

## THE BEGINNING

A project of this magnitude needed extensive surveys. The first tentative steps in this direction were taken in the early 1970's. First, cursory survey was completed upto Mangalore between 1971 and 1973, and an in-depth survey from Dasgaon to Ratnagiri between 1975 and 1977.

In October 1984 that the Ministry of Railways authorized the final location engineering cum traffic survey for the West Coast line, linking Roha on Central Railway with Mangalore on Southern Railway. The survey for part of the line, from Madgaon to Mangalore, spanning 325 km. was done initially, and in March 1985, the scope was increased to cover the remaining length of the line. Southern Railway, which was entrusted with this survey, submitted their report on the Konkan Railway to the Ministry in July 1988. Their report contained estimates of freight traffic and passenger traffic, and quite clearly proved the need for a new railway line in an expanding economy.

But parameters of these earlier alignment surveys were not modern enough. There were sharp curves and gradients, which would have become bottlenecks. So Konkan Railway Corporation Ltd. went in for a re-survey to increase the hauling capacity and speed potential.



*Engineers at work : Survey in progress.*

Many half-hearted attempts had been made over the previous century, and especially since the sixties, to extend the Railway in the Konkan region by linking Panvel to Diva in October 1964, and Panvel and Apta in April 1966. But it was only in 1977, when Prof. Madhu Dandavate was the Railway Minister, that Konkan Railway started really becoming a dream. Prof. Dandavate sanctioned the first stage from Apta to Roha, which was opened in March 1986.



*Battling the tough terrain: Working it out*

Then, in 1989, when Mr. George Fernandes became Railway Minister, the dream was pursued with greater vigour. In fact, on the first day of his taking over as Railway Minister, he told staff and officers at the Rail Bhavan that he had two projects in mind - Bagaha-Chittauni in Bihar, and Konkan Railway.

Mr. Fernandes had a fierce ambition to see the Konkan Railway project through, but arranging funds for such a mega project was going to be tough. Dr. Bimal Jalan, then Economic Adviser in the Finance Ministry, suggested the idea of a Corporation with the

Centre and beneficiary states taking up the project and raising money. With this concept, Mr Fernandes could convince Mr, V P Singh, the then Prime Minister, and the Chief Ministers of the four states. Prof Madhu Dandavate gave his whole-hearted support as Finance Minister.

Mr. E Sreedharan was Member, Engineering, of the Railway Board and being a born construction engineer, he was very enthusiastic about the idea of the Konkan Railway as it would be a challenging assignment. All paper work for obtaining the approval of the Planning Commission, Cabinet approval for the project, and floating of the Corporation was quickly gone through in 1989. By the time the Railway Budget was presented by Mr. George Fernandes in February 1990, the scheme was ready and included in the Budget. Mr. Sreedharan, who was to retire from Government Service on June 30, 1990, was earmarked to head the Corporation as Chairman and Managing Director.

On July 19, 1990, Konkan railway Corporation Limited (KRCL) was incorporated as a public limited company under the Companies Act, 1956. For the first time, the Government of India had departed from its policy of controlling railway projects. Instead, it made the four beneficiary provinces of Maharashtra, Goa, Karnataka and Kerala partners in the autonomous Corporation, with Mr. Sreedharan as Chairman and Managing Director. The Corporation had a seemingly impossible task. After the laying of the foundation stone at Roha by Mr. Sharad Pawar on September 15, 1990, it had to conquer the unrelenting terrain between Roha and Mangalore, cross dozens of mountains and rivers, and build a 760 Km. railway line. The project was huge, the time extremely short.

Where 100 km over easy territory had taken 20 years, KRCL initially had a mere five years to build the Konkan Railway, a time frame which was further reduced by six months. Four and a half years were by no means realistic, but Mr. Sreedharan's team had yet to realize what kind of terrain they would have to battle, and though some surveys had been conducted, there was no data for the entire stretch in Maharashtra - a route which involved half the length of the line.



*KRCL's Corporate Office*

The setting up of the organization was one of the most important steps in the execution of this project. With his years of experience on the Indian Railways, Mr. Sreedharan conceived an organizational set-up designed to deliver the goods. The entire project length of 760 Km. was divided in seven sectors, each approximately 100 Km. long, headed by a Chief Engineer. The sectors were Mahad, Ratnagiri (north), Ratnagiri (south), Kudal, Panaji, Karwar and Udupi.

With the delegation of adequate powers to Chief Engineers, and compact sectors that allowed for personal attention, KRCL succeeded in overcoming the proverbial 'red tape', and kept up the pace of work.

At the corporate office, there was a team of senior officers specializing in civil engineering, electrical engineering, signal and telecom engineering, mechanical engineering, and stores and finance. It was they who provided the strategic inputs of design, planning, tendering and contracting of large works. In the different sectors, Chief Engineers were assisted by Deputy Chief Engineers of the civil, electrical and signal and telecom disciplines, and by Deputy Chief Accounts Officers. The field level was manned by some 400 young engineers recruited from among fresh graduates of engineering colleges — a vital step in keeping the set-up highly motivated and dedicated to the objectives.

For the project to be a success, the organization had to be kept lean but effective. At the peak of the construction period, there were no more than 2,400 personnel, starting from the CMD to the lowest rung. The establishment of computer Wide Area Networks (WANs) and Local Area Networks (LANs) augmented their efforts, providing instantaneous fax and voice communication all along the route, which resulted in quick decision-making and prevented stalling of work.