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The Development of India’s Multimodal Logistics Service

Operating Container Trains That Connect India’s Major Ports and Hinterland

CONTENTS

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ABOUT SICAL

- SICAL IS A LEADER IN INTEGRATED MULTIMODAL LOGISTICS SERVICES IN INDIA PROVIDING END TO END PORT LOGISTICS COMPRISING OF PORT HANDLING, SHIP AGENCY, CUSTOMS AGENCY, TRUCKING, WAREHOUSING

- TRANSPORTS 12 MMT OF BULK & PACKED CARGO BY RAIL AND ADDL. 2 MMT BY ROAD. ROAD TRANSPORT CONSISTS OF BULK, PACKED, LIQUID, HAZARDOUS GOODS, ODCs

- JOINT VENTURES

- PSA SICAL TERMINALS LTD., TUTICORIN - THROUGHPUT – 4 LAC TEUs p.a

- SICAL DISTRIPARKS LTD., CHENNAI – CFS

- TIE-UP WITH CWC CFSs AT NOIDA, VIZAG AND TUTICORIN

- PROJECTS – PRESENT AND FUTURE

- ENNORE PORT BOT CONTRACT FOR TNEB - 8 MILLION TONNES COAL p,a

- SICAL IRONORE TERMINALS LTD., ENNORE – 12 – 15 Million MT IRONORE p.a

- NAGPUR RAIL TERMINAL

- NAGPUR ROAD TERMINAL

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BACKGROUND

- FEBRUARY 06- RAILWAY MINISTRY ANNOUNCED PUBLIC PRIVATE PARTNERSHIP IN CONTAINER RAIL TRANSPORTATION

- GRANTED LICENCE TO 14 PRIVATE OPERATORS TO OPERATE CONTAINER TRAINS ON SELECTED ROUTES / PAN-INDIA BASIS

- THE SECTOR IS NOW POISED TO WITNESS FRENZIED ACTIVITIES AND WILL CHANGE THE FACE OF THE INDIAN LOGISTICS SCENARIO

MAP OF MARITIME STATES AND PORTS OF INDIA

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CURRENT CONTAINER LOGISTICS SCENARIO IN INDIA

- APPROXIMATELY 30% OF EXIM CONTAINERS MOVE BY RAIL AND THE REMAINING IS HANDLED BY ROAD
- TILL 2005 CONCOR WAS THE SOLE SERVICE PROVIDER FOR RAIL TRANSPORTATION OF CONTAINERS
- DOMESTIC CARGO CONTAINERISATION IS AT A NASCENT STAGE IN INDIA
- ROAD TRANSPORT IS MAINLY IN HANDS OF HIGHLY UNORGANIZED PLAYERS
- RISING FUEL PRICES AND AXLE LOAD RESTRICTIONS ARE MAKING ROAD TRANSPORT UNECONOMICAL OVER LONG HAUL

EMERGING SCENARIO

- EXPANDING GLOBAL EXIM TRADE
- RISING IMPORTANCE OF INDIA IN THE GLOBAL TRADE SCENARIO
- GROWING INDIAN ECONOMY / EXIM TRADE AND ITS LOOK EAST POLICY
- INCREASING CONTAINERISATION OF BOTH EXIM AND DOMESTIC CARGO

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CONTAINER RAIL LOGISTICS – SWOT ANALYSIS

STRENGTHS

- CONSISTENTLY GROWING MARKET – CAGR +20% WITH A POTENTIAL OF 100 MMT (PIECEMEAL & NON BULK)

- INCREASING BUSINESS VOLUME OF RAIL BORNE CONTAINERS

  2005-2006

  TOTAL 1.7 MILLION TEUS

  NORTH = 0.71 MILLION TEUs

  WEST = 0.23 MILLION TEUs

WEAKNESS

- HIGHLY CAPITAL INTENSIVE
  - COST OF ROLLING STOCK - INR 13 Cr / rake
  - COST OF INLAND CONTAINER DEPOT- INR 100 cr
  - HIGH START UP CHALLENGES – WAGONS / WHEELS / TRAINED MANPOWER / RAKE

- LONG GESTATION PERIOD

- HIGH CONCENTRATION OF TRAFFIC AT SELECTED PORT / HINTERLAND
  - 78% OF TOTAL CONTAINER TRAFFIC AT WEST COAST PORTS
  - 70% OF TOTAL CONTAINER TRAFFIC AT WESTCOAST HANDLED BY SINGLE PORT ie. JNPT
  - 60% OF THE TRAFFIC OF WEST COAST MOVES TO NORTHERN HINTERLAND LEADING TO LIMITED ROUTES THEREBY CREATING CONGESTION

LOW DOMESTIC CONTAINER TRAFFIC DESPITE POTENTIAL GAINS

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CONTAINER RAIL LOGISTICS – SWOT ANALYSIS

OPPORTUNITIES

- HUGE POTENTIAL - VIRGIN MARKET
- CONSISTENT GROWING RATE – THE PIE IS BECOMING BIGGER DAY BY DAY
- ROBUST GROWTH IN EXIM CONTAINER TRADE
- ENTRY OF PRIVATE PLAYERS IN CONTAINER TRAIN OPERATIONS
- CONGESTION AT EXISTING RAIL LINKED ICDs AND LIMITED SCOPE FOR EXPANSION PROVIDES OPPORTUNITY FOR DEVELOPMENT OF COMPETING FACILITIES
- UNTAPPED DEMAND FOR DOMESTIC CONTAINER MOVEMENT
- POTENTIAL FOR RUNNING DOUBLE STACK TRAINS - LOWER HAULAGE CHARGES AND BETTER UTILISATION OF ROLLING STOCK AND TRACK CAPACITY

THREATS

- CHANGE IN GOVERNMENT POLICIES
- HIGH DEPENDENCE ON EXTERNAL AGENCIES
  - INDIAN RAILWAYS
  - PORT TERMINAL OPERATORS
  - SHIPPING LINES
- COPING WITH UNCERTAINITIES ON OPERATIONAL ISSUES
  - STABILITY OF RAKES
  - SERVICE GUARANTEE
  - DEDICATED FREIGHT CORRIDOR : WHEN ??
  - DOUBLE STACK OPS : ROUTES ??
- FRAGMENTATION OF VOLUMES DUE TO MULTIPLE OPERATORS
- NO CONTROL ON HAULAGE COST
- TOO MANY PLAYERS RESULTING IN PRICE WAR

LOW DOMESTIC CONTAINER TRAFFIC DESPITE POTENTIAL GAINS

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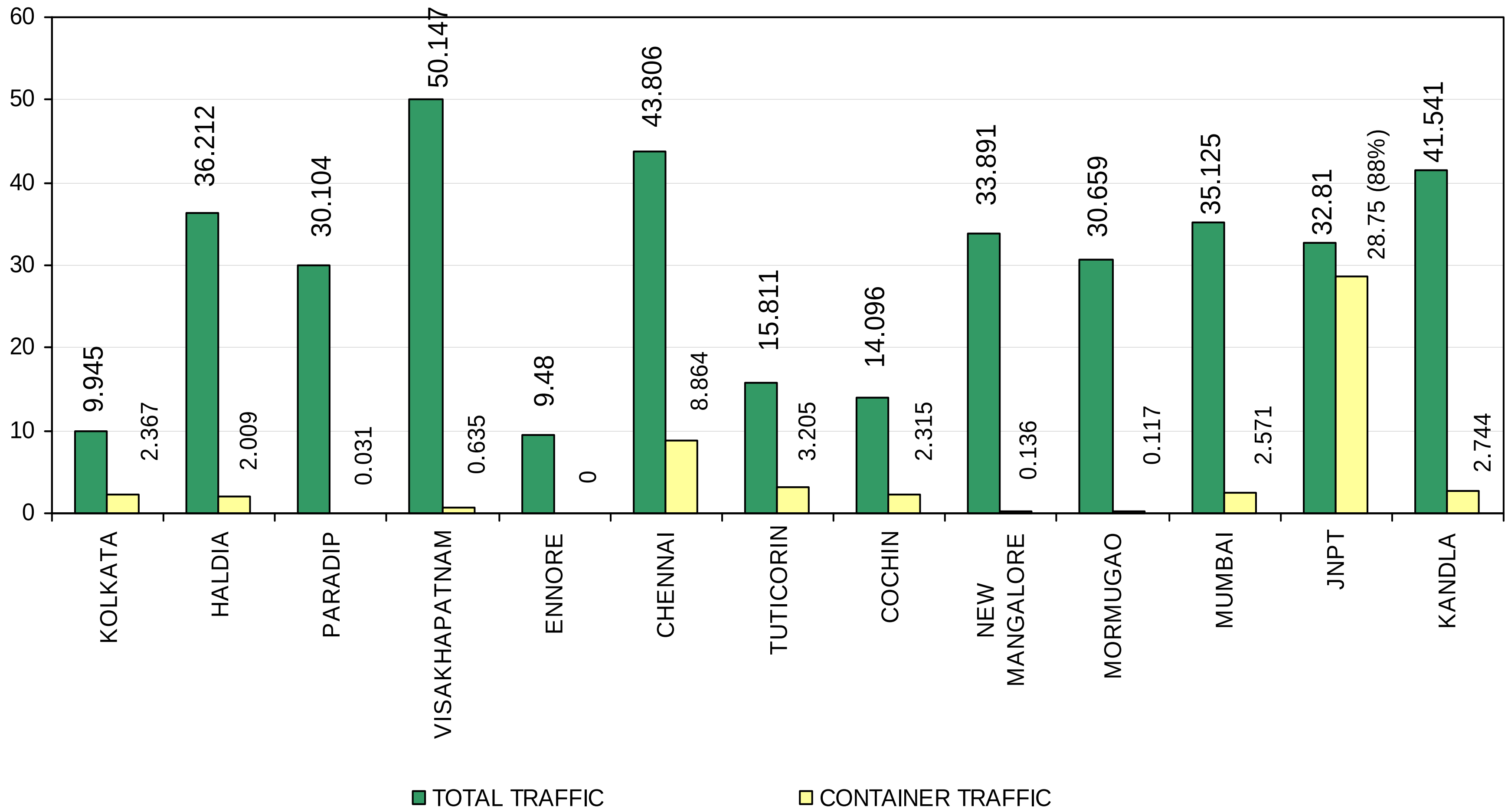
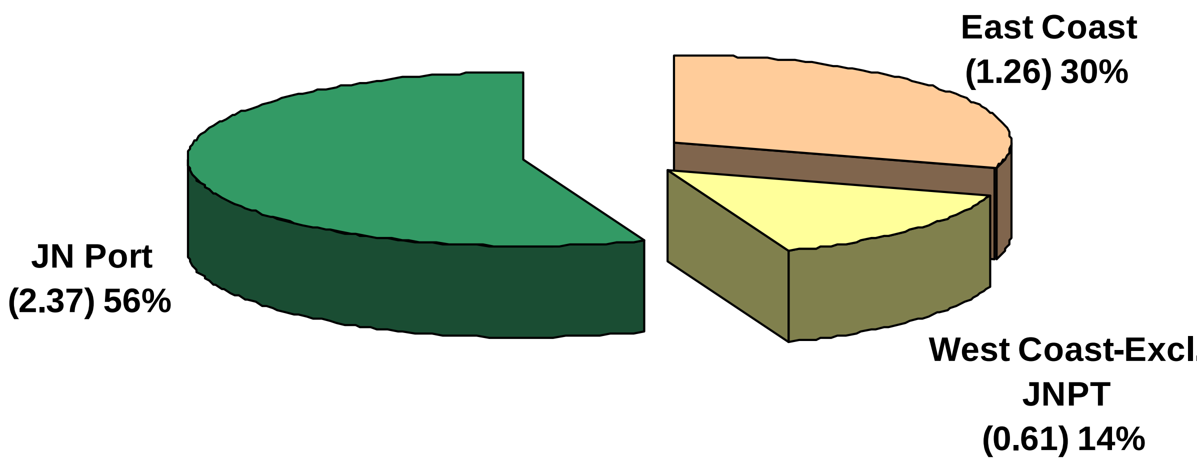
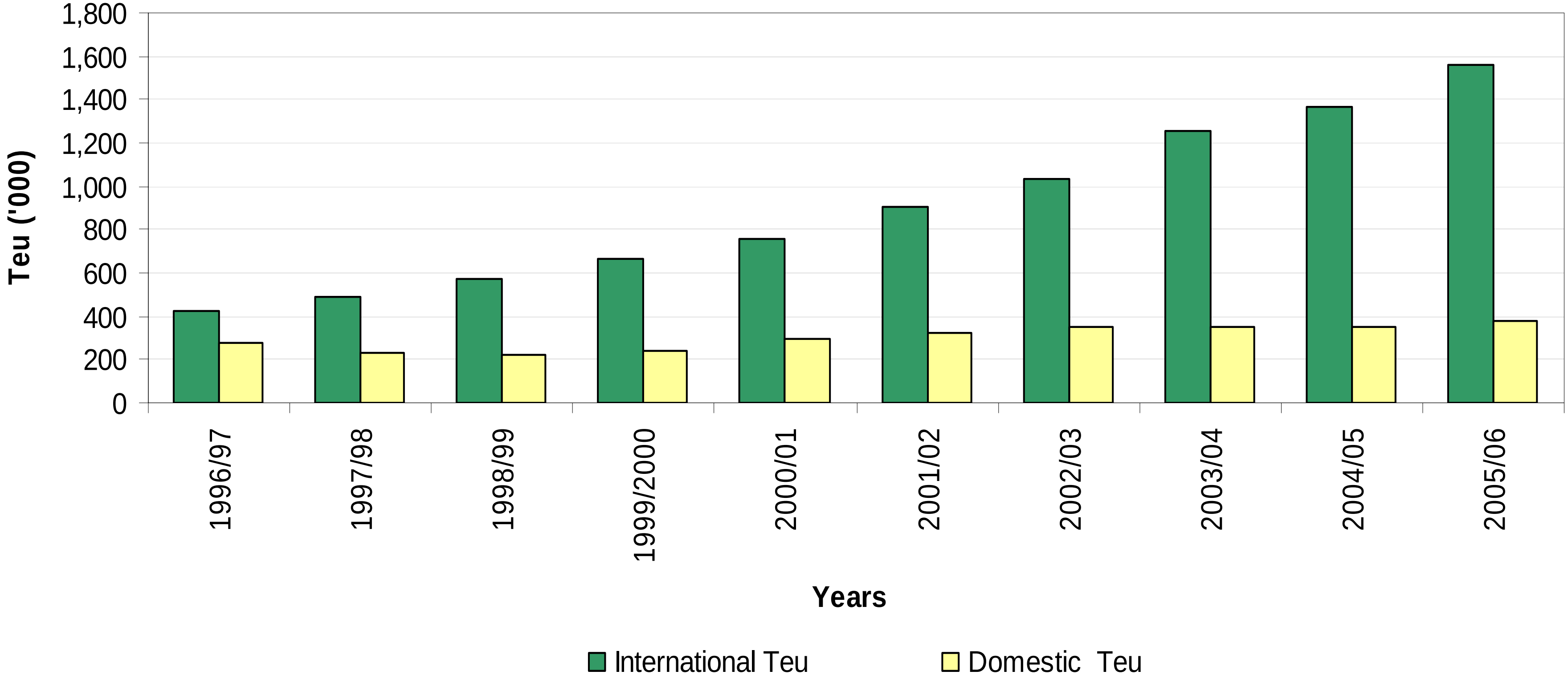
TOTAL TRAFFIC Vs CONTAINER TRAFFIC
Major Port : Year 2004-05



CONTAINER TRAFFIC BREAK-UP
Major Ports : 2004-05

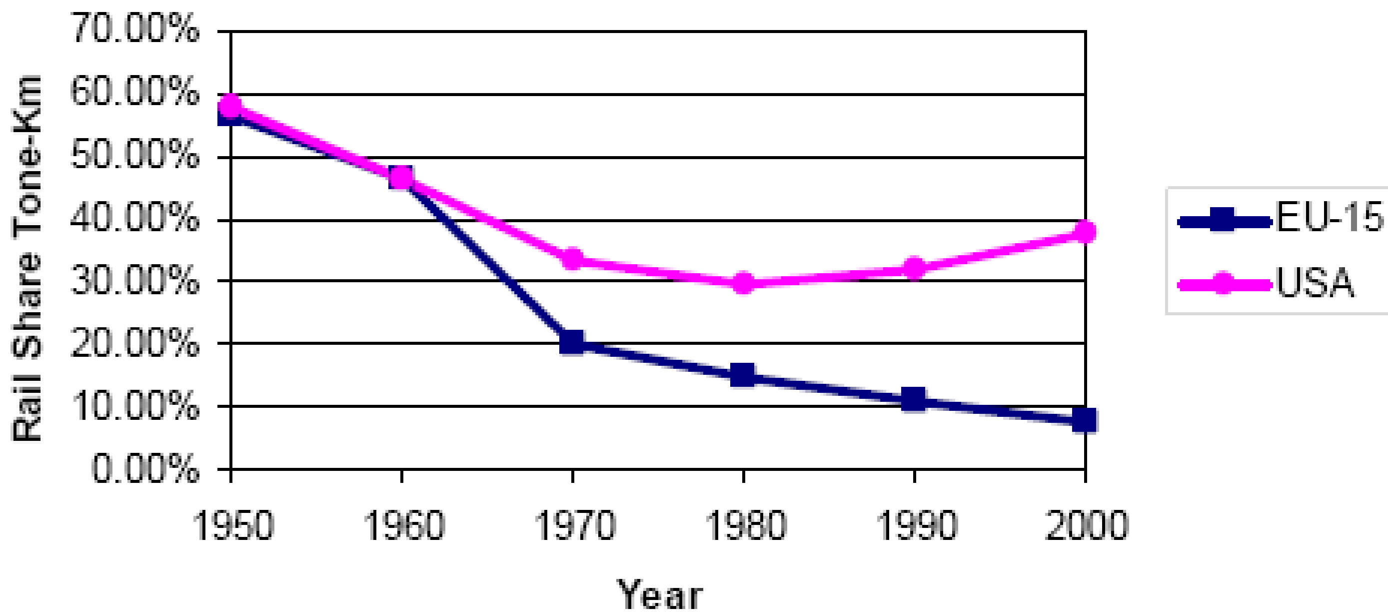


DEVELOPMENT OF CONTAINER RAIL TRAFFIC : EXIM AND DOMESTIC



Source : CONCOR website

COMPARISON OF THE US AND EUROPE (EU15) – SHARE OF RAILWAYS IN TOTAL TRANSPORTATION



Source : Research Working Paper Series – Harvard University

REASONS FOR GROWTH IN THE US RAIL FREIGHT

- THE SHARE OF RAILWAYS IN TOTAL FREIGHT MARKET IN BOTH THE US AND EUROPE WAS QUITE SIMILAR IN 1950's
- THE SHARE OF RAILWAYS REGISTERED STEADY DECLINE BETWEEN 1950 AND 1980 IN BOTH THE US AND EUROPE
- HOWEVER, THIS DECLINING TREND IN THE US SAW A REVERSAL AFTER 1980 AND THE SHARE OF RAILWAYS INCREASED TO 38% BY THE END OF YEAR 2000
- IN EUROPE, SHARE OF RAILWAYS IN TOTAL FREIGHT MARKET CONTINUED TO MOVE DOWN AND WAS AROUND 8% BY THE END OF 2000
- REASONS FOR GROWTH IN THE US RAIL FREIGHT MARKET
  - INHERENT ADVANTAGE OF RAILWAYS OVER ROAD FOR LONG HAULAGE SHIPMENTS
  - THE US HAS ALMOST 3 TIMES OF THE LAND AREA, COMPARED TO EU 15 REGION
  - THE US HAS LIMITED COAST LINE COMPARED TO EUROPE. THEREFORE LIMITED ROLE OF COASTAL SHIPPING FOR MOVING LONG HAULAGE SHIPMENTS
- FAVOURABLE GOVERNMENT POLICIES TO ENCOURAGE PARTICIPATION OF PRIVATE PLAYERS IN RAIL FREIGHT SECTOR, WHILST
- AFTER 1980, GOVERNMENT PROVIDED GREATER FREEDOM AND FLEXIBILITY TO PRIVATE PLAYERS FOR FIXING FREIGHT TARIFFS IN THE US

POTENTIAL FOR DOMESTIC CONTAINER MOVEMENT

- **EXPECTED GROWTH IN TRADE OF READYMADE GARMENTS, TEXTILES, HANDICRAFTS, LEATHER PRODUCTS, AUTO COMPONENTS, ELECTRICAL AND ELECTRONIC GOODS, ENGINEERING GOODS, PROCESSED AND PACKAGED FOOD AND AGRI –EXPORTS**

- **DEVELOPMENT OF LARGE SEZS AND INDUSTRIAL PARKS LIKELY TO PROVIDE BOOST TO INDUSTRIAL DEVELOPMENT IN THE COUNTRY**

- **NEW ADDITIONAL CONTAINER HANDLING CAPACITY WOULD RESULT IN A HIGHER PENETRATION OF CONTAINER IN THE BREAK BULK CARGO SEGMENT THUS HELPING IN THE GROWTH OF CONTAINER TRADE**

- **PRIVATE CONTAINER TRAINS WOULD ASSIST IN PROVIDING EFFICIENT HINTERLAND CONNECTIVITY FOR PORTS THUS FACILITATING IN HANDLING INCREASING VOLUMES OF CONTAINER TRAFFIC**

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POTENTIAL FOR DOMESTIC CONTAINER MOVEMENT

SIGNIFICANT BENEFITS FROM USE OF CONTAINERS FOR DOMESTIC MOVEMENT

- VAST GEOGRAPHY OF INDIA
  - NEED FOR LONG DISTANCE TRANSPORT OF GOODS FOR DOMESTIC TRADE
- INHERENT BENEFITS OF CONTAINERS APPLY TO DOMESTIC MOVEMENT
  - LOWER COST OF TRANSPORT
  - FASTER TRANSPORT
  - EASE OF HANDLING, EASIER STORAGE, LESS TIME SPENT IN INSPECTION ETC
  - LOW HANDLING LOSS

NEW POLICY CAN LEAD TO BOOST IN DOMESTIC CONTAINER TRAFFIC

- LONG HAULAGE ECONOMICAL BY RAIL
  - EXPECTED BOOST IN CONTAINER TRAFFIC WITH REDUCED COST OF TRANSPORT
- BETTER AVAILABILITY OF INFRASTRUCTURE AS OVERALL CONTAINER VOLUMES GROW
  - RAPID GROWTH IN CONTAINER CARRYING CAPACITY WITH FLOW OF PRIVATE INVESTMENTS
  - GROWTH OF SUPPORT INDUSTRY – CONTAINER MANUFACTURING FACILITIES
- MATURE CONTAINER TRANSPORT INDUSTRY
  - CUSTOMISED SOLUTIONS WILL BOOST DEMAND – CAPTURING SMALL VOLUMES, CUSTOMISED CONTAINERS

LOW DOMESTIC CONTAINER TRAFFIC DESPITE POTENTIAL GAINS

INHERENT ADVANTAGES OF RAIL CONTAINER TRANSPORT

- ECONOMIES OF SCALE - LOWER TRANSPORTATION COST
- HIGH RELIABILITY
- RELATIVELY SAFER & SECURE
- ENVIRONMENT FRIENDLY
- STRUCTURED & ORGANISED OPERATIONS

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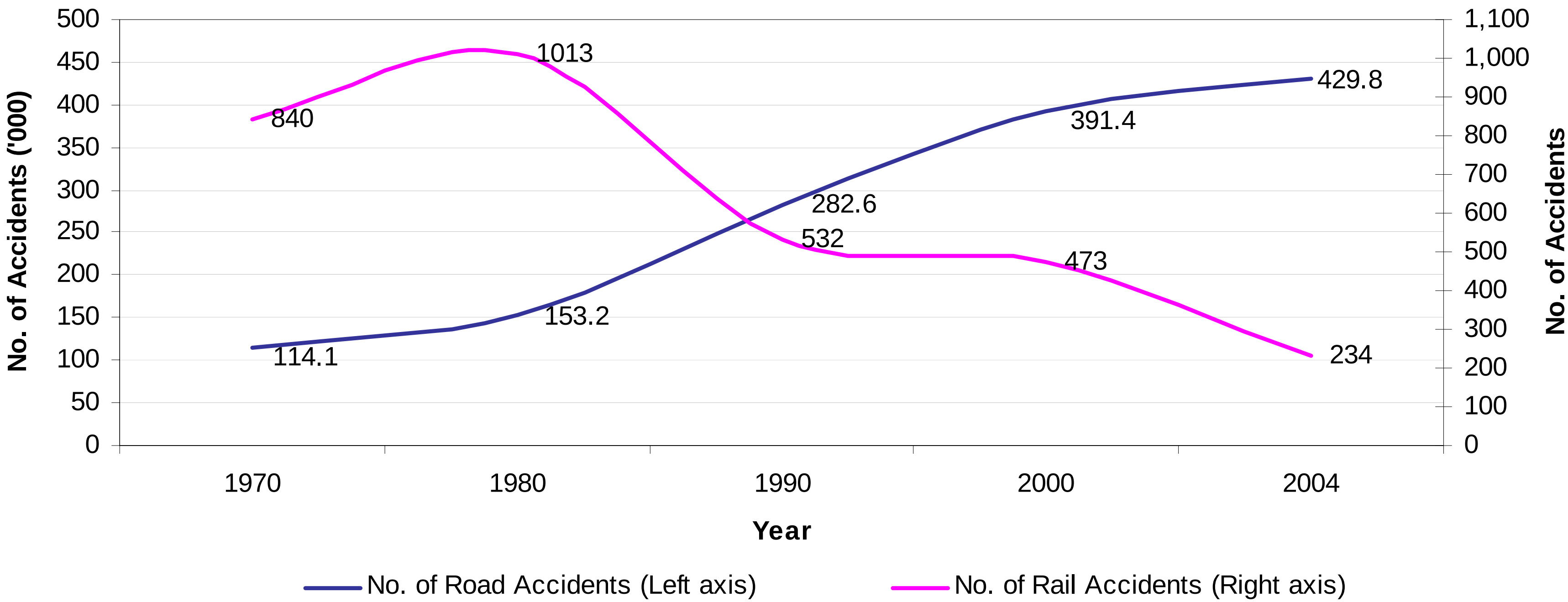
ACCESS STATISTICS (RAIL V/S ROAD)



Source : Ministry of Indian Railways, Ministry of Roads and Highways

RELATIVE OPERATING CHARACTERISTICS BY TRANSPORTATION MODES

Parameters	Rail	Road	Water	Air
Cost	2	3	1	4
Speed	2	2	3	1
Availability	2	1	3	4
Safety & Security	3	4	2	1
Capacity	2	4	1	3
Flexibility	2	1	3	4
Frequency	2	1	4	3
Overall Efficiency	**15**	**16**	**17**	**20**

Lowest rank is the Best

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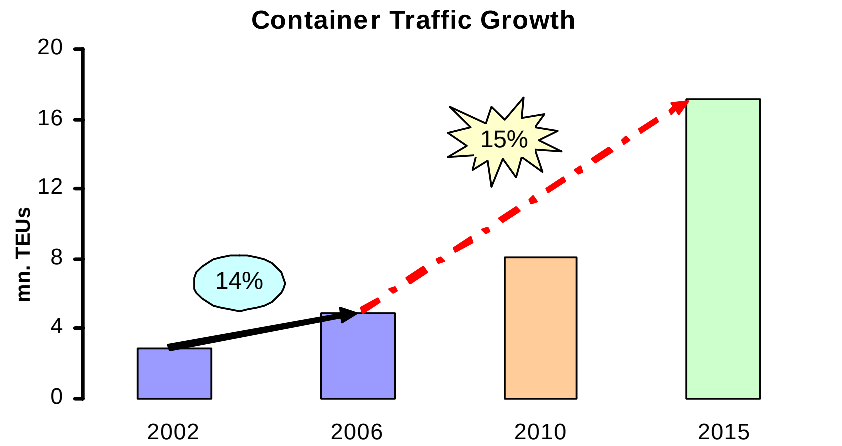
CONTAINER TRAFFIC TO EXPERIENCE ROBUST GROWTH

GROWTH IS DRIVEN BY…

- ROBUST INCREASE IN TRADE
  - GROWTH IN IMPORTS/EXPORTS OF COMMODITIES THAT MOVE IN CONTAINERS
- INCREASE IN CONTAINERIZATION
  - NEW COMMODITIES BEING CONTAINERIZED: AGRI, CEMENT, IRON ORES ETC.
  - CONTAINERIZATION LEVEL EXPECTED TO INCREASE FROM APPROX. 50% TO 70% BY 2015

ACCELERATED GROWTH EXPECTED IN EXIM CONTAINER VOLUMES



SOUTH & EAST HIGHER GROWTH; WEST WILL CONTINUE TO DOMINATE

	1995-99	2000-04	2004-10	2010-15
Western Ports	12%	18%	11%	15%
Southern Ports	10%	14%	16%	17%
Eastern Ports	8%	11%	16%	17%
All India	11%	16%	14%	15%

Source: CRISIL Analysis

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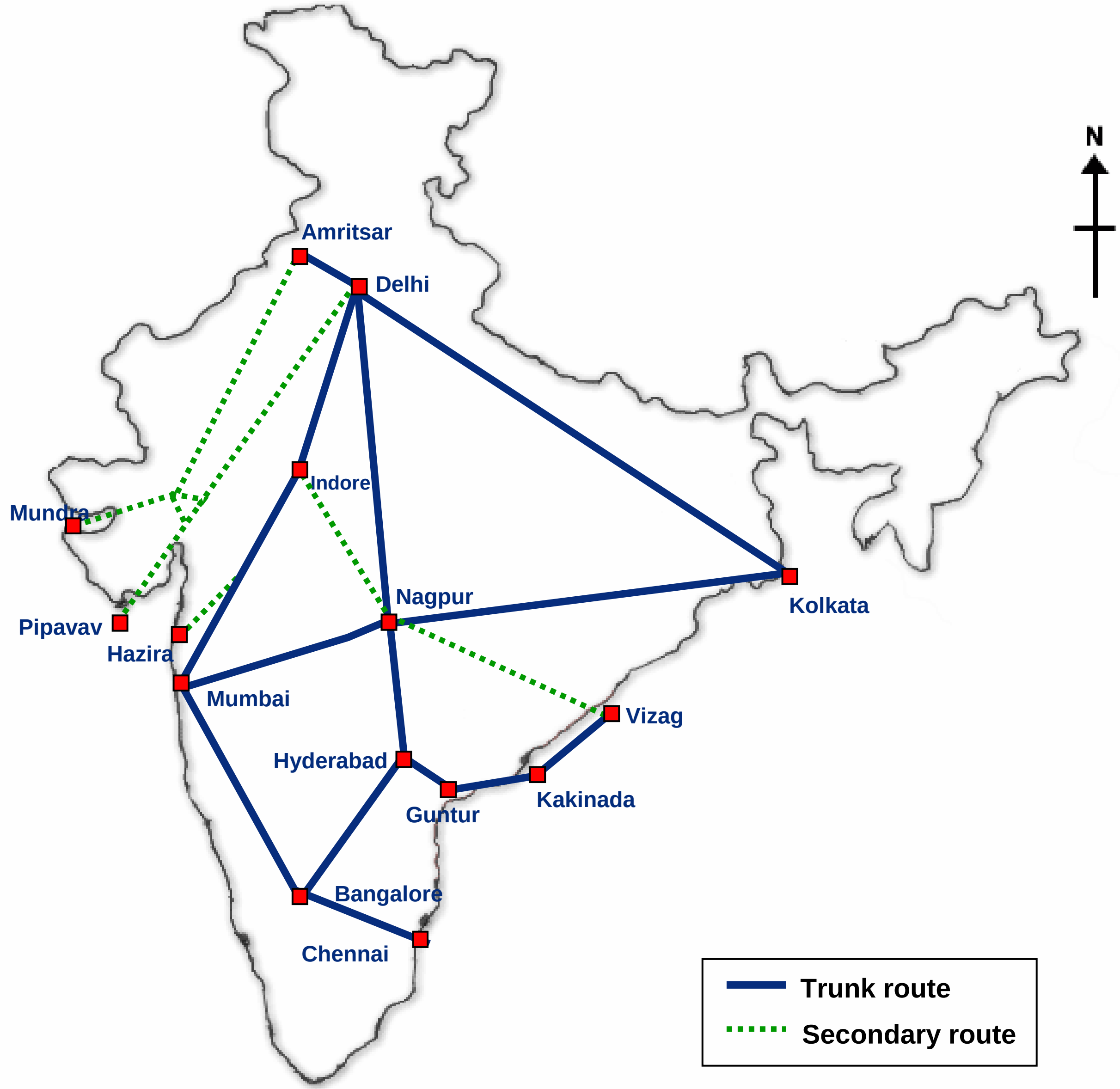
MAJOR CORRIDORS



ISSUES TO BE ADDRESSED

- MORE INLAND CONTAINER DEPOT ARE PERMITTED BY THE GOVERNMENT TO FACILITATE GLOBAL EXIM TRADE
- SPECIAL ECONOMIC ZONES – HUBS OF EXIM TRADE
- CONTAINERISATION OF HEAVY CARGO – AUTO ENGINEERING, STEEL PRODUCTS

ARE OUR PORTS GEARED UP TO HANDLE THE TRAFFIC FLOW FROM THE NEW ICDs/ SEZs AND VICE VERSA ?

- PORT BOTTLENECKS – BALLOONING COSTS
- DEDICATED FREIGHT CORRIDOR – ONLY FOR SELECTED PORTS
- TRACK CONGESTION ?

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WISH LIST

- HUB PORTS – JNPT ON WEST COAST AND CHENNAI ON EAST COAST – INLAND CONNECTIVITY THROUGH RAIL BETWEEN THESE PORTS
- BUILD NEWER / SMALLER PORTS WITH STATE OF THE ART INFRASTRUCTURE NEAR ECONOMIC ACTIVITY AREAS
- DEDICATED FREIGHT CORRIDOR TO ALL PORTS PERMITTING TRAIN SPEEDS >100 kmph
- DOUBLE STACK CONTAINER RAIL OPERATIONS ON DIESEL & ELECTRIC TRACTIONS
- MORE FLEXIBILITY AND TRANSPARENCY IN FIXING RAIL FREIGHT TARIFFS
- RAILWAYS TO ALLOW NON-CONTAINER FREIGHT WAGONS ALONGWITH CONTAINERS FOR BETTER EFFICIENCY AND UTILISATION
- BETTER COORDINATION AND TIE-UPS WITH NATIONAL ROAD CARRIERS TO PROVIDE DOOR-TO-DOOR SERVICE

Thank You