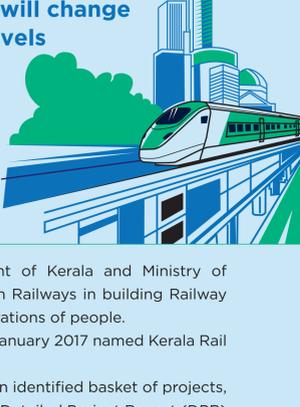


VOICE OF K-RAIL

A Monthly Newsletter From The Kerala Rail Development Corporation Ltd Issue: April 2020



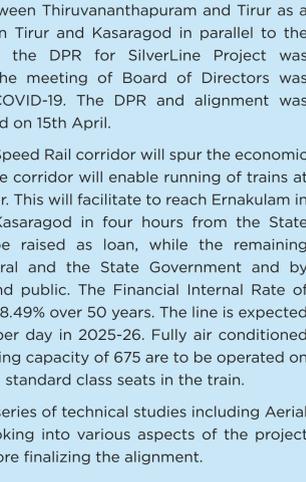
An Agreement was signed between Government of Kerala and Ministry of Railways to form a company to compliment Indian Railways in building Railway infrastructure in the State of Kerala as per the aspirations of people. A Joint Venture Company was constituted on 3rd January 2017 named Kerala Rail Development Corporation Limited (K-Rail).

K-Rail undertakes project development works for an identified basket of projects, which will inter-alia include surveys, preparation of Detailed Project Report (DPR) and getting requisite approval, processing for sanctioning of identified projects and implementation of the sanctioned projects.

EVENTS AND UPDATES

K-Rail Board Approves SilverLine DPR

The Board of Directors of Kerala Rail Development Corporation (K-Rail) has approved the Detailed Project Report (DPR) and alignment of the Thiruvananthapuram-Kasaragod Semi High Speed Rail corridor costing Rs. 63,941 crore. The DPR has been submitted to the Government of Kerala for approval, and thereafter will be sent to the Ministry of Railways. It also requires the approval of Niti Aayog and the Central Cabinet.



The DPR, drawn up by K-Rail's general consultant Paris-based M/s Systra, proposes to construct railway lines between Thiruvananthapuram and Tirur as a Green Field Corridor and lines between Tirur and Kasaragod in parallel to the existing railway alignment. Although, the DPR for SilverLine Project was completed by the month of March, the meeting of Board of Directors was postponed due to the outbreak of COVID-19. The DPR and alignment was approved by a meeting of the board held on 15th April.

The project 'SilverLine' - the Semi High Speed Rail corridor will spur the economic and social development of the state. The corridor will enable running of trains at an operational speed of 200 km per hour. This will facilitate to reach Ernakulam in one-and-a-half hours and up north Kasaragod in four hours from the State Capital. 52% of the total cost will be raised as loan, while the remaining expenditure will be met by the Central and the State Government and by participation of financial institutions and public. The Financial Internal Rate of Return of the project is estimated to be 8.49% over 50 years. The line is expected to have a ridership of 79,934 persons per day in 2025-26. Fully air conditioned EMU Type trains of nine cars with a seating capacity of 675 are to be operated on the line. There will be business class and standard class seats in the train.

Ahead of the preparation of the DPR a series of technical studies including Aerial LiDAR survey had been completed, looking into various aspects of the project including the environmental impact before finalizing the alignment.

Salient Features of SilverLine



Tentative alignment of SilverLine has been published



The tentative alignment of SilverLine Corridor has been published on the official website of K-Rail. The published alignment was prepared based on the Aerial LiDAR survey data obtained.

The alignment of the corridor which is published now, is the same as that which was approved earlier as part of the feasibility report, except for some minor modifications of plus or minus 10 to 50 meters at some locations to avoid religious/heritage structures. The 530.6 Km Standard Gauge 1435 mm line is expected to be completed by 2025 with the work starting this year.

For more details, visit: <https://keralarail.com/tentative-alignment-of-silver-line-corridor/>

K-Rail signs MOU with Kerala Infrastructure Fund Management Ltd.



MOU signing by Shri. V. S Senthil, CEO/KIFML & Shri. V Ajith Kumar, MD/K-Rail in the presence of Shri. K.R. Jyothilal, IAS, Principal Secretary (Transport)

K-Rail signed Memorandum of Understanding with Kerala Infrastructure Fund Management Ltd. for exploration of investment in SilverLine stations and area development by Kerala Infrastructure Fund and their co-investors.

In order to accelerate investment in the infrastructure sector, the Government of Kerala revamped the Kerala Infrastructure Investment Fund Board (KIIFB) in 2016 to mobilizing funds for financing critical and large infrastructure projects in the state. KIFML is an asset management company promoted by Kerala Infrastructure Investment Fund Board to primarily act as the investment manager for the Infrastructure Fund Vehicles (IFV) being sponsored by KIIFB.

FROM MD'S DESK

The Detailed Project Report was completed by M/s Systra by the month of March, 2020. The DPR was put up for approval before the Board of Directors of K-Rail in a meeting held on 15.04.2020. The DPR and the alignment of SilverLine were approved and the same has been sent to Government of Kerala for approval. Once the alignment is approved by State Cabinet, it will be sent to the Ministry of Railways. I thank the entire team of K-Rail and Systra for their efforts put in, which helped in the timely completion of the work, despite the prevailing situations.



I would also like to express my sincere gratitude to K-Rail Board members, Government of Kerala and Ministry of Railways for their whole hearted support.

Traversing through the entire state, covering 11 districts and touching the major cities and towns, the SilverLine is going to be a game-changer as far as infrastructure development of Kerala is concerned. It will increase connectivity and bring economic hubs, airports, health facilities and cultural amenities closer, across the State. It would also give a big boost to Tourism which plays a major role in the State's economy.

During the construction stage, the project will provide thousands of jobs and boost an entire set of downstream business activities, which will especially be a social and economic boon in the post-COVID 19 scenario. A highlight of the project is its total adherence to green protocols and it will also sharply reduce the pollution caused by fossil fuel driven road traffic, especially the long-haul freight movement.

We expect to complete the 530.6 km, Standard Gauge 1435 mm line, by 2025 with the work starting this year.

EXPERTS SPEAK

Latest technology Signalling System with highest security level

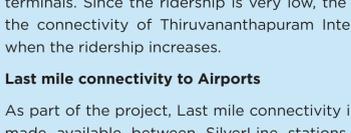
The Signalling & Train Control system proposed for SilverLine is ETCS Level-2 with LTE (with design speed of 250 kmph), which is the latest technology for high speed trains with highest security level to ensure that the operational activities are developed following strict safety requirements.



Mr. Surendar Kumar Signalling & Communications Expert

- Highest security level to ensure the operational activities
- Ensuring safety in train movements
- High quality of service
- Real Time Multimedia information to control room

This type of signal system is used for super high speed and high speed train operations in most advanced countries in the world. The train operation is fully automated by the signal train interface and the train speed and braking are monitored and controlled by the system in a real time basis. It is also provided with anti-collision and high security safety features.



Communication System

The Communication System proposed for SilverLine is LTE (Long Term Evolution), which is the latest technology based on fourth generation (4G) broad-band systems that offer higher data rates, while supporting extremely high bandwidth consuming applications such as on train Closed Circuit Television (CCTV) surveillance apart from very high level train monitoring.

- Video Surveillance (Live Feed) through CCTV cameras in trains along with Video Analytics for Passenger Security
- Faster data network Communication for voice, video and other related applications for High Speed Train network.
- Faster passenger information and amenities like all types of display, wi-fi facilities in trains and stations and emergency needs.

World Class Ticketing Facility

The Ticketing and fare collection system proposed for the SilverLine is of a world class standard. The SilverLine rail transit system is expected to handle a large volume of passengers.

The ticketing & fare collection system is an Automatic computerized system for effective management of the process of reservation, ticket issues and inspection with a view of improving convenience of users.



The Automatic Gate (AG) is provided at station with automatic entry and exit gates for ticket validation and inspection of tickets. There is also facility to integrate other modes of transport and other Indian railway trains and like urban transport with single travel cards with automatic charging facilities to ensure seamless travel without disruption and unnecessary queuing at each stage.

REPLY TO PUBLIC QUERIES

Why is the SilverLine not getting connected to the Northern Airports of Kerala?

Why is the SilverLine not extended to Thiruvananthapuram Airport?

SilverLine & Airport Connectivity

The Government of Kerala has given a specific suggestion that connectivity of SilverLine with all the four international airports in the state is to be explored. Accordingly, studies were conducted by the general consultant, a Paris-based transportation expert M/s Systra.

Kozhikode and Kannur Airports

In view of the typical hilly terrain around Kozhikode and Kannur airports, taking the alignment nearer to these airports was a technical task and was found to be very costly. Also, if the alignment is taken nearer to the airports, the Kozhikode and Kannur city centers will be far away from the alignment and providing a station within the city center which caters to more people may have to be skipped. Hence, the technical non-feasibility and commercial unviability of connecting Kozhikode and Kannur airports have already been brought out while preparing the feasibility report and the same was approved by Govt. of Kerala. Hence, connectivity to these airports is not proposed in DPR.

Thiruvananthapuram Airport

As part of the DPR, a Detailed Traffic Study was conducted at various stations throughout Kerala, including Thiruvananthapuram International and Domestic terminals wherein people were asked about their willingness to shift to SilverLine. After the detailed traffic study, it was found that the ridership originating from Thiruvananthapuram International and Domestic terminals is around 710 passengers per day against the daily ridership of 79,934 per day of SilverLine. Also, the expected ridership of 710 is split between International and Domestic terminals. Since the ridership is very low, the consultant recommended to defer the connectivity of Thiruvananthapuram International airport to a future date, when the ridership increases.

Last mile connectivity to Airports

As part of the project, Last mile connectivity in the form of electric buses will be made available between SilverLine stations and Thiruvananthapuram Airport which will include both International as well as Domestic terminals.

Last mile connectivity to Kozhikode and Kannur airport will also be made available from Tirur and Kannur SilverLine stations, respectively.

What is Last Mile Connectivity?

Moving forward most of the last mile connectivity would be through electric vehicles. To promote the green vehicle, adequate facilities including charging and parking facilities for electric vehicles, will be included in the SilverLine terminal design. The provision of park and ride facility at the terminal is an essential element in increasing the patronage so that that passengers can have comfortable last mile connectivity to their home/ work center.

In addition to above mentioned facilities, the interconnection with other mode of transport such as airport, conventional railways, bus stands and major industrial hubs will improve the last mile connectivity considerably.

MEDIA COVERAGE

