

September, 2014



Ropeway revolution

The world's first non linear aerial transport system is slated to be introduced in the West Bengal capital.

A Kolkata based firm has come up with another transportation alternative: the world's first non linear ropeway system. Conveyor & Ropeway Services Pvt Ltd (CRSPL), which is into the business of safe alternative aerial transport, has introduced Corvo, a 2nd tier alternative urban commutation mode. The firm has characterised Curvo as a path breaking invention because the overhead ropeway can follow a non linear route along urban roads.

Curvo is adaptable and amenable to bends, being able to follow existing city road routes, travelling overhead without consuming or interfering with road space below and the vehicular traffic that plies under it. It is safe, fast, pollution free, both in terms of emission and noise. It runs on electricity and does not use organic fuel. It will thereby help the government in permitting to cut down on fuel import and subsidy expenditure. It is accident proof having an automated drive system, instead of multiple human controls.

Curvo will run on existing arterial and other roads on steel portal frames spaced at 90-100 metre supporting the ropes. It will require nominal ground space for stations and rope supporting portal frames. It will have no interference with road spaces and the vehicular traffic below or with the pedestrian flow. As it will run on electricity the system will automatically eliminate the

polluting effect of poisonous and green house gases which are systematically spewed by vehicular transport. Reasonably noiseless it can travel at an average speed of 12.5 km per hour, irrespective of route alignment, thereby cutting down on commuting time considerably.

The cabins will have a capacity of 8/10 seats. The Curvo will provide boarding and deboarding facility at every 750 metre on any designated route. The stations will be provided with elevators to assist passengers reach the level of the station. Once a cabin reaches a station, the doors open automatically to facilitate boarding or deboarding at very low speed.

The Curvo ropeway is designed to ferry 2000/2500 persons per hour in each direction on a single track. A study on Kolkata city revealed possible overhead Curvo capacity of more than 200,000 commuters per hour which could be equivalent to 3000 bus loads of passengers per hour.

The estimated power consumption for running an equivalent Curvo system for one hour would be approximately be around 12 MW only. Terminal stations will be equipped with a drive or tensioning device. The operation control will be from the drive station. Sections will be interlocked for simultaneous operations. The entire ropeway will be under constant CCTV surveillance.

The Curvo system is expected to revolutionalise the transportation system not only in India but across the globe. CRSPL has had initial round of discussion with the West Bengal Government. Their response was indeed encouraging", trills Shekhar Chakravarty, Managing Director, Conveyor & Ropeway Services Pvt Ltd, and the inventor of the technology.

As a new addition to the city's infrastructure the new ropeway is being viewed as having great potential for contributing to connectivity leading to further development of the city. It is regarded as suitable for installation near canals and river banks. While construction of metro and flyovers cause acute disturbance to underground utilities, CURVO system being comparatively lighter can be located on kerbs, placed at sizeable intervals and cause minimum disturbance to utilities.

The objective of the CURVO Aerial Ropeway System is to completely eliminate risk of accidents. Even the installation and maintenance of the system is convenient," says Rachana Mukherjee, Director, Conveyor & Ropeway Services Pvt Ltd.

"With the implementation of CURVO on a stretch like Sealdah to BBD Bag would lead to Kolkata becoming the hub for all manufacturing activities. There is great potential for its spread, not only in India, but the world over," says Chakravarty.