

'Ipoh-Padang Besar job about 85pc complete'

SMOOTH-RUNNING: MMC-Gamuda JV says the RM12.48b electrified double-tracking project is running ahead of schedule

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THE Ipoh-Padang Besar electrified double-tracking railway project (EDTP) is about 85 per cent into completion on an overall basis, said MMC-Gamuda Joint Venture Sdn Bhd director (technical) Datuk Mohd Nor Idrus.

When Business Times met up with him here recently, he said the RM12.48 billion project, which runs through Perak, Penang, Kedah and Perlis, was ahead of schedule.

The railway project, which began in January 2008, is expected to be completed by the end of 2014.

While the project is described as the laying and electrification of a 329km-long double track to replace the existing single track that runs from Ipoh to Padang Besar, Mohd Nor explained that the multitude of construction works was a lot more complex.

This, he said, was because the tracks were designed to serve the current and future needs of Keretapi Tanah Melayu Bhd (KTMB).

There will be new stations, depots, KTM quarters and bridges in addition to the electrification of the railway tracks and automation of the train signalling system.

In keeping the railway route as straight and level as possible, he said numerous bridges were being built. The new railway tracks will also run through tunnels.

"We are building 66 flyovers, nine underpasses and 74 bridges. To curb

illegal crossings, we have also been instructed by the government to build 50 motorcycle and pedestrian crossings throughout the railway lines.

"There will be 23 stations, including halts. The seven big stations in Perak, Penang, Kedah and Perlis will have small stations in between them," he added.

As the EDTP enters its last leg of implementation, the next step is to incorporate a railway signalling system to control traffic flows along the rail tracks and prevent train wagons from colliding.

One of the main objectives of the railway signalling system is to help KTMB migrate its manual signalling and communication system to a computerised one.

Train movements will eventually be directed through remote switches and signals instead of timetables and train orders, with the number one priority being safety.

"The traffic control computer software is designed to be fail-safe, eliminating any conflicting commands that can cause a head-on crash or the trains going off-track," he said.

Ultimately, KTMB will be kept constantly aware of the position of each train through the control centre. Complex algorithms in the signalling system are also being designed to calculate the halting distance between trains on any kind of track, whether single, double or even

triple.

To date, Mohd Nor said system work was about 55 per cent into completion with design, procurement, installation and testing advancing ahead of schedule.

"All three divisions of system work; namely electrification, communications and signalling, are progressing smoothly with system vendor Balfour Beatty-Ansaldo Systems working diligently on the project."

Mohd Nor said the double-tracking and electrification of the Ipoh-Padang Besar stretch was the government's initiative to continue work already done on the 180km Ipoh-Rawang route. The other completed tracks are Rawang-Seremban (105km); Sentul-Port Klang (45km); and Sentul-Batu Caves (7.5km).

"With double railway tracks, KTM trains will be able to operate in both directions at the same time and that cuts down waiting time," he said.

For example, the travelling time between Kuala Lumpur and Butterworth will shorten to three hours from the current nine hours.

The project also aims to improve KTM's earnings by increasing its existing rolling stock and enhancing the efficiency of its cargo wagons through a renewed focus on containerised and long-haul freight transportation.

KTM will be able to offer its corporate clients more frequent services to move bulky commodities like cement, chemicals and rubber

products between Penang Port and southern Thailand.

This will significantly boost socioeconomic development in rural and suburban areas by enhancing accessibility for tourism and commercial activities, thereby creating direct and indirect employment opportunities for local residents.

Mohd Nor noted that the EDTP sought to reduce over-reliance on road transport with more frequent inter-city travel. Eventually, it is hoped that there will be a reduction in petrol subsidy and a drop in road fatalities due to fewer cars on the road.

The project is also an ideal training ground to produce a new breed of Malaysian engineers.

In a separate interview, MMC-Gamuda Joint Venture senior planning manager Mohd Nizam Daut and tunnel manager Ng Hau Wei shared their experiences.

"Compared with my peers of similar years in the workforce, I am proud that I have been given the opportunity to work on large-scale multi-billion projects in Malaysia

such as the EDTP (Ipoh-Padang Besar). It has sharpened my management skills and given me the confidence to take on even bigger projects, locally and internationally,"

said Nizam, who has prior experience working on the Ipoh-Rawang line.

Ng, on the other hand, recalled how his tunnelling team had to deal with "live traffic" when building the 3.3km twin tunnels cutting through Bukit Berapit, between Taiping and Padang Rengas.

Apart from subjecting themselves to confined spaces while drilling and controlled blasting through the mountain, they had to navigate their way beneath the North-South Expressway and an existing trunk road that connects Kuala Kangsar to Taiping.

"When constructing a tunnel, we are very much aware that we have only one access and that there must be adequate ventilation at all times. Comprehensive safety standards have to be in place to prevent any possibilities of gas combustion that might escalate to an explosion," he

said.

Ng, who started his career in tunnel engineering about 11 years ago, was part of the specialised team that built the Stormwater Management and Road Tunnel (SMART) in the Klang Valley, which is the world's first dual-purpose stormwater and highway tunnel.

The SMART project used state-of-the-art slurry shield tunnel boring machines.

Lately, his team has been instrumental in constructing the twin bore Berapit Tunnels and the Larut Tunnel using the "drill and blast" approach.

Today, out of the 200 Malaysian tunnel engineers who worked on SMART, 120 are working on the electrified railway double-tracking project.

"Looking back, I feel that I am lucky to be given the opportunity to contribute to major infrastructure projects here and gain valuable hands-on exposure in tunnel engineering," said Ng.

"If there is but one wish for me, I would want to be remembered for my role in these national projects."

SMOOTH RUNNING

Double tracks ahead of schedule



Construction of Ipoh-Padang Besar railway about 85pc completed

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The **Bangan Serai station** is one of more than 20 stations that are planned for the entire stretch of the Ipoh-Padang Besar route. Pix by Yong Chee Choong



MMC-Gamuda Joint Venture Sdn Bhd director **Datuk Mohd Nor Idrus** says the project aims to serve current and future KTMB needs



Workers conducting **rail clipping works** at the Bukit Gantang stretch of the Ipoh-Padang Besar rail track.