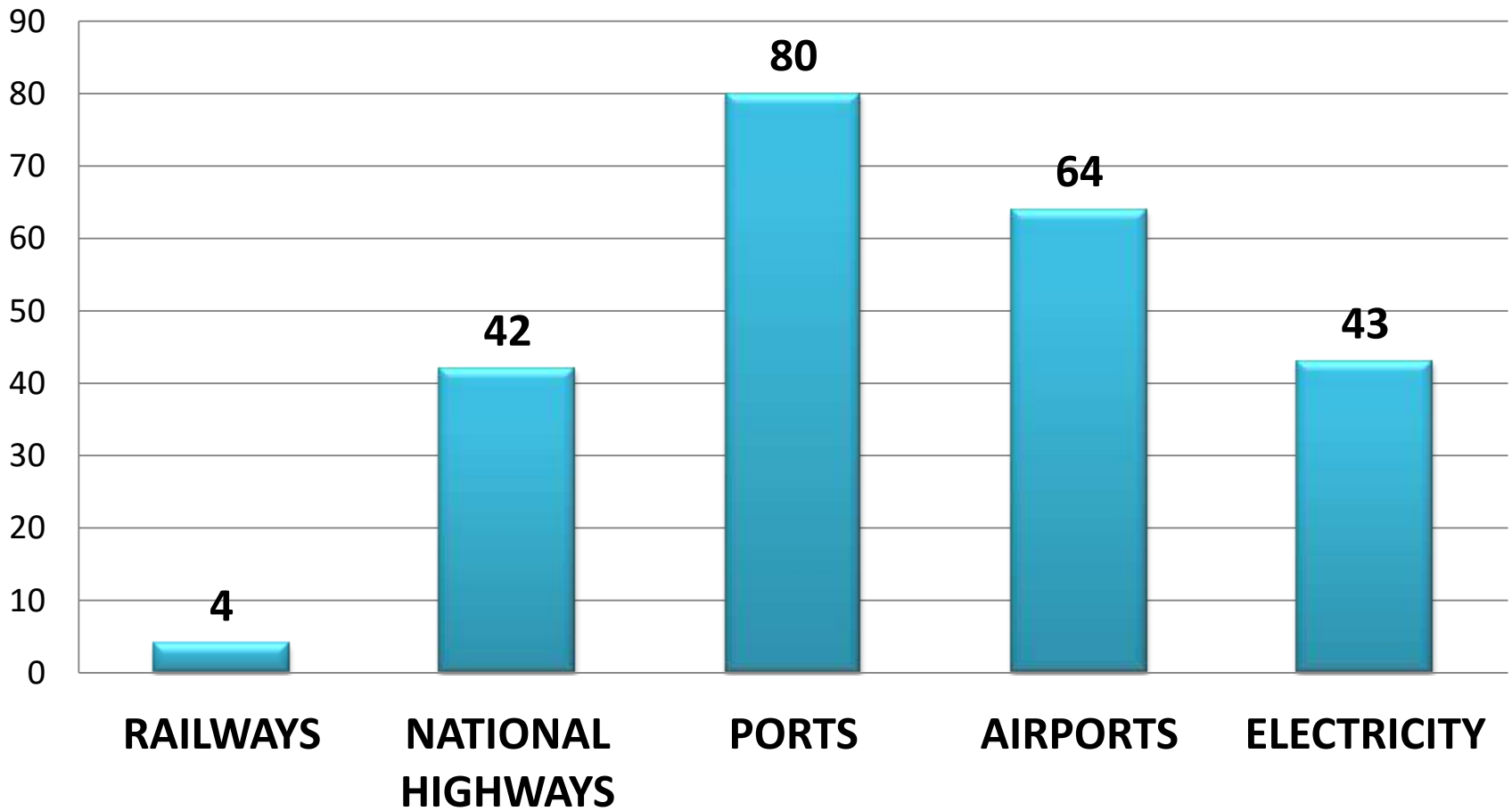
FREIGHT 2016-17

- SCENARIO I
 - 1405 MILLION TONNES
 - 927 BILLION NTKMS
- SCENARIO II
 - 1499 MILLION TONNES
 - 989 BILLION NTKMS

PASSENGER 2016-17

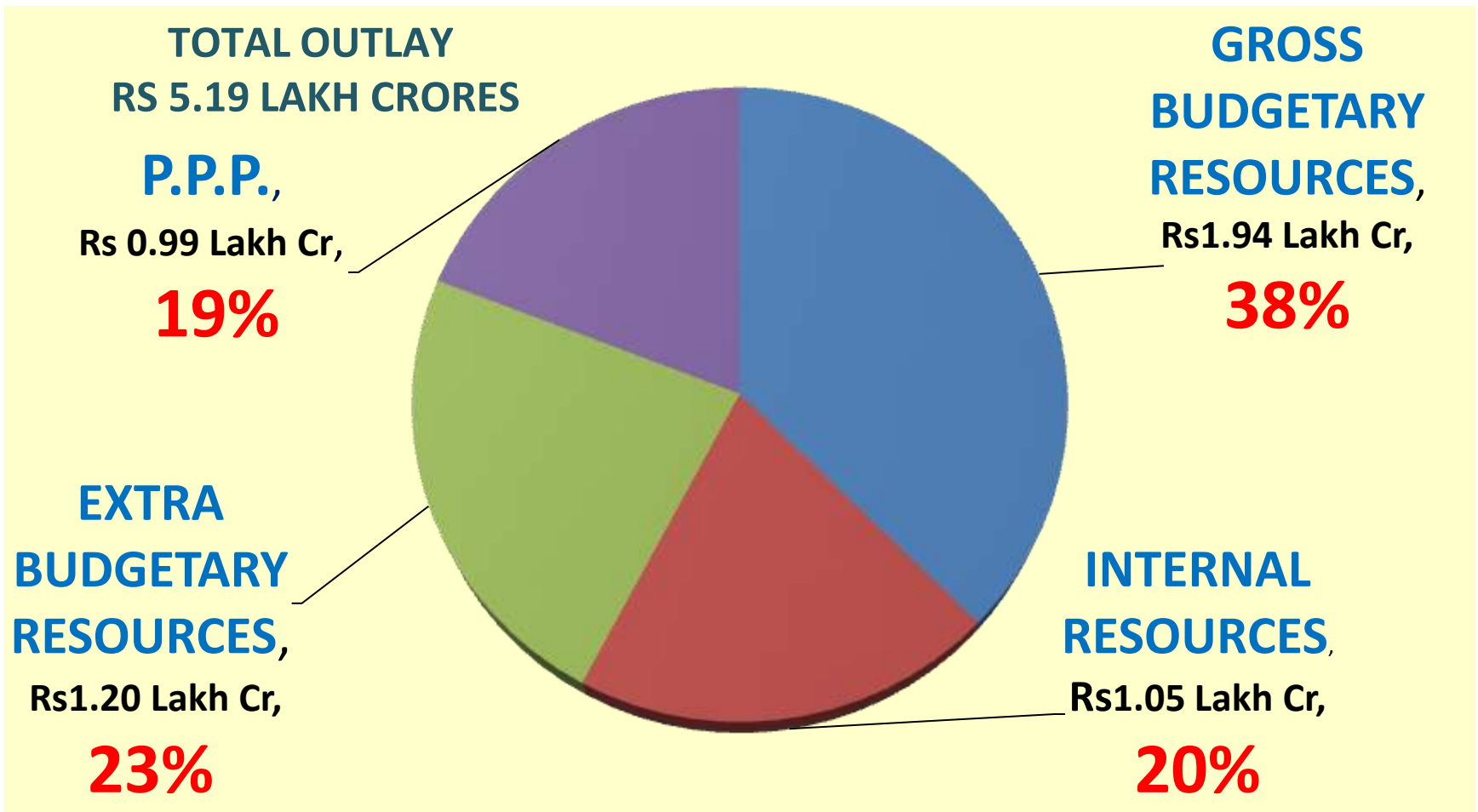
- ORIGIN. PASSENGER
 - 11711 MILLION
- PASSENGER KM.
 - 1760 BILLION

PRIVATE SECTOR INVESTMENT AS PERCENTAGE OF TOTAL SECTORAL INVESTMENT – XIth FIVE YEAR PLAN



XII FIVE YEAR PLAN OUTLAY

PLAN SIZE LIKELY TO BE CLEARED BY PLG. COMM.



PORT CONNECTIVITY PROJECTS ON IR

Project / SPV	Length (KMS)	Year Commissioned	Funding (Rs million)			
			Railway Equity	Partner Equity	Debt	Total
Pipavav Railway Corporation Ltd.	267	2003	980	980	1,770	3,370
Hassan Mangalore (HMRDC)	183	2006	450	670	2,310	3,430
Kutch Railway Co.	301	2006	1,000	1,000	3,000	5,000
Bharuch Dahej Railway Co. Ltd.	62	2012	429	1,221	2,300	3,950
Haridaspur Paradip Railway Co.	82	Under Constn.	1,332	1,428	8,990	11,750
Krishnapatnam Railway Co. Ltd.	113	Under Constn.	810	1,910	9,330	12,050
Angul Sukinda Railway Ltd.	95	Under Constn.	1,890	2,310	6,320	10,520
Total	1,103		6,891	9,519	34,020	50,430

PLANNED PPP PROJECTS 2012-17

PROJECT	PRIVATE INVESTMENT (Rs BILLION)
Logistics Parks	70.00
Private Freight Terminals etc.	28.15
Captive Power Generation	40.00
Renewable Energy Projects	10.00
Energy Conservation Projects	10.00
Locomotive Manufacturing Units	30.00
Development of Stations	261.63
High-Speed Corridor	200.00
Elevated Rail corridor in Mumbai	200.00
Dedicated Freight Corridors	100.22
Port Connectivity Projects	50.00
Total	1,000.00

OTHER SCHEMES FOR PRIVATE SECTOR PARTICIPATION IN RAILWAYS

SCHEME	DESCRIPTION	RESPONSE
CONTAINER TRAIN OPERATORS SCHEME	Private Companies permitted to operate Container trains.	Entry of 15 operators
PRIVATE FREIGHT TERMINAL POLICY	Private investment in Terminals to augment / modernize capacity	32 Applications 6 PFTs Notified
AUTOMOBILE FREIGHT TRAIN OPERATOR SCHEME	Private investment in Auto Carrier trains to increase Rail Market Share	2 Applicants Maruti + 3PL Co
SPECIAL FREIGHT TRAIN OPERATOR SCHEME	Private investment in Special Wagons for Bulk Transportation	3 Caustic Soda Trains cleared
LIBERALIZED WAGON INVESTMENT SCHEME	To enable private procurement of general purpose wagons	52 Train sets acquired
WAGON LEASING SCHEME	To enable third party leasing of wagons	2 Global majors enter into JVs

NEW PPP MODELS

MODEL	BRIEF DETAILS
NON GOVERNMENT RAILWAY MODEL	Development, Financing, land acquisition, maintenance by Developer. Operation by IR. 95% freight revenue apportionment.
J.V. MODEL (FOR OPERATIONALLY NECESSARY & BANKABLE PROJECTS)	JV of IR with stake holders. Development, structuring, land acquisition, Operation by IR. Construction by JV. Maintenance by JV or IR
B.O.T MODEL (THROUGH COMPETITIVE BIDDING)	DPR by IR. Concessionaire to Design, Build, Finance, Maintain & Transfer. Apportionment of 50% freight to Concessionaire.
CAPACITY AUGMENTATION (FUNDING BY CUSTOMERS)	For Doubling etc. Development, construction, O&M by IR. Funding by customer. Freight rebate of 7% till return of investment + int.
CAPACITY AUGMENTATION (ANNUITY PAYMENTS)	For Doubling etc. Development, O&M by IR. Construction & Financing by Concessionaire. Annuity based on bidding criteria –15/20 yrs.

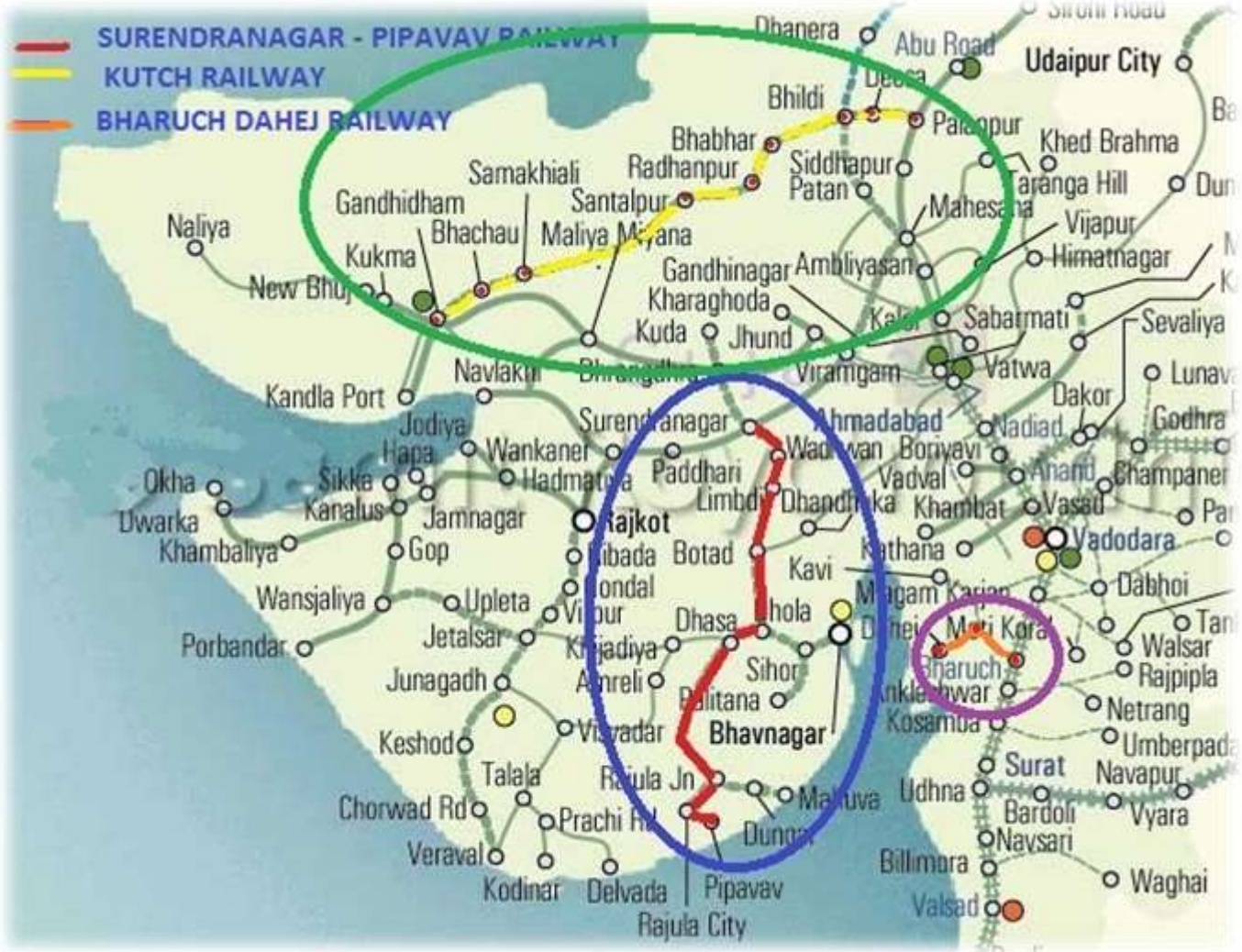
NEW PPP MODELS ON IR

ROLE OF PRIVATE & PUBLIC (IR) ENTITIES

MODEL	DEVELOP / DPR	LAND ACQ.	CONSTR- UCTION	MAINT- ENACE	OPERAT -IONS	PER- IOD	REV. SHARE
NON GOVT. RAILWAY	PVT.	PVT.	PVT.	PVT.	PUB.	-	95%
J.V. MODEL	PUB.	PUB.	PVT.	PVT. OR PUB.	PUB.	30	100%
B.O.T MODEL	PUB.	PUB.	PVT.	PVT.	PUB.	25	50%
CAP. AUGMENTATION - CUSTOMER FUNDING	PUB.	PUB.	PUB.	PUB.	PUB.	-	7% REBATE
CAP. AUGMENTATION - ANNUITY	PUB.	PUB.	PVT.	PUB.	PUB.	15- 20	BID CRITERIA

BHARUCH DAHEJ RAILWAY CO. LTD.
CASE STUDY

BHARUCH DAHEJ RAILWAY



BHARUCH DAHEJ RAILWAY CO. LTD.

- **MOU – RVNL & Adani Petronet (Dahej) Port Pvt. Ltd -2005**
- **Shareholders Agreement 2007, Concession 2008 & Construction Agreement 2009; Operational – 2011-12**
- **INITIAL COST – Rs 285 Crores (Debt Rs 200 Cr; Debt 85 Cr) 70:30**
- **SHAREHOLDERS**
 - **Rail Vikas Nigam Ltd,**
 - **Dahej SEZ**
 - **Gujarat Maritime Board**
 - **Adani Petronet (Dahej) Port Pvt. Ltd.**
 - **Gujarat Narmada Valley Fertilizers Company Ltd.**
 - **Hindalco Industries Ltd.**
 - **Jindal Rail Infrastructure Pvt. Ltd.**
 - **Gujarat Industrial Development Corporation**
- **COST REVISED TO Rs 355 CRORES – LATER TO Rs 395 Crores**

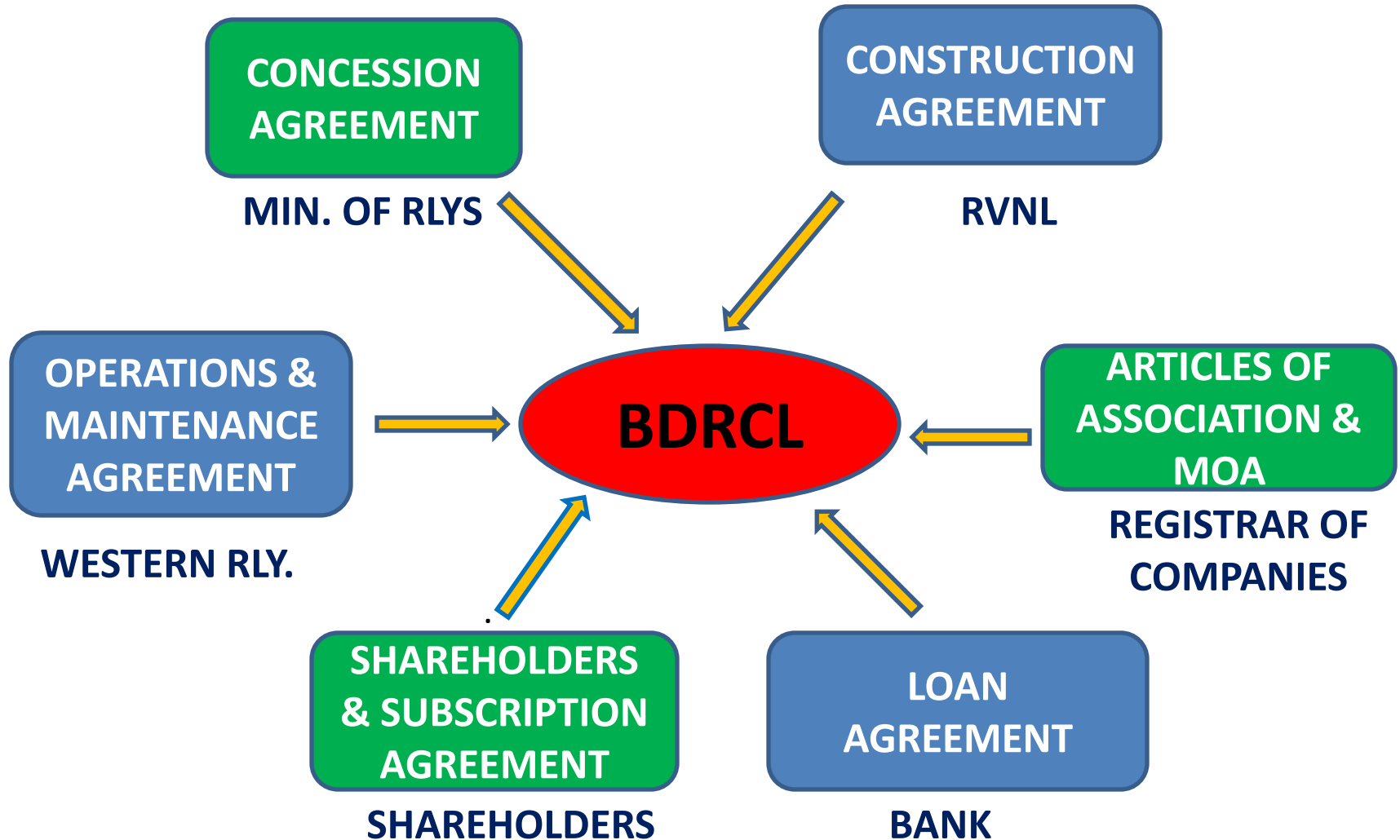
BHARUCH DAHEJ RAILWAY CO. LTD.

INITIAL PROJECTION

	2011-12	2015-16	2019-20
CARGO M.T.	5.0	7.5	8.5

- Apart from Cost Overrun there has been a time overrun of about one year – Operational March 2012
- In view of new Industries and Port facilities being developed at DAHEJ these projections are likely to be exceeded.
- Current year expectation 5.0 Million Tonnes
- In view of high cost of construction break even level of traffic is higher than in earlier projects

FRAMEWORK OF AGREEMENTS



FINANCING THE PROJECT

- **INITIAL EQUITY** - Rs 85 Crores
- **DEBT** - Rs 200 Crores
 - By inviting bids from selected banks and financial institutions
- **AUTHORIZED CAPITAL** had to be raised from Rs 95 Crores to Rs 125 Crores to Rs 165 Crores as cost escalated – Shareholder support progressively declined
- **ADDITIONAL DEBT** of Rs 30 Crores availed. Beyond Rs 230 Crores not possible to service
- **NO ACCESS TO VIABILITY GAP FUNDING**
- **CREDIT RATING**
- **PROPOSAL TO REFINANCE EXISTING TERM LOAN**

EQUITY HOLDING – 1st Rights Offer

	Name of Partner	Existing Equity Holding Rs. in Crore	% of share holding	New offer Rs. in Crore	Equity holding After New Rights offer Rs. in Cr.	Post subscription %age vis a vis Authorised Capital
1	RVNL	25.00	29.41%	7.50	32.50	26.00%
2	APDPPL	10.00	11.76%	3.53 Decl.	10.00	8.00%
3	GMB	10.00	11.76%	3.53	13.53	10.82%
4	DSL	10.00	11.76%	3.53 Decl.	10.00	8.00%
5	GNFC	10.00	11.76%	3.53	13.53	10.82%
6	HIL	10.00	11.76%	3.53	13.53	10.82%
7	JRIL	10.00	11.76%	3.53 Decl.	10.00	8.00%
8	GIDC	-		10.00+3.53	13.53	10.82%
9	Equity Gap	-			8.38	6.70%
	Total	85.00	100.0%	40	125.00	100.0%

Decl. - Declined

EQUITY HOLDING – 2nd Rights Offer

	Name of Partner	Existing Equity Holding Rs. in Crore	% of share holding	New offer Rs. in Crore	Equity holding After New Rights offer Rs. in Cr.	Post subscription %age vis a vis Authorised Capital
1	RVNL	32.50	26.00%	10.40	42.90	26.00%
2	APDPPL	10.00	8.00%	3.20	13.20	8.00%
3	GMB	13.53	10.82%	4.33	17.86	10.82%
4	DSL	10.00	8.00%	3.20 Decl.	10.00	6.06%
5	GNFC	13.53	10.82%	4.33 Decl.	13.53	8.20%
6	HIL	13.53	10.82%	4.33 Decl.	13.53	8.20%
7	JRIL	10.00	8.00%	3.20 Decl.	10.00	6.06%
8	GIDC	13.53	10.82%	4.33	17.86	10.82%
9	Equity Gap	*8.38	6.70%	2.68	26.12	15.83%
	Total	125.00	100.0%	40	165.00	

Decl. - Declined

ISSUES RELATING TO THE CONCESSION AGREEMENT

- **CONCEPT OF LEASE RENTAL**
 - KUTCH RAILWAY RS 1000 PER ANNUM
 - PIPAVAV RAILWAY RS 1.98 CRORES PER ANNUM
 - BHARUCH DAHEJ RAIL RS 7.4 CRORES PER ANNUM
- **CAP ON PROFITS OF THE COMPANY**
 - ONCE INVESTORS GET BACK INVESTMENT + 14% ASSETS REVERT TO IR AND SPV IS WOUND UP
- **SIDINGS**
 - CREDIT FOR TERMINAL COST
 - THROUGH DISTANCE FOR APPORTIONED FREIGHT
- **RUNNING OF PASSENGER TRAINS**
 - COST SHARING
 - NO. OF SERVICES

ISSUES RELATING TO CONSTRUCTION AGREEMENT

- **CONFLICT OF INTEREST - PROMOTER OF THE COMPANY AWARDED PROJECT ON NOMINATION BASIS**
- **SPV HAS NO CONTROL OVER PLANNING & DESIGN**
- **CONSTRUCTION DELAYS**
 - LOCAL AGITATION
 - LIMITED RESOURCES PUT IN BY CONTRACTOR
 - SUPERVISION ISSUES
- **DEMAND FOR MANAGEMENT FEE OF 5%**
- **MASSIVE COST OVERRUN OF OVER 25%**
- **TIME OVERRUN OF ONE YEAR**
- **MONITORING MECHANISM - INEFFECTIVE**

O&M AGREEMENT

- **MAINTENANCE PHASES - NEW CONCEPT**
 - I BDRCL MAINTAINS TRACK & S&T TILL PASSENGER TRAINS RUN
 - II WR MAINTAINS WITH REDUCED MANPOWER
 - III WR WITH HIGH MANNING LEVELS
- **AREAS OF DISAGREEMENT**
 - MANPOWER LEVELS
 - ELEC. ENGINE HIRE CHARGES
 - FUEL CHARGES
 - SIDINGS
 - STAFF QUARTERS
- **DESPITE SIX MONTHS OF OPERATION NO APPORTIONED EARNINGS RECEIVED FROM THE RAILWAY**
- **MAJOR WEAKNESS IN RAILWAY PPPs IS THAT PRIVATE ENTITY CANNOT COLLECT USER CHARGES – NO ESCROW ACCOUNT**

SHAREHOLDERS AGREEMENT IMPLEMENTATION ISSUES

- **AS NEED FOR FUNDS GREW THE COMPANY HAD TO SEEK ADDITIONAL EQUITY FROM STRATEGIC PARTNERS**
- **NEW STRATEGIC PARTNERS HAD ALSO TO BE PERSUADED TO JOIN AS SHAREHOLDERS**
- **THE SHARE HOLDERS AGREEMENT HAS BEEN MODIFIED TWICE THRO PARTICIPATION AGREEMENTS**
- **RVNL WAS SCEPTICAL ABOUT THE PROJECT & INITIALLY RELUCTANT TO PUT IN MORE EQUITY. GUJARAT GOVT. ENTITIES HAVE BEEN SUPPORTIVE**

THE RAIL SPV MODEL

- SOME CONSTRAINTS

- No provision for SPV collecting user charges
- Little control over Operations and Maintenance which are handled by IR
- Therefore limited scope for bringing in efficiencies expected of the Private Sector
- Not eligible for viability gap funding
- A Cap on profitability of the SPV deters equity participation by financial investors
- Lease Rental in some cases very high.

THANK YOU