

Dubai-Abu Dhabi possible in '25 minutes'

SWISSRAPIDE SEES OPPORTUNITY FOR NEXT GENERATION MAGNETIC LEVITATION TRAIN TECHNOLOGY IN MIDDLE EAST

DUBAI

BY ANDREW STAPLES
Chief Business Reporter

Ultra-high-speed magnetic levitation (maglev) trains travelling at up to 450km/h could reduce the travel time between Dubai and Abu Dhabi to just 25 minutes – and they'd be cheaper to run than regular trains, the Middle East Rail Conference heard yesterday.

Niklaus Koenig, CEO of maglev developers SwissRapide AG, said operating costs of maglev trains were around a fifth of the operating costs of a traditional high-speed train.

"We think there is tremendous potential here [in the Middle East]. It's interesting to hear there are a lot of commuters between Abu Dhabi and Dubai. We see potential to connect both international airports as well as the downtown areas of Dubai and Abu Dhabi – that's about 145km. Travel time would be about 25 minutes and capacity almost unlimited."

SwissRapide have conducted feasibility studies on projects in Switzerland, and are bidding for a concession linking Zurich and Winterthur under a public-private partnership.

Low costs

Although his company hadn't conducted a feasibility study for an Abu Dhabi-Dubai maglev link, he said: "The distance is about the same as Zurich-Bern. You're talking about €10 billion (Dh40.46 billion) for that. The cost here I think would be significantly lower because wages are lower here, plus with a single



Discussing future trends

Andreas Schwillig, a partner at Roland Berger, Ajit Kumar Mishra, additional GM for the Dedicated Freight Corridor Corporation India, with the moderator during a session yesterday.

track you can bring those costs down. That gives you a rough estimate. That's for the complete system including trains, including stations."

Maglev relies on magnetic repulsion to float the train above the rail. The limitations on its speed – aside from the distance between stations – come down to air pressure, streamlining and the energy used to propel the train.

Koenig said such trains had more in common with the airline industry than the rail

industry. Koenig highlighted three possibilities for maglev routes in the Middle East.

'Awakening interest'

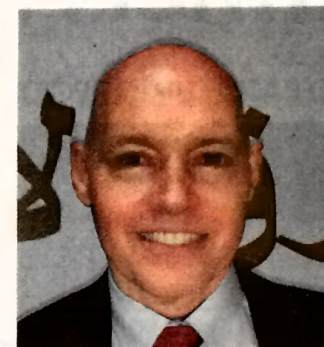
In addition to an Abu-Dhabi link, he suggested a 450km route between Riyadh, Dammam and Bahrain and the Metro project linking Muscat's old town and airport could be built as maglev monorails.

In an interview after his keynote presentation, Koenig said, "If we can get a feasibility study, great, but my pitch is re-

ally to awaken interest here in something we think would be fantastic for the region."

In a question-and-answer session after his presentation, Koenig said SwissRapide relied on their business cases to bring in private financing for projects.

"I think it's very difficult at this point in time to find financing for giga-projects, where we're going into the billions or tens of billions. I think from my experience in the Middle East, I think particularly with the Abu Dhabi-Dubai project,



Andrew Staples/Gulf News

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Nicklaus Koenig / SwissRapide CEO

my feeling is that the business case would be there, perhaps not at the beginning, but when we see the increase of ridership that we've seen presented in the last two days on the Dubai Metro and other projects... we've been seeing rises of 5 to 7 per cent. I think the same effect would take place."

He added that maglev worked well in sandy conditions, and was unaffected by sand on the track, though he said the effects on the train exteriors would need to be examined.

New software can help builders cut costs

DUBAI

BY ANDREW STAPLES
Chief Business Reporter

Builders could save significant sums if they adopt software that runs detailed, holistic simulations of projects before starting.

Building information modelling – which simulates and monitors all aspects of design, project management and visualisation – could save up to 50 per cent of costs on infrastructure projects, and around 15 per cent of costs on buildings, Autodesk executive Michael Stangl told the Middle East Rail Conference yesterday.

Stangl, Autodesk's senior director of global services, told delegates that the methodology, already adopted for some projects by Dubai Municipality, could also reduce scheduling delays by 50 per cent for buildings and between 30 and 120 per cent for infrastructure problems.

The system results in overall savings of 5 per cent of costs, with similar reduction in schedules and accidents. But despite the benefits, adoption of the technology by the construction sector has been sporadic.

"Adoption could be much faster," he admitted in an interview after his presentation. "It's a massive process change. It's a workflow change and if anything else the industry has to adjust to that – and it's a very fragmented industry. You got a whole bunch of independent companies that have to come together ... and work in a unified way."