



**KRS** Infra Ventures Pvt. Ltd.



# KNOWLEDGE PAPER

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**From**  
*Director*  
**Desk**

*Indian Economy is step ahead now and its boosting Infrastructure projects with extra pace. Roads & Highways projected fastest construction along with developing various Industrial Corridors.*

*KRS boosted our team to market Indian Infrastructure Opportunities to Global Friends and guiding them for establishing business relations.*



**Keshav Gandhi**  
*Executive Director,  
KRS Infra Ventures Private Limited*



## Future Opportunities in Railway Sector

The construction of High Speed Rail (HSR) corridors is one such major upcoming opportunity. The HSR projects will entail a cumulative investment of approximately Rs 13.02 trillion over the next 15-20 years. Through the development of HSR corridors, IR aims to transform the conventional railway network by introducing world-class technologies. Meanwhile, the semi-HSR projects are expected to entail a cumulative investment of Rs 1.7 trillion. Of this, the Kasaragod-Thiruvananthapuram project will entail the maximum investment of Rs 660 billion and is expected to be commissioned by March 2025. The national transporter has also identified several new HSR corridors under the National Rail Plan, 2030.



The Western and Eastern dedicated freight corridors (DFCs), which are being developed to segregate passenger and freight traffic on some of the country's busiest rail routes, also offer major opportunities to stakeholders. The 2 DFCs are under construction. The western DFC will stretch from UP to Mumbai, while the eastern DFC will stretch from Ludhiana in Punjab to Dankuni in West Bengal. The projects were expected to be completed by December 2021. However, due to disruption of work caused by the Covid-19 pandemic, the completion date has now been pushed back by six months to June 2022.

**MOVING FREIGHT FASTER**

With four ports being in development in AP, officials previously estimated the DFC would help in handling **300 to 350** metric tonnes of cargo by 2024-25

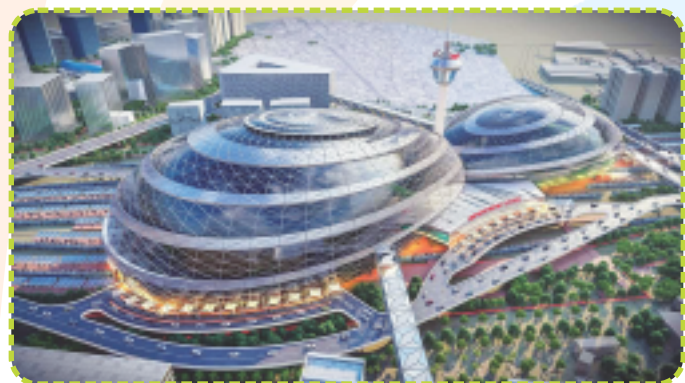
**1,115 km** | Length of East Coast corridor from West Bengal's Kharagpur to Vijayawada

**975 km** | Length of North-South sub-corridor between Vijayawada, Nagpur and Itarsi in Madhya Pradesh

Time taken for transportation will also reduce as freight trains will run at **100 km/hr** along these routes

Besides, the two DFCs, another three corridors – the East Coast corridor from Kharagpur to Vijayawada, the East-West corridor from Bhusawal to Kharagpur to Dankuni, and the North-South corridor from Itarsi to Vijayawada – have been proposed to further provide exclusivity to freight traffic on the rail network. The proposed corridors will have a combined length of nearly 4000 km, creating significant market opportunities.

Station Infrastructure development is one of the most ambitious mega projects being undertaken by IR, as most of the stations on its network revamp. The station redevelopment plan is aimed





at opening up about 20 million square feet of real estate, attracting nearly Rs 500 billion in investment. It offers immense market opportunities for the 123 stations currently on the list of redevelopment, IR aims to issue tenders for several in the coming months. In 2020-21, work has been awarded for major stations such as Delhi, Mumbai, Nagpur, Amritsar, Dehradun, Nellore, Tirupati and Puducherry.

Electrification is a major focus area for IR, in view of the cost savings from electric traction and a reduced carbon footprint. The national transporter plans to move to 100% electrification by 2023, and become a 100% net zero operator in the next 9-10 years. As of March 31, 2021, IR has completed the electrification of 45,881 rkm, which is 71% of the total broad gauge network (64,689 rkm). IR is also working on the ancillary requirements of its electrification system, such as upgradation of signaling systems and procurement of electric locomotives.

In another development, IR has planned to source around 1000 MW of solar power and 200 MW of wind power by 2021-22 across zonal railways and production units. To this end, solar plants aggregating 500 MW are to be installed on the rooftops of railway buildings to meet non-traction loads at stations. The Ministry of Railways

(MOR) further plans to use its surplus land to generate 20 GW of renewable energy from the solar and wind installations set up under the Make in India initiative to power the IR network.

Suburban rails play a major role in the public transport systems of several major Indian Cities. The Government of India approved the MoR's proposal for the construction of the Bengaluru Suburban Rail Project in October 2020. It envisages the construction of four suburban rail corridors with a total route length of 148.17 km, as well as 57 stations. The project is proposed to be completed in 6 years at an estimated cost of Rs. 157.67 billions. It is expected to provide a safe, accessible and comfortable mode of public transport. The Karnataka Government has allocated Rs 8.5 billion to the project under the state budget 2021-22. The project will ease traffic congestion, enhance rural-urban connectivity and provide a cleaner mobility option to lakhs of daily commuters, while opening multiple opportunities for stakeholders.



The government is undertaking several initiatives to attract investment in the sector from domestic as well foreign private players, and other multilateral agencies. IR sanctioned a feasibility study for seven bullet train projects, which are all open to public-private investments. ■



## Redevelopment Planned for Udaipur Railway Station

The redeveloped station has been envisioned to be transformed into an integral railway station on a par with the international airport. The station will be redeveloped on a Design-Build Finance Operate Transfer (DBFOT) model using principles of Transit Oriented Development (TOD).

Indian Railway Stations Development Corporation Ltd. (IRSDC) has invited Requests for Qualification (RFQ) to redevelop Udaipur City Railway Station. The objective is to redevelop the Udaipur Railway Station into a modern station equipped with state-of-the-art amenities.



Total mandatory cost for the redevelopment of Udaipur Railway Station is Rs. 132 crores, time frame three-years for completion after award of work. The total area for mandatory development is 49,8115 sqm and the built-up area for station estate development is up to 1,0,1374 sqm.

The concession period shall be 60 years and the concessionaire shall have the obligation to redevelop and maintain the station for 60 years along with the right to collect revenue from station users and commercial development.

The objective of redevelopment is to offer state-of-the-art amenities to passengers and improve their travel experience. ■

## Redevelopment of Surat and Udhna Railway Stations -Bids Invited

The Indian Railway Stations Development Corporation Ltd. (IRSDC) has invited Requests for Qualification (RFQ) to redevelop Surat and Udhna railway stations in Surat, Gujarat.

The objective of the redevelopment is to transform these railway stations into 'Railopolis'- a mini-smart city with mixed-use development where one can live, work, play and ride, thus attracting huge investment and business opportunities. ■





## Funding Landscape

The central Government is providing financial support to the extent of 480 billion over a period of 5 years, which comes round to an average of Rs 1 billion per city per year. An equal amount, on a matching basis, is being contributed by the state governments and urban local bodies (ULBs). Apart from these, around Rs 420.28 billion, or 21% of the total investment, is expected from convergence with other missions, Rs 410.22 billion (21%) from public private partnerships (PPPs), around Rs 98.43 billion (4.8%) from loans, Rs 26.44 billion (1.3%) from the resources of the ULBs, and the remaining amount from other sources.

A total of 12 smart cities have been selected for funding and technical assistance under the CITIIS Program. The MOHUA has also signed an agreement with the United States Department of the Treasury for provision of technical assistance to Vadodara, Rajkot, Pimpri-Chinchwad, Mysuru, Mangaluru and Faridabad in the issuance of municipal bonds.

A major component of smart mobility is smart infrastructure, which involves the development of physical infrastructure including airports, bus rapid transport, expressways, highways, MRT and seaports. To this end, the government has approved several major projects in the area of urban infrastructure development, predominantly in road transportation, with a total of 599 highway projects, covering approximately 12,903 km of the national highways, approved in the past five years. The government intends to develop 200 low-cost airports in Tier I and Tier II cities

throughout the country. With the objective of lowering freight rates, plans are also in pace to construct 111 river streams for coastal shipping.

Rapid urbanization has led to a surge in greenhouse gas emissions, contributing to an increase in the carbon footprint and necessitating the adoption of sustainable technology for public transport, coupled with clean fuels. As a result, EVs, hybrid EVs and solar-powered vehicles seem to be the future of vehicle technology in India. Compressed natural gas, as an alternative fuel, is already gaining popularity owing to its low cost. However, it requires infrastructure investments in the form of more fuelling stations, with improved accessibility.



Smart mobility is a major cornerstone of the SCM, as 150 projects worth over Rs 23 billion have been completed in the smart mobility segment, including projects such as smart roads. However, a comprehensive road-map for mobility across the entire city is missing, leading to many gaps in the transport segment. Lack

of financing capacity and delays in fund release are other concerns that often ward off some of the potential interest from private players. The integration of a strong regularity framework, public and private sector investments, smart technology solutions relating to artificial intelligence, data, drones, sensors, etc, are effective implementation of urban mass mobility schemes will make India progress towards a smart transportation age. Smart mobility can be ushered in through improvements in intelligent transport systems, smart automobiles, sustainable fuels and smart infrastructure. ■



## The Road Ahead – Tunnelling Construction

There is a need to ease technical and financial parameters for infrastructure projects, so that small players can be given an opportunities to at least bid for the projects, as it has been noticed that big players, after receiving the contract, assign it to small players, who were unable to bid for the project in the first place. The Ministry of Road Transport and Highways is planning to bring changes in bidding process regarding the technical and financial capacity for the Hybrid



Annuity Model (HAM) and build, operate, transfer (BOT) projects. Apart from this, the central government has been discussing providing general relaxation for tunnel and bridge projects. Given the large pipeline of tunnel projects and the increasing focus of the government on infrastructure development, the tunneling in the upcoming future. Meanwhile, implementing agencies must rely on advanced technology and digital solutions to expedite the completion of tunnel projects. ■

## Logistic Parks Planned in Krishnapatnam, Kakinada in Andhra Pradesh

Andhra Government is planning to construct two multi-model logistic parks on the PPP model will be taken up at Krishnapatnam and Kakinada ports. A hundred acres of land will be spared in each location for construction of the parks.



Government high-level committee is working to design the logistics policy-2021. State Government giving high priority to create the best infrastructure for industries. The government had

already studied the Singapore model for designing the policy. The government also plans to construct an integrated command control centre. Government creating better infrastructure for movement of goods carriers would be key to the logistics policy.



The government also plans to construct truck parking bays along the state and national highways. ■



## KRS MARKETING Partnership Proposal

### Marketing Requirements

Handling business opportunities in India require various steps and Marketing Partnership will help you to understand the practice and management to work in India. Considering the promotion before official participation in business, few steps like promotion, introducing own product range to manage the requirement development accept our standard products or services, advance preparation of participation in Indian Opportunities, management of local vendor team, if required for joint participation, handling tenders, offers, negotiations, contract management support etc., the list is ongoing and KRS Infra Ventures Pvt. Limited ensure that our experience being in this trade from last three decades offer you wider experience base in INDIA.

### Marketing Proposal

The KRS Group herewith introduce KRS Infra Ventures Pvt. Limited herewith offers the marketing partnership to your organization to promote you and yours associates interest in Indian Infrastructure Sector with following ways:

- ▶ Informing Business Opportunities in India for business scope of your organization.
- ▶ Promoting your organization with introducing and presenting details to various clients in Government

and Private Sector and follow-up for acquisition formalities (tendering process, finalization of business, all assistance during implementation & after sales etc.)

- ▶ Informing the current scenario of market in view of Government Policies, Procurements plans etc.
- ▶ Advising the strategies required during promotion for successful business opportunities.

The partnership terms will require discussions to finalize, which will be second step after receiving your principal approval and suggest you to work on following options for understanding:

- ▶ Marketing Partnership Joint Venture-which means "KRS Infra Ventures" will be offering all Marketing support in India and your organization handle the technical & commercial need of the projects targeted and rest terms & conditions of arrangement will decided after in principal approval of partnership.
- ▶ Exclusive Agent in INDIA-KRS will be offered exclusive Agency Agreement for 3 years minimum to develop and managing business opportunities for your organization and terms & conditions of this agreement will be discuss after principal approval of working.



## KRS Infra Ventures Private Limited

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