Amman – Zarqa light rail project derailed

GLOBAL FINANCIAL CRISIS Failed project reveals challenges of public-private partnerships for urban rail development

Photos: CPCS Transcom

Light rail operations are expected to make use of the existing Hedjaz Railway alignment.

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Jordan's proposed Amman – Zarqa Light Rail System may be the latest casualty of the global financial crisis. Touted as the first urban rail public-private partnership in the Middle East, the project — in its current form — has now been derailed indefinitely by financial challenges.

March 31 marked the passing of the deadline for the selected developer, Kuwaiti-led consortium Jordanian Kuwaiti Company, to secure financing for the project. This is despite two extensions granted by the government of Jordan for reaching financial close. No further extensions are expected.

The passing of this deadline effectively renders null and void the 30-year Construction & Operating Agreement signed a year earlier by the government of Jordan, the Jordanian Public Transport Regulatory Commission, and JKC.

This is the latest setback for a project that has been in progress for over a decade. Conceived in the mid-to-late 1990s, in response to growing congestion between the Jordanian capital, Amman, and neighbouring industrial city of Zarqa, the Amman – Zarqa LRS was intended to be the first link in a more extensive regional urban rail network.

It was envisaged that the LRS would operate using electric light rail vehicles on a standard gauge double-track line. The 26 km route was to be largely constructed within the existing Hedjaz Railway right-of-way, which would cease operations in this corridor.

Early ridership studies forecast close to 100 000 passengers per day (both directions) initially, with weekday peak ridership of between 4 000 and 6 000 passengers per hour per direction during the first few years.

Project structure

The government decided at an early stage that the project should be developed by the private sector, using a PPP model. This was a novel approach for the region at the time. The preferred project structure was to choose a private sector consortium to design, build, partly finance, operate and maintain the LRS for a period of 30 years. The consortium would enjoy the operating revenues — and revenue risk — during that period, after which the project assets and operations would be transferred back to the government.

The project had a number of false starts. In the late 1990s, the proposal, which at the time placed excessive risk on the private sector, failed to attract qualified bidders. It was re-tendered in 2005 but, despite significant initial interest from the international community, it attracted only one bid, which was ultimately not accepted by the government.

The principal reason for the failure of the initial tenders was that the project was simply not attractive; expected returns were too low, and the risks too high. Though not unlike the PPP model and the DBFOM structure used for urban transit projects elsewhere in the world, including the Canada Line in Vancouver, the PPP terms for Amman – Zarqa needed a re-think.

With the support of management consultants CPCS, the government went back to the drawing board in 2006 and re-assessed the terms with the aim of making the project more attractive. The revised structure included a capital infrastructure grant equivalent to US$85m, a minimum revenue guarantee equivalent to US$11m per year (to be adjusted with inflation), a significant allocation of land for commercial development, and freedom to set fares, subject to a pre-set fare ceiling.

Based on these revised terms, the project was again tendered in 2006. Three consortia submitted bids, two of which were deemed to be qualified. Initially, Pakistani-led consortium Infrastructure Development Company was selected as the preferred bidder, but negotiations between the

Jordanian government and IDC ultimately failed. The second bidder, a Kuwaiti-led consortium later incorporated as Jordanian Kuwaiti Company, subsequently entered into a Construction & Operating Agreement with the Jordanian government, subject to standard conditions precedent, including the ability to secure finance within a fixed time period.

Unfortunately, timing for achieving financial close coincided with the collapse of international financial markets and the virtual freeze in the availability of commercial credit. As with most urban rail PPP deals, debt forms the lion's share of private financing. Without debt or alternative sources of financing, there is no PPP project. And so, as traffic congestion continues to worsen on the Amman to Zarqa corridor, the light rail project is again stalled, with its fate unclear.

PPP approach

Based on the Jordanian experience, some reflection on the value and challenges of PPP approaches to urban rail projects may be warranted. Did the PPP model fail the Amman – Zarqa LRS project, or did the project fail the PPP model? I would suggest that the answer lies somewhere between the two.

Advocates of PPPs often suggest that their value is in ensuring on-time and on-budget delivery of infrastructure projects; transferring certain risks to the private sector, where these can be better managed; and more efficient and market-responsive operations, all of which benefit the public in one way or another. Empirical evidence suggests that these benefits can and do result from using PPP models.

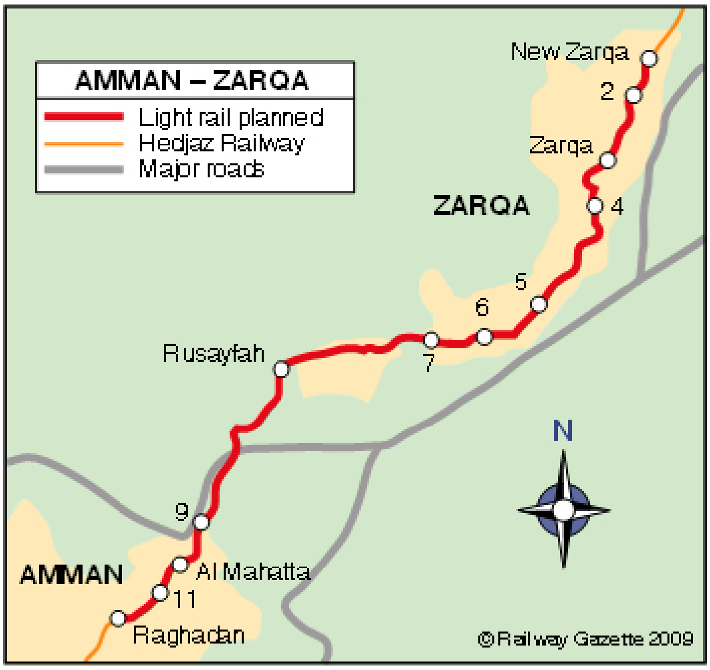
Of course, this presumes that a project company is already selected, that the PPP agreement terms are agreed, and that financing is secured by the private sector company.

Getting to this stage can take time. PPPs require a lot of up-front planning and work. A municipality, regional or national government can move quickly to develop urban rail transport using traditional procurement methods, subject to the usual planning, environmental assessments, budget and so on.

However, PPPs require analysis, financial modelling, risk structuring, contract and tender document preparation to ensure that the 'deal' will be acceptable to the market and that public interests will be protected. This process can be significantly slowed in jurisdictions where PPP approaches are new, or are being applied to new sectors, or where there is reluctance within the public sector to engage with the private sector to build and operate public infrastructure.

A further challenge to the PPP model is the introduction of a high degree of complexity which may be difficult to control or even understand at times. Under traditional procurement models, the government defines the project, tenders the work, and manages execution, operations and maintenance. This is relatively simple.

Under PPP arrangements, the public sector must craft and define a project with a horizon of 25 or 30 years and nail down a structure and terms that will be attractive to the market, while protecting public interests, before it can even be tendered. Once tendered, it must engage with complex project finance-style corporate entities, and negotiate a long-term deal with a structure representing multiple corporate interests. This is no easy task.



Limitations

PPPs are also subject to a number of external forces, not typically present in traditional procurement. For one, public sector actors must deal with a new partner, which has its own interests, constraints, and liabilities. External debt financing (or challenges in obtaining financing) is a clear example of an external force that can be difficult to control, as the case of the Amman – Zarqa light rail project so aptly demonstrates.

These real limitations of the PPP model are often glossed over. The reality is that PPPs for urban rail projects do not have a very long track record. International experience with this model in the urban transport sector is still limited and no urban rail PPP has yet to run its full concession period. The case of the Amman – Zarqa LRS suggests that some caution may be warranted.

Whether the PPP model used for this project was the best structure is perhaps debateable. What is certain is that the PPP model used in Jordan did not result in speedy implementation. Indeed, in the 10 years that have elapsed since the first plans were developed for the Amman – Zarqa corridor, a number of other cities and countries have planned, built and opened urban rail lines.

It could be argued that more could have been done to ensure the success

'Though recognised as more expensive than public financing, private capital can also help fund projects where short-term public sector budgets are constrained'.

Conversion of the Amman-Zarqa corridor would require severing of the Hedjaz Railway main line with Jordan and Syria.

of the project as a PPP. A better allocation of risks, in particular revenue risk which was largely transferred to the private sector, is one factor that could probably have been better addressed. A greater level of public funding for capital provision and the division of responsibilities between infrastructure and operations are others. A requirement for full committed financing at the time of bid submission could also have helped, though it is recognised that few, if any, financial institutions are open to committing financing beyond a few days in today's market.

Whatever the case, the Amman – Zarqa light rail project, in its current form, has fallen off the rails. Whether the project will be reborn after financial markets stabilise, or whether it will go ahead using a traditional procurement method or in another form is still unclear. Certainly, other PPP structures are possible, including government construction of infrastructure, with private involvement in systems and operations only. The government is currently contemplating ways to move ahead with the LRS project on its own, though plans have yet to be confirmed.

Urban rail financing

Also questionable is the universal applicability of the PPP model for urban rail projects. The reality is that PPPs are highly complex and much more difficult to implement than traditional procurement methods. PPP models cannot simply be copied from one jurisdiction to another. They have to be modified to meet the features of the transport system, the needs of the passengers, the financial and technical resources of the government, and the abilities of the private sector to meet their assigned roles (and to meet their corporate objectives).

Whether the value of the PPP model outweighs the challenges that arise from its complexity is likely to be the subject of much future debate. In the meantime, it is important to draw the lessons from past and ongoing PPP transactions.