Noteworthy advances in passenger rail transport

Some implications for South Africa

Some of the latest developments in passenger rail technology presented in the article are worth noting by the South African civil engineering profession. While some may appear far-fetched, the article outlines the potential of rail in properly developed urban areas.
TECHNOLOGY AND BUSINESS MODELS

Although numerous new rail technology patents are being developed, the critical issue is to adopt the technology to render quality passenger transport services to customers.

In South Africa, where the drive is towards the refurbishment of existing rail infrastructure, the adoption of most of the latest technology should probably not be expected. However, the situation could alter if the South African public passenger transport environment becomes an attractive investment option for the private sector. For example, some European countries are exploring the use of high-speed trains over long distances as an alternative for domestic airlines services, based on the total service package offered to customers. In South Africa, the recently unveiled intention to construct a high-speed rail link between Johannesburg and Durban could be pitched at this level amidst tighter airline regulations, which are creating rather hostile services. This specific project, however, has also sparked debates around government’s transport intervention priorities.

Many large rail projects have often fallen short of meeting their financial projections and ended up receiving operating subsidies from governments. Their implementation appears to be more politically driven than technically driven. The Chinese have attempted to reduce implementation costs by focusing on developing manufacturing and implementation skills internally and using local resources as far as possible. In South Africa, the nature of land use patterns and populations densities are such that for some time to come, high-performance transport modes will by default require operating subsidies to make them attractive to the average South African user. South African transport systems have historically been – and still are – reliant on some form of subsidy.

THE SOUTH AFRICAN REALITY

From a rail passenger transport perspective, getting the basics right would be the first prize in South Africa. These would include:
- Eliminating level crossing accidents
- Training rail security officials and improving their work ethic
- Offering improved pedestrian infrastructure design and delivery to pedestrians accessing rail stations
- Accepting that the provision of adequate railway police is a basic requirement, not a favour to passengers
- Improving train station aesthetics

Implementing performance-based contracts for rail services

The South African Rail Commuter Corporation recently introduced newly refurbished 10M5 trains with improved customer comfort features. This is a step in the right direction. Similarly, the planned Soweto Express train service, also with customer-oriented features, is worth applauding.

References are available on request

Source: