EXECUTIVE SUMMARY

1. Logistics play a citadel role in the modern intelligent supply chain management. It is defined as the broad range of activities concerned with effective and efficient movement of semi-finished or finished product from one business to another or from manufacturer/distributor/retailer to the end consumer. It relates to freight transportation, warehousing material handling, protective packaging, inventory control, order processing, and marketing, forecasting and other value added services.

2. With a view to provide efficient logistics services, Indian Railways has embarked into a massive investment to create dedicated freight corridor between Delhi and Mumbai (called Western DFC) and Ludhiana and Howrah (called Eastern DFC), which could provide high speed, heavy pay load only for freight traffic. Western DFC passes through most high density transport arteries of the country i.e. Maharashtra, Gujarat, Rajasthan, Haryana, Delhi, Uttar pradesh with a route length of 1483km.

3. Gujarat shares 38% of the route covering Valsad, Surat, Vadodara, Anand, Ahmedabad, Mehsana, Palanpur. This corridor is expected to carry predominantly, container traffic, bulk and break-bulk cargo. To support this infrastructure, DMIC Delhi-Mumbai Industrial Corridor, Special Economic Zones, MMLPs Investment Regions, Industrial Area are likely to be set up contiguous to Western DFC in the coming years.

MMLP is the refined form of Logistics Park where various value added services are rendered in addition to rail/road based transportation. It is nowadays a globally identified supply management and known by different names in different countries.

4. As the economic barriers among European Union were dislodged, it was essential to rationalize the transport and logistics structure by revitalizing the railways, promoting maritime and rationally integrating all modes of transport. In China, the shifting of closed economy to globalised economy enhances the need to develop a sound logistics industry.

5. Cushman and Wakefield have published a report “Logistics Industry- Real Estates’ New Power House” which avers that Indian logistics industry is expected to grow annually @ 15 to 25%. Major cities like Kolkata Mumbai, Chennai-Hyderabad, have identified locations for Logistics Park.

These are the different kind of logistics services:

i) 3 PL services- mainly provide outsourced or third party logistics services to the companies by transportation and warehousing.

ii) 4 PL Services- offering client specific solution to supply chain needs and they execute the solutions by facilitating the necessary tie up between different agencies and modes of transport.
6. **Merits of MMLP**
   i] Excellent transport links of rail and road
   ii] Custom clearance facilities
   iii] Round the clock services
   iv] One window services
   v] Enhanced security systems
   vi] Availability of more options to the users
   vii] Value added services
   viii] Indian Railways intend to develop MMLPs through PPP along with proposed DFC and at strategic locations for containerized as well as bulk and break-bulk cargo in order to enhance rail –co-efficient with resultant increase in the modal share of railways.

7. Gujarat, being strategically situated on the west coast of the country, has emerged as one of the fastest growing industrial states with 26 districts in the land area of 1.96 lakh sq. km. It has the longest costal line of 1600 km hosting 1 major port and 40 non-major ports – Kandla, Mumbai, Pipavav, Navlakhi, Magdallah ports are worth to mention. Endowed with only 6% of the geographical area and 5% of India’s population, Gujarat’s share at current prices accounts for nearly 6.7% of the national GDP. It accounts for 20% of the country’s total industrial production and contributes nearly 7% to the national GDP. The prominent cities of the state are Ahmedabad, Surat, Vadodara, Jamnagar, Rajkot and Jamnagar.

Several landmarks achievements in respect of industries agriculture, commodities and infrastructure can be credited to Gujarat.

8. **Gujarat Industrial Development Corporation (GIDC)**
   GIDC plays a significant role in industrial development of Gujarat, being the nodal agencies for the GoG for building the industrial backbone of the state. There are as many as 242 industrial estates which are being maintained by GIDC. The corporation has further decided to acquire the land in large scale basis at various places in the state.

9. **Vibrant Gujarat Investors’ Summit**
   Biennial vibrant Gujarat Investors’ Summit is being organized by GOG since 2003. The last one was on January 2009, The details summit is in para 2.4.4.

10. **Special Economic Zones**
    SEZ is considered Growth Engine which can boost manufacturing, augment exports and generate employment. The details of SEZs as sanctioned in Gujarat is placed in para 2.4.4.1.

11. **Gujarat Infrastructure Development Board (GIDB)**
    GIDB is continuously striving to harness the potential of public-private investment in infrastructure sector by identifying and creating specific opportunities. GIDB itself does not develop infrastructure projects but acts as an catalyst for their development.
The role of GIDB is to undertake the responsibility of the project preparation exercise. It supports the conduct of pre-feasibility studies for various projects. If the project is found bunkable, it could be offered to the public-private sectors for execution. These studies are conducted through reputed Consultants.

With this backdrop, GIDB has taken initiative for setting up logistics parks at 5 designated areas in Gujarat – namely Ahmedabad-Surendranagar, Palanpur-Mahsana, Gandhidham-Samakhiali, Bharuch-Dahej and Surat-Hazira. These are important industrial/manufacturing centres of petrochemicals, pharmaceuticals, textiles, dairy product, Spices SSI and electronics goods contiguous to DFC/DMIC. GIDB has commissioned RITES with this study.

12. Role of RITES  
RITE Ltd. an ISO 9001-2000 Company and GOI enterprise under Ministry of Railways is a multi-disciplinary Consultancy Organisation in the field of transport, infrastructure and related technologies.  
The purpose of study, scope of work, approach and methodology are as per agreement.

13. DMIC in Gujarat  
Ministry of Railways has embarked a massive investment plan of laying Dedicated Freight Corridor between Delhi and Mumbai passing through Gujarat and other States with route length of 1483 km. The area of 150 km on either side of the line will be developed as an industrial corridor. Total four industrial areas and 2 investment regions have been proposed by GOG. Details in para 2.5.

14. DMIC in Other States  
The DMIC has identified a total of 9 IRs and 15 IAs spreading across six states. Details in para 2.6.

15. Gujarat Infrastructure Agenda  
Vision 2010 in the first ‘Holistic Plan’ prepared by GIDB for infrastructure development in Gujarat taking into consideration of comprehensive view of all infrastructure sectors and seamlessly integrates them into a synchronized and synergistic plan.

Thereafter GIDB has made an ambitious long range perspective planning ‘The Blue Print’ for Infrastructure in Gujarat 2020 (BIG 2020) to ascertain the economic structure of Gujarat in next decade.

Gujarat is a progress oriented state. Several measures have been initiated to encourage investment and entrepreneurial activity in the state basically related to basic infrastructure development of ports, industries and industrial zones.

16. Section I- Ahmedabad-Surendranagar MMLP  
a. Project Influence Area (PIA)- On this corridor, the following districts have been identified- Ahmedabad, Surendranagar, Gandhinagar and Rajkot, Bhavnagar.
b. Hinterland- For originating traffic- Gujarat, Maharashtra (JN Port), West Bengal, (Shalimar, Kolkata), Assam (New Guwahati), Tamilnadu (Salem), Bihar (Fatua, Patna).

c. Hinterland- For terminating traffic- Gujarat, Maharashtra (JNPT), Andhrapradesh (Vishakhapatnam), Chattisgarh (Bhilai), Orissa (Bondamunda).

d. Major Commodities- Originating- Pharmaceutical, Drugs & Chemical, Cotton, Textile, Apparel, Container, Milk & Milk Product, Edible Oil, Salt Automobile, Scrap.


f. Connectivity- Road- NH 8 & 8A
Rail- Ahmedabad,-Mumbai Broad Gauge Double Line Electrified territory.
Ahmedabad-Viramgam-Okha B G connectivity Surendranagar-Bhavnagar-Pipavav Port.
Ahmedabad-Viramgam-Kandla-Mundra-New Bhuj BG connectivity.
Ahmedabad-Jaipur-Delhi BG connectivity.
DFC- Main DFC alignment with cargo exchange point at Sabarmati.
Ports - Navlakhi, Bhavnagar, with excellent connectivity to Kandla, Mundra and Pipavav
Airport- Ahmedabad, Rajkot, Bhavnagar.
The PIA is situated within DMIC.

g. Major Industries- Reliance, Arvind, Suzlon, Meghmane, Dishman pharmaceutical, Cadila Health, Ajanta, Samay, Nirma, Wipro.

h. Prospective Development- 20 SEZs on panel, Dholera Special Investment Region and Fedra International Airport.

i. Traffic Projection-

<table>
<thead>
<tr>
<th>Base Year</th>
<th>Horizon Years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2006-07</td>
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<tr>
<td>Total Traffic</td>
<td>Allocable</td>
</tr>
<tr>
<td>40.4</td>
<td>31.9</td>
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</table>

j. Approximate Area Requirement for MMLP (In Ha.)

<table>
<thead>
<tr>
<th></th>
<th>2011-12</th>
<th>2016-17</th>
<th>2021-22</th>
</tr>
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<tbody>
<tr>
<td>Rail Others Total</td>
<td>Rail Others Total</td>
<td>Rail Others Total</td>
<td></td>
</tr>
<tr>
<td>4.5</td>
<td>49</td>
<td>53.5</td>
<td>4.5</td>
</tr>
</tbody>
</table>

k. Probable Locations- Bavla, Khodiyar, Viramgam Railway Yard, Dholera, Goraj

l. Competing Facilities- ICD/CONCOR-Khodiyar, Sabarmati, CWC Adalaj, Hasti Petrochemical-Sanand, Thar Terminal at Sanand, Dubai Port-
Changodar, Hind Terminal-Ahmedabad, Hari Har Infrastructure Logistics – Virochan Nagar.

17. Section III Surat-Hazira MMLP
   a. Project Influence Area (PIA)- On this corridor, the following districts have been identified- Surat, Tapi, Valsad, Navsari, Daman and The Dang.
   b. Hinterland- For originating traffic- Gujarat, Maharashtra, Haryana, U P, Andhra Pradesh.
   c. Hinterland- For terminating traffic- Gujarat, Rajasthan, Punjab, Tamilnadu.
   f. Connectivity- Road- NH 8 and NH 6
      Rail- Mumbai-Ahmedabad-Delhi main line BG connectivity.
      Ahmedabad-Palanpur-Jaipur BG connectivity.
      DFC alignment with cargo exchange point Gothangam.
      Ports- Hazira main port with Magdalla, Vansi borsi, Maroli andonward connectivity with JN port.
      Airport- Surat
      The PIA is situated within DMIC.
   g. Major Industries- Hazira Development Authority, Essar Steel, L& T, Kribhco Fertilizer, Reliance.
   h. Prospective Development- 5 SEZs & 5 Industrial Parks Planned Surat-Navasari Industrial Area and extension of rail link to Hazira Port in pipeline.
   i. Traffic Projection-

<table>
<thead>
<tr>
<th>Base Year</th>
<th>2006-07</th>
<th>Horizon Years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2011-12</td>
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<tr>
<td>Total Traffic</td>
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<td>Allocable</td>
</tr>
<tr>
<td>Rail</td>
<td>4.5</td>
<td>53</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4.5</td>
<td>53</td>
</tr>
</tbody>
</table>

j. Approximate Area Requirement for MMLP (In Ha.)

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<tr>
<th></th>
<th>2011-12</th>
<th>2016-17</th>
<th>2021-22</th>
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<tbody>
<tr>
<td>Rail</td>
<td>4.5</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Others</td>
<td>53</td>
<td>65</td>
<td>79</td>
</tr>
<tr>
<td>Total</td>
<td>57.5</td>
<td>69.5</td>
<td>83.5</td>
</tr>
</tbody>
</table>

k. Probable Locations- Gothangam, Hazira Sachin and Batha Village.

l. Competing Facilities- Chalthan by CONCOR, Chhatral Group at Haripura near Bardoli and KIRIBHCO at Hazira.
I. Setting up of Rail Based Multi Modal Freight Logistics Park Across the DMIC (Delhi-Mumbai) Industrial Corridor

18. Section III Palanpur- Mahesana MMLP

a. Project Influence Area (PIA)- On this corridor, the following districts have been identified- Banaskantha, Mahesana and Patan.

b. Hinterland- For originating traffic- Gujarat, Rajasthan, Haryana, Punjab, UP, Uttarakhand, Himachal Pradesh, Assam.

c. Hinterland- For terminating traffic- Gujarat, Rajasthan, Punjab, UP.


f. Connectivity- Road- NH 15
Rail- Palanpur-JN-Gandhidham BG line by Kachch Rail Corporation.
Ahmedabad-Palanpur-Jaipur BG connectivity.
Bhildi-Samdhari-Jodhpur under gauge conversion.
Bhildi-Patan New BG connectivity under construction.
DFC - Mahesana-Palanpur DFC connectivity with junction point at Mahesana and Palanpur.

Ports-Kandla and Mundra are the main Ports serving the area. There is direct connectivity to Pipavav Port via Surendranagar.

Airport- Deesa
The PIA is situated within DMIC.

g. Major Industries- Food Processing, Agro Ceramics and Engineering SSI units.

h. Prospective Development- Palanpur-Mahesana Industrial Area, Santalpur Investment Region.

i. Traffic Projection-(In million tonnes)

<table>
<thead>
<tr>
<th>Base Year</th>
<th>2006-07</th>
<th>Horizon Years</th>
<th>2011-12</th>
<th>2016-17</th>
<th>2021-22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Traffic</td>
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<td>Allocated</td>
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<td>8.4</td>
<td>8.0</td>
<td>11.0</td>
<td>1.1</td>
<td>14.5</td>
<td>1.8</td>
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</table>

j. Approximate Area Requirement for MMLP (In Ha.)

<table>
<thead>
<tr>
<th>2011-12</th>
<th>2016-17</th>
<th>2021-22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail</td>
<td>Others</td>
<td>Total</td>
</tr>
<tr>
<td>5.5</td>
<td>30</td>
<td>35.5</td>
</tr>
</tbody>
</table>

k. Probable Locations- Bhildi, Chadotar and Bhandumotidav, Santalpur.

l. Competing Facilities- There is no competing facilities in surrounding area.
19. **Section IV Gandhidham-Samakhiali MMLP**

a. **Project Influence Area (PIA)** - On this corridor, the following districts have been identified- Kachchh.


c. **Hinterland- For terminating traffic** - Gujarat, Delhi, M P, Rajasthan, Punjab, U P, Haryana.


f. **Connectivity- Road** - NH 15 and NH 8A connecting Gandhidham to north hinterland and Ahmedabad.

   Rail- Gandhidham is main hub with connectivity to Kandla and Mundra/New Bhuj with rest of India.

   DFC- Through PIA does not within DFC/DMIC, its leg/diagonals are connected to Kandla and Mundra port through Kachchh Railway Corporation Gandhidham-Samakhiali-Palanpur

   Ports- Kandla and Mundra are the main ports serving the area.

   Airport- Bhuj, Mundra and Kandla

g. **Major Industries** - Adani Port, Kandla Port, Welspun, Electrotherm, IFFCO, SAL Steel, Agrocel, Varsana Ispat, Ratnamani Tube, Sanghi Cement, Jaypee Cement.

h. **Prospective Development** - 12 SEZs & 3 major industrial parks planned.

i. **Traffic Projection** -

<table>
<thead>
<tr>
<th>Base Year</th>
<th>Horizon Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-07</td>
<td>2011-12</td>
</tr>
<tr>
<td>Allocable</td>
<td>Allocable</td>
</tr>
<tr>
<td>49.1</td>
<td>36.2</td>
</tr>
<tr>
<td>15.0</td>
<td>12.3</td>
</tr>
</tbody>
</table>

j. **Approximate Area Requirement for MMLP (In Ha.)**

<table>
<thead>
<tr>
<th>2011-12</th>
<th>2016-17</th>
<th>2021-22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail</td>
<td>Others</td>
<td>Total</td>
</tr>
<tr>
<td>15.0</td>
<td>78.0</td>
<td>93.0</td>
</tr>
<tr>
<td>15.0</td>
<td>94.0</td>
<td>109.0</td>
</tr>
<tr>
<td>15.0</td>
<td>120.0</td>
<td>135.0</td>
</tr>
</tbody>
</table>

k. **Probable Locations** - Kandla Port Trust Area, Mundra SEZ, Motichirai and Chitrod.

l. **Competing Facilities** - CFSs at Kandla & Mundra Port, CWC at Kandla, Samraj at Samakhali.
20. Section V Bharuch-Dahej MMLP

a. Project Influence Area (PIA) - On this corridor, the following districts have been identified- Bharuch, Narmada, Vadodara.


e. Major Commodities- Terminating- Cement, Foodgrains, Automobile, Iron & Steel, Chemical.

f. Connectivity- Road- NH 8

Rail- Vadodara is the junction point between Mumbai-Delhi BG main line via Ahmedabad and via Ratlam-Kota.

DFC- Alignment with cargo exchange point at Makarpura.

Ports- Dahej port with several captive jetties.

Airports-Vadodara

The PIA is situated within DMIC

g. Major Industries- Adventis Pharma, GNFC, GSFC, GACL, IOC, BASF, Lupin, Cadila Health, Nirma, United Phosphorous.

h. Prospective Development- 11 SEZs & 4 industrial parks planned, Vadodara-Ankleshwar Industrial area, Bharuch-Dahej Investment Region and PCPIR form the part of PIA.

i. Traffic Projection-

<table>
<thead>
<tr>
<th>Base Year</th>
<th>Horizon Years</th>
<th>2006-07</th>
<th>2011-12</th>
<th>2016-17</th>
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<td>17.7</td>
<td>9.7</td>
<td>13.4</td>
<td>1.8</td>
<td>18.0</td>
<td>3.1</td>
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k. Approximate Area Requirement for MMLP (In Ha.)

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<tr>
<th>2011-12</th>
<th>2016-17</th>
<th>2021-22</th>
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</thead>
<tbody>
<tr>
<td>Rail</td>
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<td>Total</td>
</tr>
<tr>
<td>6.0</td>
<td>35.0</td>
<td>41.0</td>
</tr>
</tbody>
</table>

k. Probable Locations- Dahej (Lekhigam), Samni, Jhagadia.

l. Competing Facilities- Vadodara & Ankleshwar by CONCOR, Dashrath by CWC Fourcee Logistics at Miyagam, CWC at Makarpura, Contrans at Vadodara.