City air-rail link that we need

n overall terms, the increasingly rapid expansion of the city of Jakarta has caught planners and developers unprepared, as they now grapple daily with the worsening traffic congestion, currently compounded by the periodically heavier seasonal wet conditions with resulting flooding in the lower lying and sinking areas of the city.

Decisions and actions too frequently are responses, albeit understandable, to difficult events, rather than part of a longer term path that sets the city for an agreeable and habitable future, when it will become in a few decades the core of arguably the world's largest continuous conurbation.

One key immediate deliverable relates to the construction of a satisfactory and safe rail link to, first and foremost, the city's overworked international airport, Soekarno-Hatta, and now also to its revitalized backup at Halim Perdanakusuma, which until 1985 was the city airport until Soekarno-Hatta opened for business on 1 April of that year.

The plan for a dedicated rail link from city centre to Soekarno-Hatta has been talked about for nearly a decade. An early plan, albeit flawed, was entered by a joint venture of the airport and national rail operating state-owned enterprises in recognition of the looming problem of access to the airport from the city center. However, development of the plan became mired in bureaucratic-speak, responsibility for project ownership and the need for private sector participation, but with an unworkable formula for engagement of



Scott Younger

private sector involvement.

Over the intervening years, none of these problems has been satisfactorily resolved, and the link has remained unbuilt. Now, of course, the link sensibly has to be extended to provide a connection to Halim, hopefully duly integrated with the other mass transport projects (MRT and monorail) now getting underway.

A recently published proposal under MOT Regulation No. 1264/2013 suggests a dedicated routing between the airports with a city center direction involving connections at Cawang to the east side of the city, through Manggarai, Tanah Abang, Sudirman, Dukuh Atas and Pluit before terminating at Soekarno-Hatta. The plan suggests the route to involve construction at elevation with tunneling at either end, where the airports are to be approached.

For the west part of the link, the route will use much of the existing toll access road right-of-way, as in the original Railink proposal, and an attempt is being made to minimize the impact of delays caused by right-of-way acquisition. The route chosen will involve interesting engineering challenges, especially when tunneling at the airport in or under the soft ground which is subsiding

in the area. The approaching elevated rail section will also require substantial foundations to ensure that the track is stable and unaffected by subsidence as occurred to the original section of the airport toll road.

All these factors mean a high price tag for the project, in the order of US\$2 billion. However, the aim is to provide a city link travel time in the order of an acceptable 20 minutes, something that cannot be achieved by alternatives, ostensibly cheaper, that involve using existing rail routes west of the city. To meet the required short travel time a dedicated route is needed.

Nevertheless, it will be towards the end of this decade that this quick option between city center and Soekarno-Hatta will be available to serve the fast growing air travel market. Along with the double digit growth in air travel demand that Indonesia faces with its expanding economy, the strain on catering for both satisfactory flight and road travel is going to become increasingly stressful over the next few years, even if small short term and needed improvements to operating and connecting systems are implemented.

The connection through to Halim, apart from linking these two key airports, is important from the point of view of Halim being able to provide the most suitable space for train terminal and maintenance facilities.

It will also be important to ensure that planned connections to other city rail transports, whether internal such as the MRT and monorail, or to suburban links further afield, are efficiently thought through and constructed as well as locations for transfer to roads. This is going to offer serious planning challenges because of the limited area that generally exists at inner city stations. Solutions will have to involve station building on several levels and even considering the Heathrow "pod" system of linking passengers to slightly distant parking arrangements.

Implementation of the project is designed for major private sector participation under a form of PPP (public private partnership) arrangement with government taking responsibility for the land required for the project. Proposed rail fares will be attractive to users so that savings in both time and charge, compared with today's road only option, will be effected. However, in order to attract private sector interest, the return on investment may require some form of government incentive as commonly required for major urban transport projects.

The project is important as well as overdue, so every endeavor should be made to ensure that obstacles to delivery are minimized.

The writer, who has degrees in civil engineering from Glasgow University, the University of California at Berkeley and the University of Hong Kong, is a director at PT Nusantara Infrastructure Tbk. and vice chairman of EuroCham. He has worked in Indonesia for nearly 30 years as academic and consultant in the infrastructure sector on a number of projects.