Runaway Train: The New Age of the Railroad? An update on rail projects in the MENA region

Overview

- As a follow-up from our previous Runaway Train article issued in December 2013 this article is a round-up of the current state of the market for the rail industry in the Middle East, and particularly in the Gulf Corporation Council (GCC) region.

- Developing transport networks, in particular rail networks, has remained firmly on the agendas of the governments of the Middle East in recognition of the importance of building efficient and integrated modes of transport (for both freight and passengers), to cope with rapidly growing populations and increasingly congested roads, and also to aid socio-economic development and exploit natural resources.

- 2014 has seen a number of significant steps forward in this development. The members of the GCC and the Intergovernmental Organisation for International Carriage by Rail have signed a memorandum of understanding which could lead to the GCC and its six member states, Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the UAE, acceding to the COTIF convention. The convention provides a legal framework for international rail traffic. Following the meeting which was held at Bern in Switzerland on 19 March 2014, a seminar is planned for later this year to discuss the scope of co-operation between GCC and OTIF.

A visionary programme, to connect the 21 member states of the Arab League with six major lines running across the region, is being developed by Italian consultant Italferr. This includes a line in Morocco, running across the Mediterranean coast; a line connecting Egypt across the Nile; a line running across Turkey/Red Sea connecting the Levant; a line running across the Mediterranean/GCC, connecting the Gulf States; a line running across Saudi Arabia to link the east and west coasts of the Kingdom; and a line through Oman, Yemen, Djibouti and Somalia.

In the GCC, the governments have pushed for the development of railway and metro projects. These national rail networks will have to compete for resources with various metro schemes across the region. Last year, the KSA alone awarded more than US$22bn worth of deals for the delivery of six lines of its metro network. Even more contracts are expected to be awarded in the near future.

Similarly, Qatar has continued to build on its 2013 awards (totalling almost US$10bn worth of construction contracts for the first phase of its metro system) and has continued to award contracts throughout 2014. In March, it selected a consortium led by Greece's Aktor for the construction of the Gold Line, and a consortium led by Spain's FCC to build the elevated and at-grade sections of the Red Line South.

Later this year, it plans to award contracts for the rolling stock and systems, and the construction of three other sections of elevated and at-grade line.

More metro projects are planned elsewhere in the GCC. In Saudi Arabia, consultants are competing for project management roles on Mecca, Medina and Jeddah metro projects, and in the UAE, Abu Dhabi is preparing to issue tender documents for its metro this year.

As these schemes move forward, the competition for resources will become even more intense. For those countries in the region, this means it has to secure the right people and resources as quickly as possible, or it could be left waiting in the wings for even longer.

Driving factors

There are numerous factors that drive the thirst for the development of rail transport networks across the GCC, including the following:
• rapidly growing populations and growing urbanisation;
• alleviating road traffic congestion, which is still rapidly increasing;
• competition between the GCC countries to be market leaders in the rail sector;
• increasing employment opportunities, including for the local populace, helping answer an increasingly pressing social issue by creating thousands of jobs in the rail industry and opening up job opportunities across all fields by making travel within the region more accessible;
• exploitation of natural resources such as the mineral mines in the north-west of Saudi Arabia and the gasfields of Habshan in Abu Dhabi;
• creating access to remote areas and communities giving rise to increasing land value and promoting socio-economic growth;
• increased industrial growth in industries such as mining, transit and supply services and other heavy industries;
• improving transport connections with Europe and among the GCC countries, saving time and costs and opening up the market;
• in-line with global trends, an increase in the level of environmental awareness in the region, a push for sustainable 'green' living and 'cleaner' public transport;
• attracting and delivering successful international events such as the FIFA World Cup 2022 in Qatar and Expo 2020 in Dubai; and
• the collective will of the UAE and the wider GCC countries to participate in the Etihad Federal Railway and GCC Railway projects (as discussed below).

Overcoming barriers and blockades
Traditionally, the Middle East has faced a number of barriers to the implementation of public transport networks and more specifically, rail projects. These barriers have included the difficult topography, summer climate, the relatively under-developed legal and regulatory frameworks and the perceived cultural preference for private over public transport. However, whether it has been the mass influx to countries like the UAE of expats accustomed to a daily train commute in their home countries, increased social pressure for a cost-effective and efficient transport system (following the recent political unrest across many parts of the region) or simply road congestion, there has been a seismic shift in the mind-set of the region with regard to rail. Indeed, almost every country in the Middle East has announced plans for massive infrastructure spending in the transport and rail sector.

As noted in our previous Runaway Train articles, it has been reported that more than US$130bn worth of rail schemes are currently planned or under way in the GCC. This includes a number of high profile projects, such as the US$25bn GCC rail network, the UAE’s US$11bn Federal Railway project (where Ashurst advises the railway owner, Etihad Rail PJSC), the US$4.2bn Dubai Metro system (on which Ashurst advised the current operator, Serco), the US$7bn Haramain high-speed rail link (on which Ashurst advised a bidder), the circa US$15bn Makkah Mass Rail Transit system in Saudi Arabia (for which Ashurst has also advised), the US$1.1bn Dubai Tram (on which Ashurst advised the successful bidder for the operations contract, Serco) and Kuwait’s circa US$7bn metro system (on which Ashurst advised the authority). Other notable projects under development include Qatar’s Doha Metro, the “Saudi Landbridge” freight rail, the Riyadh Metro (where Ashurst advises the public sector) and Oman National Railway and prospective metros in Jeddah, Medina, potentially Dammam. Projects such as these demonstrate that the appetite for infrastructure development in the region remains generally high, with rail playing a key role.

Completed projects such as Dubai Metro provide a great boost of confidence for similar proposed projects in the region, proving not only that these projects can be successfully delivered in the region but also that they are a viable alternative to road transportation. For example, during the first quarter of 2014, there were 40.7m users of Dubai Metro, up 22 per cent on the same period in 2013. There remain a great number of very significant rail projects planned for the next few years and if all of the metropolitan rail schemes currently planned go ahead, then by 2030, almost every major city in the GCC will have some form of metro or light-rail network. Further to the Dubai metro, there have been more contracts awarded and more movement in the sector than there has ever been in recent history in the region. Previous barriers and blockades, such as financing and technology to
deal with the unique environmental conditions, have clearly been overcome as the sector hots up an appetite to break down barriers continues to grow. Many of these opportunities are discussed in more detail below.

"Ridership [on the Dubai Metro] grew over 500 per cent in three years."

**GCC Railway**

The GCC countries are planning to create an integrated rail network connecting all six GCC countries, which would allow free movement of passengers and cargo. The railway will pass through at least one city within each of the GCC member states linking the city of Kuwait in Kuwait, Dammam in the Kingdom of Saudi Arabia, Manama in Bahrain, Doha in Qatar, Abu Dhabi and Al Ain in the United Arab Emirates and Sohar in Oman. The GCC Railway is therefore an overarching project to join together the national railway networks of the six member states that are currently in varying stages of design and implementation.

The GCC Railway will have an estimated total length of 2,117km including about 180km of lines connecting to traffic generating facilities and other transport facilities, such as ports, airports, and industrial parks, etc.

The cost will be shared by the six countries in proportion to the length of main line in each country.

The total length of the railway line in km in each GCC country² is expected to be:

<table>
<thead>
<tr>
<th>States</th>
<th>The total length of the railway line in km</th>
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<tbody>
<tr>
<td>Kuwait</td>
<td>145</td>
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<tr>
<td>Bahrain</td>
<td>36</td>
</tr>
<tr>
<td>Qatar</td>
<td>283</td>
</tr>
<tr>
<td>Oman</td>
<td>306</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>684</td>
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<tr>
<td>Saudi Arabia</td>
<td>663</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>2,117</strong></td>
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On 10 May this year, a number of joint committees were established by Saudi Railway Company and Etihad Rail to implement best practice in railway projects under a partnership accord signed in Abu Dhabi. The two railway companies foresee the partnership forming the basis for a wider programme to develop common technical and operational standards which would apply to railways being developed across the GCC countries.

Following the establishment of the joint committees in July 2014, the final touches were made to the proposed GCC network design.

Notwithstanding that each country is responsible for the separate delivery of the physical construction works within their borders, the centralised design and the establishment of universal standards are critical to ensuring the best possible integration of the network across all GCC member states. Construction has commenced in a number of states, with the others expected, in the near future, to also commence construction. However, the overall 2018 target completion date remains optimistic while not all works are under way.

The UAE and Saudi Arabia are at the forefront of the GCC countries to have taken practical steps to set this project on its course, and have already embarked on constructing their railway projects. The remaining GCC countries are required to take similar practical steps, especially after the decision by the committee on the final plan design. Oman has recently begun making progress towards this goal, and after a hiatus, so has Kuwait.

Etihad Rail has already entered its second phase, which is expected to become operational as per the projected schedule. Meanwhile, Saudi Arabia has invited bidders for the implementation of the first phase of a railway network running through its territories.

The GCC railway project will contribute to setting up significant related projects, such as the construction of a 25km long bridge between Saudi Arabia and Bahrain, and another 45km bridge between Bahrain and Qatar. This will provide an integrated network that will contribute effectively to stimulating bilateral trade and cutting transport costs, and consequently reducing commodity prices.³

**United Arab Emirates**

**Federal Railway**

Regardless of the plans of individual Emirates discussed below, the UAE has one of the most ambitious transport plans in the GCC region; the Federal Railway project. This plan includes the project for the first stage, within the UAE, of the wider plan to develop the GCC rail network. The Federal Railway project aims to link the seven Emirates of the UAE by rail, initially for freight and then later passenger traffic. It is intended that by 2017 Abu Dhabi and Dubai will
be connected by rail, initially for freight only, with passenger services to be provided in the future.

The project is being overseen by Etihad Rail Company PJSC (Etihad Rail), a state-owned vehicle. Deutsche Bahn’s (DB) UK-based rail freight operating arm, DB Schenker Rail, and Etihad Rail formed a joint venture company called Etihad Rail DB Operations LLC to oversee the freight operations for the Federal Railway. The new company will manage operations initially for stage one of the network and will later act as a consultant for the development of the future stages of the network.

Ashurst advised Etihad Rail throughout its procurement of an operating partner, including the development of all project and corporate documentation, a role that was recognised when the team won the award for Middle East Transport, Energy and Infrastructure Team of the Year at the Corporate Counsel Middle East Awards 2013.

The project is divided into three stages. The 573.5km first stage was developed under a design and build contract to create a 270km freight line linking Abu Dhabi’s Shah sour gas field to Ruwais on the Arabian Gulf coast. The line transports up to 22,000 tonnes of granulated sulphur per day to the port of Ruwais for export. Services between Habshan and Ruwais have been operational on a testing basis since 2013, with Shah – Habshan services to follow before the end of this year. The civil and tracks work, worth US$898m, is being developed by a consortium led by Italy’s Saipem. The other members of the consortium include Tecnimont, and the UAE’s Dodsal Engineering & Construction.

The second stage extends the railway to link to Ghweifat on the Saudi Arabian border (c.137km), to Al Ain (c.190km) and the Jebel Ali Port in Dubai (c.186km), with branch lines to ICAD and Mussafah (c.78km). The bulk of the contracts for Stage 2 are currently being tendered and will be procured by way of four design and build infrastructure contracts (which include civils, structures, track works, facilities and utilities) and one integration and systems contract. Bids for the two civil works packages for Stage 2 were submitted at the end of 2012; however, they are yet to be awarded, although at the time of writing, this is expected imminently. Three companies or consortiums have been shortlisted for the project management consultancy contract for phase 2 of the projects: US firm Bechtel, Parsons and Aecom consortium, and Fluor. Etihad Rail has been planning to award these Stage 2 contracts for the railway for the majority of 2014. There are no reported updates in the press at this stage; however, we will continue to monitor this and advise on any relevant movement.

Stage 3 completes the project by linking the northern Emirates and the east coast. It is also understood that preliminary engineering for Stage 3 is also under way.

**Abu Dhabi**

The Emirate of Abu Dhabi, the capital of the UAE, previously published its urban framework structure entitled: "Plan Abu Dhabi 2030" which affirmed plans to spend US$82bn on transport projects in the Emirate. Part of that plan is a commitment to establishing a world-class sustainable public transport network. The Surface Transport Master Plan (see below), in conjunction with Plan Abu Dhabi 2030, was, at the time, a major initiative undertaken by the Department of Transport (DoT) to develop a comprehensive plan for surface transport. While put on hold back in 2011 there has been much more active movement in the market in pursuit of achieving the goals of the transport plan in recent times.

**The Surface Transport Master Plan (STMP)**

The STMP, which was released in March 2009, reveals that, in addition to the proposed high-speed passenger rail link with Dubai, the Government plans to construct:

(i) a freight rail line connecting Khalifa Port, the Abu Dhabi International Airport and Jebel Ali (as noted above, this is being progressed as part of the Federal Railway);
(ii) a metro system;
(iii) a light rail transit (LRT)/tram system; and
(iv) a bus rapid transport system (BRT).

The DoT has said in the past that a key element of its plan is the privatisation of transport services through the use of the PPP model. However, in light of the cancellation of the Al Mafraq-Ghuwaifat road PPP some years ago, realising that ambition now seems doubtful. In any case, the high value and complexities of such ambitious green field projects means that using PPP models for these projects requires complex project structuring (including packaging bankable volumes of work) and an acceptance of some relinquishing of control which is inherent in any long term out-put based structure. For these reasons, among others, the more cash rich GCC nations (including the Abu Dhabi Government) have fallen back to more traditional state funded project structures.

In May of this year, the DoT shortlisted Arup, Aurecon and Mott MacDonald as the three consultants for...
updating the STMP. The study will involve updating the masterplan that was prepared by the DoT with Mott MacDonald and the UK’s Steer Davies Gleave that was commissioned in 2007. The transport masterplan will support the aims of the Plan Abu Dhabi 2030 urban masterplan, which is currently being updated by Arup.

**Metro and LRT project**

The DoT previously estimated that the proposed Abu Dhabi metro system would be 131km in length with an estimated cost of US$7bn and was originally due to be operational by 2015. The LRT/tram system was to comprise a rather ambitious 340km of tram line and be completed in 2030. The first two lines of the project were originally expected to be completed by 2014, however, with no construction works commenced to date, all of these details have been revised.

The projects have now been downsized and combined and currently the Abu Dhabi metro and LRT project is known to have three main components to its system:

(i) a 18km metro line between Zayed Sports City and the Mina Zayed/central business district area servicing 17 stations, 13 of which will be elevated;
(ii) two light railway or tram lines that will run above ground comprising of a 15km blue line which will run from Marina Mall to Reem Island and a 13km green line which will run from the Central Bus Station to Saadiyat Island; and
(iii) the BRT line, which will be known as the orange line, will be a 14km loop connecting 25 stations on the islands Northern areas such as Khalidiya and Al-Maryah.

The Adapt Consortium (Parsons Brinckerhoff, Aecom and Deutsche Bahn International) completed the feasibility study for the metro system and were also awarded the study and preliminary design contract in November 2012. According to MENA Rail News, the design work is now complete. The US based Fluor, along with the UK’s Arup, are acting as the project manager for the Abu Dhabi metro and LRT projects.

Although it is understood that project structuring work is not yet concluded, it is also understood that DoT plan to split construction work on the Abu Dhabi metro line into three separate contracts. The first will cover the civil works for the above-ground structures, which will be awarded as design and build contracts based on FIDIC templates. The second will be for the underground civil works, which again will be awarded using a design and build contract, again based on FIDIC templates. The third covers the rail system, the rolling stock and the operation and maintenance for the line. That will be awarded using a bespoke design, build, operate and maintain contract.

In contrast, it is understood that while prospective LRT tenderers will be prequalified separately (civils and stops, systems and rolling stocks, O&M, roads) all of these elements will eventually be combined in a single design, build, operate and maintain contract.

DoT invited expressions of interest in May 2013 for the construction contracts for the US$7bn Abu Dhabi metro and LRT scheme. According to MEED more than 400 companies registered an interest in the contracts. The expression of interest stage closed in June 2013 with international companies such as Siemens, Samsung Engineering and Bechtel, all understood to have expressed their interest in delivering the project. It was believed that a shortlist of prequalifiers would be announced in October last year, however, this has not happened and it is understood contracts will not be tendered before 2015, with operations pushed back to 2017 at the earliest.

There has been no further communication since mid-2013 on this project, however, the industry is optimistic that the project will ultimately proceed.

**Midfield Terminal Complex**

The joint venture partnership between Tav Construction, Consolidated Contractor International Co, and Arabtec Construction LLC Contracts have been awarded the US$2.8bn to construct the midfield terminal complex. The new terminal is part of the overall expansion of Abu Dhabi International Airport and is expected to incorporate a high-speed rail link and a metro connection. Abu Dhabi Airports Company has predicted that within the next few years, 20m people are expected to use Abu Dhabi International Airport as their origin, destination or transit point for international and domestic journeys thus driving the need and motivation to deliver good transport links.

**Dubai**

Dubai was among the first of the governments in the GCC to develop its rail infrastructure and, as a result, perhaps has presented fewer new opportunities going forward than elsewhere in the region for the past four years. Now, further plans are being made.

**Dubai Tram (previously Al Sufouh Tram)**

The progress of Phase 1 of the US$1.1bn Al Sufouh tram system has not been smooth since its announcement back in 2008; however, the first phase is currently undergoing its third round of testing and is due to open in November 2014. This first phase consists of a 10km track between Knowledge Village,
Media City and Dubai Marina with 11 stations. The late addition of extra safety measures has pushed the project over budget, although reportedly by less than 5 per cent. The main contract for the tram was awarded to France’s Alstom and the local/Belgian Belhasa Six Construct by the Dubai Roads and Transport Authority (RTA) back in 2008. In June 2010, work was halted due to financing issues, but began again in January 2011. The project got back on track after the Department of Finance secured a US$675m loan (from HSBC, Deutsche Bank and Citigroup underwritten with ECA support from both France and Belgium) to finance the project in early 2012.

The tram, designed by Alstom, has been designed to withstand Dubai’s high temperatures and the nose of the tram has been shaped to reflect the “cut of a diamond”. The RTA expects the tram to carry approximately 27,000 passengers a day when it starts in the autumn, increasing to 66,000 a day by 2020. A consortium led by Alstom won the 13-year US$231m maintenance contract for the tram project’s first phase.

Phase 2 of the Dubai tram project has not been fully confirmed yet but is expected to connect with the Mall of the Emirates and the Burj Al Arab hotel.

After a competitive tender process which attracted a lot of interest from rail operating companies from around the globe, the RTA signed a contract with Serco, represented by Ashurst, for the operation and management of the Dubai tram. The contract is for an initial five year operating period with an 18 month “Pre-launch” period in addition, during which recruitment and training of employees will take place. The initial term of the operations contract has an approximate value of US$30m.

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Dubai Metro

The US$4.2bn Dubai Metro project commissioned by the RTA was the first of its kind in the Arabian Peninsula when it commenced operations on 9 September 2009. The 28th station on the 52km Red Line at the Jebel Ali Freezone Authority area opened in December 2012. The shorter Green Line, covering a total distance of 23km, boasts 20 stations and was opened in September of the same year.

It is widely believed that the Dubai Metro has been a great success and has catalysed a noticeable shift in culture and attitudes towards public transport. The RTA released a statistics report stating that during the first quarter of 2014, there were 40,655,978 passengers using the Dubai Metro, compared to 33,341,095 passengers for the same period last year. The RTA hopes that the use of the metro will continue to increase and by 2030, 30 per cent of all journeys will be taken by rail, up from 10 per cent in 2011.

The RTA is looking at ways to increase passenger capacity and has invited consultants to tender on a study to explore its options for doing so. The study aims to look at passenger flows and on ways to increase capacity at major stations such as Burjuman, Dubai Mall and Mall of the Emirates. The study will also look at adding new stations to the current network on the existing Green and Red lines, while also extending these lines.

Serco, who won the initial five-year contract to operate the Dubai Metro in 2009, currently operates the Dubai Metro. Ashurst advised Serco on its original appointment and also recently advised Serco on the extension of the Dubai Metro contract (such extension was announced on 24 October 2013). The contract extension is for a further five operating years with a two-year further option to carry through to 2021. The extension of the operating contract has an approximate value of US$543m.

The RTA’s ambitious plans for the metro continue to grow. The Chairman of the RTA confirmed in February 2013 that three new metro lines—purple (connecting the city’s two airports along Emirates Road), gold (running in a loop inland from the coast) and blue (running out to the new airport down the Dubai Bypass Road) – have been approved by Prime Minister and Vice President of the UAE and Ruler of Dubai, Sheikh Mohammed bin Rashid Al Maktoum, and will be in operation by 2030 and that the existing Green and Red Lines will be further extended, with the former expected to be tendered by the end of 2014. The Green Line will be extended by 20.56km and have 11 stations between Jaddaf and Academic City. The Red Line extension will be 3.5km long and run from Rashidiya to Mirdif City Centre. Another extension will link the Expo 2020 site, to Al Maktoum Airport (at Dubai World Central) and Jebel Ali. The joint venture of Parsons International and Systra will carry out the preliminary engineering work on the link. The plans approved refer to a total of 421km of metro and 197 stations across Dubai in 2030.
The RTA is currently understood to be in talks with prospective advisers regarding the development of "metro cities"—transit oriented developments around selected Metro stations and to investigate financing options/structures for the extensions. The RTA is, in addition, well progressed with a project for the development of the site surrounding Union Square Station. There are, however, no anticipated releases of tenders in relation to these in the near future.

Dubai Airport people-mover
Terminal 1 of Dubai International Airport is to be connected to the new Concourse 4 by a train line, which is currently under construction. Dubai Airport Corporation has selected Bombardier for the contract to provide the rolling stock and Alec was awarded the contract to build the substructure and superstructure in 2013. TUV Rheinland won the safety assessment services contract which will cover a three-year period. Lebanon’s Dar al-Handasah is the project manager for the people-mover and Drake Scull’s rail subsidiary will be building the automated system in a US$9.5m contract. The people-mover will help ease congestion in the airport, which became the second busiest airport in the world in 2013. Serco is the operator for the project, completing a ‘clean sweep’ of all rail projects in Dubai-metro, tram, monorail and people-mover.

Rail Academy
In January this year, a memorandum of understanding to establish a Rail Academy was signed by the Centre of Excellence for Applied Research & Training and Thales. The planned Rail Academy would provide Emiratis with high-level professional and academic training programmes to support the country’s railway and urban transport projects.

The partnership is "a key milestone for genuine local empowerment in the railway field", according to Thales country director Thibaut Trancart. The companies have worked together since 1999 when they set up the CERT Thales Institute to provide technical training in the defence sector.

It will be interesting to see if other GCC governments follow suit to retain this specialised rail knowledge within its own people and help with each countries local employment agenda.

The Kingdom of Saudi Arabia
The Kingdom of Saudi Arabia (KSA or the Kingdom) is at the forefront of the Gulf’s rail industry, serving as a role model for its neighbouring countries as the most active player. The KSA has given its rail industry a top priority. To highlight this drive in the Kingdom, the Riyadh metro awarded US$22bn of turnkey contracts on one day in late July 2014.

This wave of momentum in Saudi rail will pave the way for the development of other rail projects in the Kingdom and give a boost to the series of major metro projects currently being planned in the Kingdom, including in Makkah, Medina and Jeddah, on which consultants are currently competing for project management roles.

The huge geographical expanse of KSA, the obvious economic benefits of connecting the different regions of KSA by railways and the discovery of large mineral/ore deposits in different parts of KSA make the expansion of the current railway network inevitable. The Saudi Railways Organization (SRO) has an expansion programme which includes the following three major projects:

(i) the Saudi Railway Company Project (formerly known as the North-South Project);
(ii) the Landbridge project; and
(iii) the Haramain High Speed Rail.

Two of the projects were assigned to SRO while the third was assigned to the Ministry of Finance represented by the Saudi Public Investment Fund (PIF) and the Saudi Arabian Mining Company.
Saudi Railway Company Project (formerly known as the North-South Project)

The first project of the SRO’s rail expansion programme is the 2,400km, US$5.3bn Saudi Railway Company Project freight line, parts of which have been completed and is now operational. The project is managed by Saudi Railway Company (SAR) which was set up by PIF as a holding company for the purpose of managing and investing in rail projects in KSA.

Starting in the north-western region of KSA, it passes through Riyadh with extensions to Hazm Al-Jalamid (to haul phosphate) and to the Gulf at Ras Al Khair, where a major port will be constructed for the exportation of minerals. The planned freight network will connect the new mines at Al Jalamid and Az Zabirah to the processing facilities in Ras Azur. It is about 75 per cent complete.

Two new sections of railway, being the Ras Al Khair to Jubail line and Jubail to Dammam line (which was originally part of the Saudi Landbridge Project) are both now being procured by SRO and forms part of the Saudi Railway Company Project (see below). The Ras Al Khair line will primarily be a freight/container line, while the Jubail to Dammam line will possibly also cater to passengers. Work on the Ras Al Khair to Jubail line started in September 2012.

In February this year, Spanish company Typsa was awarded an estimated US$87.5m consultancy contract for the management and supervision of the construction of the rail link between the Waad al-Shamal industrial development and Jubail. The line will be constructed to connect the city to the Saudi Railway Company Project railway to transport phosphate to Ras al-Khair in the Eastern Province.

SAR expects to appoint an operating partner for the North–South railway shortly, following the evaluation of bids from international consortia. Rather than outsource operations through the award of a long-term operating concession for the network, where commercial operations are already under way on the first phase, SAR is seeking to appoint a partner to assist with the development of domestic rail industry skills and provide SAR with the capability of running the network after around five years.

It has been reported that the project will be commissioned on a trial basis in early 2015, and that contractors are currently working on completing the rail, passenger stations and logistic and maintenance services.11

Landbridge project

The second major project is the Saudi Landbridge scheme which will link the Red Sea to the Arabian Gulf via a new freight line which will be interoperable with the Saudi Railway Company Project and will be overseen by the SRO. The original project plan consisted of the construction of a new 950km railway between Jeddah to Riyadh primarily for container traffic, the construction of a new 115km line between Dammam and Jubail and the upgrade of the existing line between Riyadh and Dammam. However, as noted above, the rail line between Jubail and Dammam has now been removed from the scope of the Saudi Landbridge project and incorporated as part of the Saudi Railway Company Project.

The SRO awarded China Railway Construction Corporation approximately US$33m contract to renew 78.4km of the Dammam to Riyadh freight line within 21 months, and local contractor Al Mobty approximately US$104m contract to double the 241km single track section between Hofuf and Haradah. SRO is currently drawing up tender documents for a contract covering a further 91km.

SRO is aiming to increase capacity on the freight line to meet growing demand, and to permit maximum axleloads of 32.5 tonnes. This is part of a wider strategy to upgrade the infrastructure and rolling stock to the standards agreed for the proposed international GCC network. A 150km/h passenger service is also planned.

SRO President Mohamed Khaled al Suwaiket stated that increasing rail’s share of the freight market would provide significant benefits to the wider economy, by reducing road accidents and highway maintenance costs while cutting pollution.

PIF has previously awarded Fluor Corp a US$72m contract to provide consultancy services. Under the
84-month contract Fluor is to review engineering designs for the railway in conjunction with Parsons Brinckerhoff, and will define implementation strategies and be responsible for commissioning.

In early August 2013, Italy’s Italferr won the US$37.2m preliminary design contract. Previous reports indicated that the successful bidder would be expected to complete the work in just 13 months, providing a tight timeframe in which to design a complicated project; approximately 70km of the railway will be tunnelled in order to get through the mountains in central KSA.

In June this year, the Saudi Railway Company invited applications to prequalify for the construction supervision consultancy contract for the project. The construction supervision consultant would be responsible for verifying contractors’ contractual, safety and quality compliance, as well as quality surveying to verify applications for payment. To date, there have not been any updates as to whether any contracts have been awarded. We will continue to monitor this and provide updates as appropriate.

Haramain High Speed Rail (HHR) project
The third major project is the 440km, US$7bn HHR Project connecting Makkah and Madinah, and passing through Rabigh, Jeddah and King Abdulaziz International Airport, which is the first high speed rail line to be built in the GCC. There is an urgent need for this line to accommodate the growing numbers of pilgrims travelling to Makkah for Hajj each year. This project was originally mooted as a PPP scheme (when it was called the Mecca-Medina Rail Link), but in light of the difficulties experienced by the Saudi Landbridge project surrounding procurement and financial close, it was restructured into a series of traditionally procured packages overlaid with joint and several liability across those packages. The first phase of this project was won by the Al Rajhi Alliance (which Ashurst advised) in February 2009 and construction started in March 2009.

The management contract for the rail project, which is valued at US$8.97bn, will run for a period of 12 years and will be undertaken by a joint venture, led by Ineco, of 12 public and private companies (including Talgo, Dimetronic, Copasa, OHL and Indra).

Projects under study: Southern lines
Aside from the above three ‘major’ projects, the SRO’s expansion plan also lists a number of ‘projects under study’. The SRO entered into a contract with an engineering consultancy firm to conduct a feasibility study for establishing railways in the southern region of the Kingdom, the study included the following routes:

(i) Taif - Khamis Mushayt – Abha Line;
(ii) Jeddah and Jizan Line; and
(iii) Yanbu – Jeddah Line.

Saudi-Bahrain rail link
The 90km Saudi-Bahrain rail link, which is predicted to cost US$5bn will form part of the 2,177km GCC-wide rail network linking Alkhobar with Manama and will help alleviate the increasingly congested King Fahd Causeway.

It was understood from January 2014 that the previous target of 2017 operations was not going to be achievable. Despite a refreshed target by the Government of 2018, a more realistic expectation of a seven to ten years construction period was reported. It was anticipated that the previously provided feasibility study would now be delivered in September 2014. There is no confirmation this was actually completed; however, the causeway was approved by Saudi Arabia’s King Abdullah bin Abdulaziz al-Saud in early September of this year, and work on the procurement planning is expected to commence soon.

Makkah Mass Rail Transit
The Makkah Mass Rail Transit Project (MMRT), is a circa US$15bn project which includes the construction of four new lines with 88 new stations and a combined track length of around 180km.

Ashurst advised Al Balad Al Ameen Company (the development arm of Makkah Municipality) on this project as part of a consortium led by Ernst & Young, along with Parsons Brinkerhoff acting as the technical adviser in the preparation/structuring of the project.
While it was originally proposed as a PPP project, funds were subsequently released from the central government for public transportation and the project was thereafter restructured as a series of EPC contracts with separate arrangements for O&M.

The Al Balad Al Ameen Company created its subsidiary Mecca Mass Rail Transit Company (MMRTC) to act as the programme management office for overseeing Mecca’s entire "Public Transport Programme" (MPTP) of which MMRT is a key component (along with a smart bus system, comprising rapid transit, express and feeder buses).

Companies were prequalified in early 2014 to bid for phase 1 of the project. Prequalified consortiums, that expressed interest in the two civil works contracts, were invited in July 2014 to bid and are preparing to submit bids at the end of October this year for the tender to build the first phase of the project. The first phase is expected to involve the construction of two lines with a total length of 46km and 22 train stations. The first package includes the construction of a 26km line, which will be mainly underground, and 12 stations. The second contract will be the construction of a 20km track, including 10 stations. The correct programme would see testing begin in 2017 for full operations from early 2020.

Many firms were wary of taking part in the tender due to restrictions on non-Muslims working in the holy city and other challenges unique to Makkah. Therefore, several contractors have showed more of an interest to bid on the upcoming Jeddah metro.

Applications to prequalify for contracts covering railway systems works closed on June this year, and expressions of interest opened in July for contracts for the supply of rolling stock. There is no report of the expression of interest closing or any parties being nominated to participate in the full procurement process. However, we will continue to monitor this project.

**Jeddah Metro**

Jeddah is seeking to develop a metro project with three major lines (orange, blue and green), comprising 152km in total track length with 72 stations which will be integrated with Jeddah’s planned bus network, trolley system and sea transport system. There is also a planned tram network which will be 48km long with 48 stations. It is understood that in May 2014, the Government passed a Royal Decree allocating approximately US$12bn to complete the project over three phases and seven years.

The Jeddah Metro Company was set up in March 2013 as a joint venture of the Jeddah Municipality and the Jeddah Development and Urban Regeneration Company. France’s Egis Rail undertook the feasibility study for the Jeddah Metro and has been working on the early designs. The project is scheduled for completion by 2020, and the metro is anticipated to go into service after the last leg of safety tests are conducted two years later in 2022.

In May this year, Aecom was awarded a US$28m 18-month contract to provide pre-programme management consultancy services for the project, while a contract with Systra was signed in July this year for preliminary engineering designs for the metro. The value of this 20-month contract is approximately US$736m.

It is currently anticipated that construction contracts for Jeddah Metro will be tendered and awarded in the course of 2015, with works to commence in late 2015.

**Riyadh Metro**

Riyadh Metro is currently one of the most high profile schemes in Saudi Arabia and, indeed, the wider region. Funding for the Riyadh Metro, to be known as the King Abdulaziz Public Transportation Project, was approved in April 2012, following which the Arriyadh Development Authority (ADA) pushed ahead with prequalifying four consortiums to undertake the works. The planned scale and extent of the project has grown to include a metro of six lines with 176km in track length and 85 stations, at a cost of US$22-25bn.

The Olaya Street station, designed by German architectural firm Gerber Architekten

The metro is structured as five design and build packages, with lines 1 and 2 as one package, and with the other lines each as single packages. Each package includes the supply of rolling stock. The award of the three construction contracts for the project were announced in 2 July 2013.

Three multinational consortiums were awarded the contracts to build the six metro lines; the ‘FAST’ consortium led by Spanish firm FCC (lines 4, 5 and 6), the "BACS" consortium led by US firm Bechtel (lines 1
and 2), and the Arriyadh New Mobility group led by Italian firm Ansaldo STS (line 3).

The design of the metro promises to be ultra-modern as German design architects Gerber Arkitekten have been chosen for their innovative designs for the Olaya Metro station, which combines lush gardens with undulating dunes in a “dune park”, and Norwegian architects Snohetta have been chosen to design an iconic Downtown Metro station.

Design works have already started for the project and in April this year construction on the metro officially started on five sites simultaneously. These include King Khaled International Airport, Olaya at the intersection of line 1 and 2, and the site of the control centre on Line 4, close to Princess Nora University. The six-line, 176km network is due for completion by 2019.

It is understood that ADA (who Ashurst is advising through Egis Rail) is now turning its attention to the operations and maintenance of the network once construction is completed. While there is currently no indication of the breakdown of the scope or what packages will be released it is anticipated that the tender will be released to market soon with operators appointed in sufficient time to participate in the testing, commissioning and trial services processes.

Other notable projects
There are a number of other notable projects planned or under way in KSA. These are set out below.

- **Medina Metro**
  Project management firms submitted bids for work on the planned Medina metro project in March this year. There are no reports suggesting that the contract for these services has been awarded, however, this could occur at any time and we will continue to monitor this project. In May 2013, the Turkish/Lebanese joint venture between Khatib & Alami and Istanbul Ulasim won the consultancy services contract for a new metro system within Medina. MEED reported that the metro will connect to the HHR line, which is currently under construction, and links the city to Mecca. Early estimates suggest the project will cost at least US$1bn to construct.

- **Dammam Light Rail**
  This integrated public transport network of light rail and buses should be implemented by 2021, and has been approved by Saudi Arabia’s Council of Ministers on May of this year. It is estimated that the project will cost US$16bn. The light rail network will comprise two lines. One line would run south from Tarout Island via Qatif, Dammam and Dhahran to Al Khobar. The second line would run along the King Fahd Road in Dammam northwest towards King Fahd International Airport. There is no further information at this stage on when the project may move forward to procurement.

- **Dammam – Riyadh High-Speed Rail**
  In September this year, the SRO appointed Spanish company Consultrans to carry out a study of the high-speed railway line between Dammam and Riyadh. The 10-month study involves evaluating the feasibility of the 480km high-speed railway linking Riyadh to Dammam through Hofuf. The study will look at the most appropriate procurement approach for future contracts for the project. By increasing the speed of trains running between Dammam and Riyadh, the SRO aims to cut journey times.

- **Saudi Railway Polytechnic**
  In 2013, TQ Education & Training was awarded a five-year contract to provide training and management services to the Saudi Railway Polytechnic, which has been established in Buraydah through a partnership between Saudi Arabia Railways and Technical & Vocational Training Corp. TQ is responsible for developing the curriculum and learning materials, managing equipment and facilities and employing the training staff.

  The polytechnic will train 1,500 students aged 18 to 21 years over five years, providing vocational qualifications in health and safety, mechanical, electrical and civil engineering, signalling and telecommunications, rolling stock maintenance and train driving. All teaching will be in English.

**Qatar**
By 2016, Qatar plans to have a vast network of rail lines as part of the Qatar Integrated Rail Programme, with Doha alone planning 300km of rail lines for its metro. Estimates have put the total budget for Qatar’s rail programme at around US$40bn. Doha awarded close to US$10bn worth of construction contracts for the first phase of its metro system in 2013 and has continued to award contracts throughout 2014. In March, it selected a consortium led by Greece's Aktor for the construction of the Gold Line, and a consortium led by Spain's FCC to build the elevated and at-grade sections of the Red Line South.

Qatar railway’s development plans form part of a general drive to boost tourism and upgrade the transport infrastructure in the country, which is now
more important than ever, following the successful award of the FIFA World Cup 2022.

The initial plan for the integrated rail network involves five key sections:

(i) an east coast freight and passenger line, linking Ras Laffan, the New Doha International Airport, Doha and Mesaieed;
(ii) a high-speed link between the New Doha International Airport, Doha city centre, and the Kingdom of Bahrain via the planned 45km Friendship Causeway (to be the world’s longest causeway);
(iii) a freight link connecting to the proposed 1,500km GCC rail network;
(iv) a 30km, US$1.8bn light rail network and automated people-mover linking new developments north of Doha such as Westbay, Lusail and Education City; and
(v) a 300km, US$3bn Doha metro system consisting of 100 stations on four lines based on the Qatar Transport Master Plan.17

Doha Metro

Of particular importance to Qatar (and the 2022 FIFA World Cup) is the Doha Metro project. The 300km project will comprise four lines, being the Red, Gold, Green and Blue Lines and will have 100 stations once complete.

Each separate line will have its own project management consultants. Currently, three project managers have been appointed; a team of Louis Berger and Egis Rail has been selected to manage the construction of the Gold Line and two major stations. Jacobs Engineering will manage the Red Line while Hill International will manage the Green Line. All three coordinate with Parson Brinkerhoff as overall project manager for the Qatar Integrated Rail Programme.

In April 2014, Qatar Railway Company (QRail) awarded a Systra-Parsons joint venture approximately US$216m E&M systems project management contract for Phase 1 of the metro. The scope of the contract includes design reviews, works supervision, testing and tracking acceptance activities. Lead consultant Systra will be responsible for signalling, driverless systems, rolling stock and depots.

Within the scope of each line QRail has further divided up the scope into varying elevated and at grade sections of track. These are being tendered at various times. Below we have set out a number of these broken down scopes into their awards and tenders.

In April 2013, the Red Line North design and build contract was awarded to a consortium led by Impregilo S.P.A, comprised S.K. Engineering & Construction Co. Ltd, and Galfar Al Misnad Engineering & Contracting W.L.L. One contract is for the construction of an underground section of the Red Line; the other is for building Msheireb and Education City stations.19

QRail is currently evaluating bids for the contract to build the elevated sections of the Red Line.

In June 2013, the Red Line South design and build contract was awarded to a consortium led by QDVC and included GS Engineering and Construction Corp, and Al-Darwish Engineering W.L.L.

The scope of the Red Line South contract comprises the design and construction of the underground works between the proposed Msheireb Underground Station and the New Doha International Airport.

In addition, the design and build contract for the two major stations at Msheireb and Education City has been awarded to a consortium led by Samsung C&T Corporation and comprises of Obrascon Huarte Lain S.A. and Qatar Building Company.

In March this year, QRail awarded the Citizen Services Group consortium the approximately US$640m
contract to build a 6.97km section of the Red Line. The consortium is led by Spanish firm FCC and includes Archirodon, Yuksel and Petroserv. Herrenknecht is also currently building tunnel boring machines to bore 90km of the Red Line South for the Doha metro by 2019.20

The design and build contract for the Green Line was awarded to a consortium of Porr, Saudi Binladen Group and HBK Contracting Company. The team was recently awarded a third major construction contract on the metro scheme to cover the elevated sections of the Green Line.

In July this year, Atkins was selected as lead designer for the Gold Line, which is scheduled to open by 2019. The design contract is worth approximately US$150m over two years. Atkins was awarded the contract by the consortium of Larsen & Toubro, Aktor, Yapi Merkezi, STFA Group and Al Jaber Engineering which QRail has appointed to design and build the line.21

Phase 1B will see the Doha metro extended to meet the FIFA World Cup 2022 requirements. This will involve construction of the elevated sections of rail on the outskirts of Doha up to Al-Khor and will link the respective stadiums for the tournament.

Altogether, the infrastructure and civil works packages for the Doha metro will include over 80km of tunnels and over 70km of elevated civil works. It is one of the largest green field metro projects under construction in the world.

Lusail Light Rail
The Lusail light rail project in Lusail City (the main centre of activity during the FIFA World Cup in 2022) consists of around 25 ‘at-grade’ stations and ten underground stations with a total track length of 39km. The Lusail light rail system is to be supported by a park and ride system with four 550 vehicle car parks. Aecom and Parsons were appointed as the project management consultants for the project in April 2011. QDVC, a joint venture between Qatari Diar and France’s Vinci Construction, has already been awarded the civil works contract. QDVC began earthworks for the cut-and-cover tunnels in 2009, and in 2011 was awarded the approximately US$475m design and build contract.

In June this year, QRail awarded a consortium of Alstom and QDVC the approximately US$2.5bn main contract for the construction of a four-line tram network. Opening of the first line is planned for 2018, with the other lines to follow in 2020.

Alstom’s responsibilities include trackwork, signalling, substations, catenary, the APS ground-level power supply system and 35 Citadis trams.

The awarding of the contracts for Phase 1 of the Doha Metro marks a key milestone in the development of the Qatar Rail Project.

Tram for Education City
A consortium led by Siemens has been awarded a US$412m contract to develop a tram network, for the Qatar Foundation, in Education City, for the Education City campus. Siemens will provide 19 electric powered trams for the 11.5km system as well as signalling and communication technology. The Al-Habtoor Leighton Group will execute the design and construction of the track, tram stops and depot. The tram system is scheduled to become operational in September 2016.22

High-Speed passenger rail line, Long Distance Freight Link and Qatar-Bahrain Causeway
Where the Qatar to Bahrain Friendship Causeway project is concerned, there had been uncertainty following a halt in progress in June 2010 when the contracting consortium was demobilised. Following a new phasing of the country's rail schemes, this project now falls within the remit of phase 3 and forms part of larger plans to build a long-distance freight line and a high-speed rail line.

The projects are expected to be executed in the following three phases:

(i) 195km freight line linking Port Mesaieed to Ras Laffan and eventually linking KSA through the planned GCC-wide network;
(ii) 150km high-speed connection linking into Bahrain; and
(iii) 165km passenger and freight national network linking Dukhan to Al Shamal and Doha City.

In February this year, a joint venture of Parsons and Systra has been awarded a design consultancy services contract for the Qatar Long Distance Railway Network.

However, Bahrain’s decision to withdraw its ambassador from Qatar on 5 March of this year is likely to be a further setback to the long-delayed Friendship Causeway link which the two countries have been planning for more than a decade.

Egypt
Egypt faces a completely different challenge to most of the MENA region, which is not just as a result of the...
recent political and socio-economic reform and ongoing instability. While Egypt has a legacy rail system (developed during the British colonial period and the most extensive in the Middle East), it requires a great deal of work to bring it up to the standard that modern Egypt demands.

According to their website, Egyptian National Railways (ENR) oversees a network of over 9,000km of railway, carrying approximately 1.4m passengers each day. ENR officials have publicly stated the need to upgrade the railway’s assets in order to ensure safe operation, improve service quality and increase freight capability.

Opportunities, therefore, abound for upgrading, modernising and improving the safety of the existing rail network (the second oldest in the world) and extending it to meet the requirements of mass tourism and a growing population. An official at the Egyptian Railway Authority (ERA) previously announced the launch of a ten-year, US$7bn rail plan for developing new lines during the period from 2011 to 2020. However, in May of this year Nino Cingolani, co-chairman of ENR’s transformation and restructuring programme, estimated that a more realistic figure of around US$11bn would be required to improve the quality, efficiency and safety of Egypt's rail network.23

The need to improve the safety of the network was highlighted in November of 2012 and January of 2013 after three train crashes left over 70 people dead. The first of these crashes also led to the resignations of both Egypt’s transport minister and the head of the ERA. It was reported at the time by the Ministry of Transport that only 18 per cent of the 5,500km of track in Egypt operates safely.24

Egypt, as part of its commitment to improving the rail network, has created an Egyptian Academy of Transport Science and Technology in partnership with Thales which, among other things, specialises in providing services for the transportation markets. The Academy will help support the development of the rail industry in addition to enhancing the country’s higher education sector.25

In recent years, investment has been funded from a range of sources including US$600m worth of loans from the World Bank. In April 2013, the Kuwait Fund for Arab Economic Development and the Arab Fund for Economic and Social Development agreed to provide US$250m of funding to develop the Banha-Zagazig railway line.

In April and May of this year several new sources of finance were announced. First, the European Bank for Reconstruction and Development agreed to loan approximately US$160m to help modernise the rail system.27 In addition, the Chinese Government announced that it will invest US$800m to help finance the construction of a high-speed rail project (further details on the project below).28 It was also announced this year that an initial public offering is planned to provide further funds for the high-speed rail project.29

Despite the ongoing unsettled political and social landscape in Egypt, it seems that, on the whole, existing rail projects have continued, and new projects recommenced, even if with some delay. Notwithstanding this suggestion of increased momentum, there has been no movement on any of the planned projects originally announced in March 2013 and such lack of progress will only act to deter international participation and whether there will be an appetite for a planned procurement programme that appears undeliverable.

Ramadan City link

The much anticipated railway project connecting the Tenth of Ramadan City to Ain Shams and passing through Belbes City was one of the ten PPP projects announced by the Ministry of Finance in March 2013. This will be a 72km passenger and freight link with 17 stations. Once complete, this project will allow the transportation of people and products between the industrial Ramadan City and the retail outlets of Cairo.

In April 2013, MEED announced that French firm Thales were selected for a US$143m contract to provide signalling equipment for the new Cairo-Alexandria rail line. An additional line between Beni Suyuf and Asyut is also to be constructed and a further signalling equipment package was due to be
awarded for that line in the first quarter of 2014. Thales, Alstom, Siemens and ECM submitted bids for the package in July 2013. There is no information available on this award which suggests that it has not been awarded.

**Cairo Underground**
The Cairo Underground system is the oldest in the MENA region and is the backbone of public transportation in Cairo. There are currently two operational lines: Line 1 (New El-Marg to Helwan) and Line 2 (Qalubeya to Mounib) with a third, Line 3 (Imbaba to Cairo Airport), currently under construction and two more (Nasr City to Shoubra and Maadi to Shoubra) in the pipeline. Line 3 will be 40km long once complete. France's Systra announced that they had been appointed as the consultant for the expansion of this project.

Line 3, has been separated into four phases. Phase 1 involves the construction of a 4.2km section of track with five underground stations. France's Alstom and locally based Orascom Construction Industries won the civil contracts for this phase. Phase 1 (between Attaba and Abbasiya) was successfully launched on 21 February 2012. Phase 2 has a 7.7km section of track with four underground stations. Vinci has led the consortium that won the civil engineering contract for both Phase 1 and Phase 2 which involve an investment of US$784.3m. Phase 2 was completed in May of this year. MEED reported that Phase 3 is to be built in three parts, with plans to begin construction of part 1 in October 2013, a time frame which has now passed with little progress, and the entire Phase 3 being completed by 2018. However, in light of the delay in tendering the construction contracts, it remains to be seen whether this overall target will be met.

Feasibility and outline designs were being conducted for Phase 4 in October 2012, which would further extend the network from Al-Ahram to Cairo Airport along a length of 15.8km, with 10 stations. No further information is available on any plans to put detailed design or construction of Phase 4 to the market at present.

**Heliopolis New Cairo Tram**
The General Organization of Physical Planning has also announced plans to upgrade the Heliopolis New Cairo Tram in Egypt. The project includes the upgrading of the link from the Stadium station to Nasr City station to reach New Cairo. A consortium consisting of SML, Gide Loyrette, and Al Sherqawi company was awarded the feasibility study contract in February 2013. The upgrade will take place in two phases, the first phase is due to be completed by 2016. To date, there have not been any further updates in relation to this planned upgrade. We will continue to monitor this and provide you with any relevant details. It is not known if or when the feasibility study will be completed.

**High speed railway**
Plans are under way to develop a high-speed railway, costing an estimated US$10bn, which will connect Alexandria and Aswan, passing through Cairo, Assiut and Luxor. The first phase, Cairo to Alexandria, is expected to be operational by 2017 and will cost approximately US$3.5bn. The high-speed passenger rail project is cited as a top priority for the interim government this year according to the Minister of Transport, Ibrahim El-Demeiry, who issued a RFP to carry out a feasibility study in May 2014. There is no information on when this might be awarded and the project remains in an early study phase.

**Jordan**

**National Railway Network**
The Jordanian Government completed its study for its National Railway Network, linking the Mediterranean countries with the Gulf Region, in May 2010. The study recommended that the Government should execute the projects in partnership with the private sector on a BOT basis. In November 2012, Jordan's Transport Minister announced that tenders were to be invited for the network. The release of tenders is yet to take place.

**Amman-Zarqa Light Railway**
The Jordanian Government had planned to develop a light rail system between Amman and Zarqa, funded through a PPP. This would have been Jordan's first rail PPP scheme, but the project failed to get off the ground. Two consortia were appointed and removed as the preferred bidder and in March 2012 it was announced that the Jordanian Government won an arbitration against the International Railway Company (IRC) (which was promulgating the project), with regard to the legitimacy of the Government's decision to cancel the project due to the IRC's failure to secure financing. Following these problems, the Jordanian Government announced its intention to develop a bus scheme, however, there is now uncertainty as to
whether the rail project may, in fact, be re-initiated because, according to a media report released in June of this year, the rail link between Amman and Zarqa is one of two projects that the Government expects to launch by the end of 2014. It is intended that this project, along with a rail link between Agaba and Chidiya, will be funded by Gulf countries under the pledged development aid for Jordan.38

In addition to the above projects, the Government has also entered into a number of Gulf-wide intergovernmental rail agreements. In 2003, during meetings of the Economic and Social Commission for Western Asia, Jordan was among 13 Arab countries that agreed on a railway linkage system which envisaged those countries implementing internal railway networks within 10 to 15 years. Member countries of this regional project include the six GCC states along with Jordan, Iraq, Syria, Lebanon, Palestine, Yemen and Egypt. In January of this year it was announced that the proposed 420km rail link between Jordan and Iraq is clear of any administrative or technical problems and therefore the next stage is to consider funding options.39 However, it is now likely that the current political and humanitarian situations in the region will most certainly cause delays to the project.

Algeria

Algeria is carrying out one of the most ambitious rail developments in the MENA region. Like Egypt, much of its railway is in desperate need of modernisation. As a result, the Algerian Government previously announced plans to spend US$30bn on rail development projects during 2010-2014 with the aim of increasing the coverage of the national rail network from 3,500km to 10,500km. This is on top of the US$50bn that has been spent during the 10 years prior to 2010.40 The programme is designed to promote economic development in the region and to connect the populous northern coastal region with the agricultural and industrial resources in the south.

Rail programme

The length of the network has been rapidly developing, increasing from 1,719km in 2008 to 4,000km as of 2013, according to a statement by Transport Minister Amar Tou in late June 2013. In November 2012, the Algerian Transport Ministry announced that it would be launching a further 13 new rail projects before the end of 2012 worth an estimated US$4.5bn. These projects would add 643km of new track and modernise a further 225km. A press release in April of this year stated that the transport sector aims to achieve a total 12,500km of railway lines in the medium term and studies into the high speed train in the "North Ring" have been launched.41 Nine new lines are planned including three suburban lines (in Arzew, Beni Saf and Bab Ezzouar) and the following six interurban lines:

(i) Laghouat – Djelfa (110km);
(ii) Djelfa – Boughezoul (140km);
(iii) Boughezoul – Ksar el-Boukhari (40km);
(iv) Touggourt – Hassi Messaoud (154km);
(v) Mecheria – El Bayadh (130km); and
(vi) Hassi Mefsoukh – Mostaganem (56km).

The lines to be modernised are Es Senia to Ain Temouchent (53km), Constantine to Ramdane Djamel (15km) and a 157km line in the east of the country used by the mining industry.

Following on from this, in June of last year, Anesrif (the rail agency of the Algerian Transport Ministry) released a number of rail tenders calling for bids for preliminary designs for new rail lines and stations (including El-Meghair) as part of its efforts to modernise and expand the country’s rail network. These tenders covered the design of various train stations and 18 level crossings. These new tenders followed the award of a 48-month, US$1.7m contract covering the engineering and design work for a new 140km railway line between Djelfa and Boughezoul. The award was made to a Portuguese consortium comprising TPF Planeg and Refer.42 Unfortunately, there is nothing reported to date on the award of any of these tenders. With greater political and social calm returning to Algeria these projects should continue to be monitored; however, slow progress is anticipated similar to the situation in the MENA region generally.

As part of the modernisation of Algeria’s railways, there have been contracts awarded in 2014 to improve the standard of the train vehicles. In early 2014 Algerian National Railways (SNTF) awarded a joint venture of Faiveley Transport and Compin a US$95m contract to modernise 202 long-distance and suburban coaches by installing new doors, air conditioning, seats, etc.43 Recently, in August of this year, SNTF announced that it had provisionally entered into a contract worth US$260m with Alstrom for the supply of 17 bi-mode (diesel and electricity) intercity trains.44 There is no information available on when these trains are to be delivered but a normal procurement of rolling stock would take in the order of 18 to 24 months to complete.
Algiers Metro
Studies for the Algiers metro were first carried out in the 1980s, but operations did not commence until 1 November 2011 and upon opening it attracted criticism for ticket prices being too high. The metro carries around 300,000 passengers per day on a 9.2km line serving 10 stations. A consortium led by Colas Rail, incorporating KOU GC won the US$117m contract to extend Line 1 in October 2012. The first extension will run entirely underground, linking Haï el-Badr in the centre of Algiers to El-Harrach Centre in the east of the city. The extension is due to open in mid-2015.

It is understood that studies have been carried out for further extension works. Close attention should be paid as to whether these subsequently come to market.

Tramways programme
There is a US$6bn government investment programme for tramways across Algeria, which is seeing rapid developments.

Algeria opened its first tramway in the capital city of Algiers in May 2011 and currently three extensions are planned. In June 2013, a US$314m contract to build the first 12.6km line of a tram system, in Ouargla, a city 700km south of Algiers, was awarded to a consortium comprising Spanish firms Elecnor, Assignia and Rover Alcisa. A consortium comprising Spanish firm Corsan Isolux and French firm Alstom has won a US$313m contract to build the first line of a tram in the Western Algerian city of Mostaganem. A tram in Oran became operational in May 2013 and a tram network in Constantine opened in July 2013, Annaba in September 2013 and Batna in July 2014, all in north-eastern Algeria. There are also plans to build trams in Beja, Biskrea, Skikda, Tebessa, Bilda and Djelfa. Contracts have not yet been awarded on these tenders, but given that other lines have been not only awarded but completed, it is very much a “watch this space” situation for current and potential future bidders.

There is no doubt that the Algerian Government’s plans are truly impressive and the projects mentioned above are only the tip of the iceberg. What is worrying potential sponsors, however, is the government’s capacity to manage projects in a financially efficient manner: 45 per cent of the budgeted US$30bn is allocated to the completion of unfinished projects. There have also been delays due to difficulties in securing the land necessary for development. However, Algeria has a generally optimistic market outlook.

Bahrain
Having conducted a comprehensive study to develop an integrated transport strategy for the Kingdom, the heart of the "National Economic Strategy for 2030" is a comprehensive public transport network comprising six transit lines which incorporate light rail, monorail and tramway.

The rail network plan
The invitation to bid for the main construction contract of the rail network had been expected to be issued in Q4 2009, which was to include plans for a tramway, a light rail transit and a metro system. A bus system and a monorail were also being considered. However, the project has been continually delayed and to date no further information has become available on this project and no announcement has been made on whether those parties seeking pre-qualification were actually pre-qualified.

Bahrain is expected to be part of the GCC rail network. As part of this, it was announced in September of this year that a new 25km causeway connecting Bahrain and the Kingdom of Saudi Arabia will be built to increase the capacity of vehicles, passenger trains and freight trains passing between the two countries. In addition to this, another causeway is planned to be constructed which will connect Bahrain to Qatar; however, there are generally doubts over the ability to deliver the latter given the breakdown of relations between the countries.

The Bahrain light rail and metro projects generally appear to be forgotten with no progress beyond initial planning stages in the last few years. There appears to be a lack of ability for these projects to be delivered by the Government beyond this early planning stage. It remains to be seen if these projects will re-emerge on the radar at some stage in the future.

Kuwait
Kuwait has vast reserves of petroleum which have provided recent budget surpluses. Despite its wealth of natural resources, Kuwait’s development has been stifled by poor transport links and political gridlock. The elections in May 2009, however, ushered in a much needed culture for reform and in 2010 Kuwait’s parliament approved a new development plan (the total cost of which is estimated to reach US$129bn designed to improve the infrastructure in certain strategic sectors. However, with various parliamentary dissolutions by the Emir in recent years, no PPP project has yet to reach financial close.
Metro
The Kuwait Metropolitan Rapid Transit System Project (KMRT) is a key part of the State of Kuwait’s strategy to address population growth challenges and the current public transport deficit.

The Ministry of Communications is the client for the metro project, which was previously planned to be developed as a public-private partnership (PPP) project under the supervision of the Partnerships Technical Bureau (PTB).

The team of Ernst & Young, Ashurst and Atkins were advising the PTB on the development of the project when it was anticipated as a PPP, however, this was disbanded when Government funding was proposed in place of private finance, and the project procured on a more traditional basis.

KMRT involves the development, financing, construction, operation and maintenance of a full metro network that would be developed over five phases. Each phase would be subdivided into a number of separate procurements.

The entire project, worth an estimated US$20bn, is comprised of 61 stations (16 per cent underground) with three lines and a total track length of 160km. PTB is currently focusing on delivering Phase 1 of the project which will include the construction network of roughly 50km of track, with 28 new stations, 30 per cent of which will be underground. The other four Phases will be developed and constructed in future stages over the coming years as demand grows. While tenders have not been put to market (although it is understood this is imminent) construction is reported to begin in 2017.

The project plans had been stalled for some time, however, in April this year the Ministry of Communications invited international consultants to express interest in a design and supervision role on the scheme, and is preparing to issue a tender. In August 2014, the network layout was confirmed by the Ministry of Communications, and six governmental departments have agreed to shift their locations to allow construction work to begin. The industry is currently eagerly awaiting the release of the design and build packages.

Kuwait National Rail Network
Kuwait’s PTB had also planned to construct a 505km, US$10bn national rail network on a PPP basis, which would, in time, be connected to the GCC rail network. In August 2011, the transaction advisory contract was awarded (with Booz and Company acting as the financial adviser and Wilbur Smith as the technical advisor). However, it is understood that—like the Metro—this project will now be procured on a more traditional basis.

The project will be built in two phases, anticipating completion by the end of 2018, and the Ministry of Communications has received prequalification documents from consultants for the project management role. The Ministry intends to prequalify at least 12 companies that will then be able to tender for the role.

Oman
National Railway
Oman has reported that it is ready to start building its own rail network through a US$15bn project intended to facilitate the movement of goods around the country, as well as help the growth of the tourism industry. Oman’s varied topography and size (it is the second largest country in the GCC, by area) will mean the scheme is one of the most challenging to be undertaken in the region. 12,000km of rail, including 35km of tunnels and 84km of bridges and viaducts, is currently planned.

The route will connect Muscat, Sohar, Duqm and Salalah, as well as linking to the UAE’s Federal Railway project and the planned GCC network.
Early estimates suggest total traffic on the network north of Muscat will be 1.2m passengers a year. Freight traffic is expected to hit 23.1m tonnes in 2017, rising to 33.7m tonnes by 2039.

To manage and help expedite the development of the railway, Oman’s Transport & Communications Ministry has established an operating vehicle named Oman Railway Company and has awarded the UK-based Grant Thornton a deal to study the organisational structure of the new entity.

Italian state railway group Italferr won the US$37.3m consultancy services deal for the preliminary design contract in August 2013. Firms have already submitted two-price bids for the project management consultant contract, with a consortium led by South Korea’s Dohwa Engineering submitting the lowest bid (a first bid of approximately US$89m and a second bid of US$277m). A consortium comprising Spain’s Tecnicas Reunidas, Lebanon’s Dar al-Handasah and Spanish firm Ineco offered the second-lowest bid (US$154m, along with a second bid of US$428.5m). The award of the project management consultancy contract was pushed back until October this year; however, no announcement of the winner has been reported to date.

In addition to the PMC contract, the anticipated Oman railway network construction phases have been released. These are set out below.

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<th>Oman railway network construction phases</th>
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(Source: Railway Gazette)

The first phase of the scheme comprises a 242km section from Sohar port to Al-Misfah in Muscat, an 8km spur line to the Sohar railway yard, a 20km link from Al-Misfah to Muscat central station, a 486km track from Muscat to Duqm port and an 84km section from Sinaw to Ibra A 136km track from Sohar to Al-Ain in the UAE, with a 27km spur to Buraimi, and a 58km line from Sohar to Khatmat Malaha on the border with the UAE are also included.

In late August this year, Oman Rail Company invited 18 prequalified groups to bid by 21 December for the contract for the first design and build package for 207km of double-track, mixed freight and passenger, non-electrified railway line linking Sohar to the Oman/UAE border at Al Buraimi and Al Milahah.

The first segment of the railway is due to start operations in four years’ time, in 2018 – a tight time frame.

Turkey

Falling between Europe and the "true" MENA region, Turkey is nonetheless worth consideration for its record of successfully closing PPP projects and for the government’s focus on improving rail infrastructure by 2023, the republic’s centenary.

Turkey has ambitious plans to upgrade and install a new and efficient rail network with a number of projects either planned or underway, some of which we note below. This includes plans to build an additional 9,000km of high-speed train lines. The government, which is focusing on the liberalisation of the rail transport sector, is opening this market up to international competition. The government will also separate the functions of infrastructure managers and railway undertakings. In this context, Turkish State Railways (TCDD) was reorganised in 2013 as the infrastructure operator and a new state-owned company named TCDD Taşımacılık A.Ş. was established as a train operator.
Istanbul Metro
2014 has seen progress on the expansion of the city's metro system. In February, a US$671m, 3.5km extension of metro line M2 from Sishane to Yenikapi opened. The project was delayed for four years and an extra US$53m cost was incurred as a result of archaeological finds and discussions with UNESCO over the impact on views of the Süleymaniye Mosque.

In March this year, the ground-breaking ceremony took place for Line M5 on the Asian side of Istanbul. The line will run entirely underground for 19.7km east-west from Üsküdar to Ümraniye and Çekmeköy and is reported to be completed in 38 months. The approximately US$715m contract covering civil and electrical was awarded to Dogus Insaat ve Ticaret. Given the delay on M2, this timeline is probably overly ambitious.

Ankara – Istanbul high speed link
The line between Eskişehir and Istanbul, the final section of the Ankara-Istanbul link, was officially inaugurated in July this year, and an initial service of six trains a day is currently running between Ankara and Penik (in the suburbs of Istanbul). Once upgrading work is complete, this will be extended to the centre of the capital. The high speed rail link is capable of speeds of 250km/h, and has reduced the journey time between Ankara and Istanbul from seven hours to three hours.

Kayseri Tramline
The Italian building cooperative, Coopsette, has been awarded the tender for the expansion of the tram line in Kayseri by the Kayseri Metropolitan Municipality, as part of a temporary consortium with Turkish firm Ici. The contract is reportedly worth US$46.69m and entails the construction of 16km of new rail lines and 22 new stations. Originally planned for completion in 2013, no completion date is being reported, but it is now understood that work would be ongoing in 2014. There is no report as to whether it will be completed and operational before the end of 2014.

Kayseray light rail
Two extensions to the Kayseray light rail line opened in February 2014 with a further extension south from Erciyes Universitesi to Talas due to open shortly. Yap Merkezi was the contractor for the extensions, having also built the initial section of the line. According to mayor Mehmet Özhasi, the ridership goal for 2014 is 32m passenger journeys.

Irmak – Zonguldak
In March 2012, a US$288.87m contract was awarded to a consortium including MÖN Insaat ve Ticaret and Yapi Merkezi by the Central Finance & Contracts Unit (CFCU) to upgrade the 415km rail line operating from Irmak, east of Ankara, to Zonguldak's Black Sea port. The contract, which covers track renewals and infrastructure rehabilitation, is slated to be completed within four years. The initiative was funded by a US$261.9m EU grant and a US$200m loan made by the European Investment Bank.

Ankara Metro
Spanish construction firm, Comsa Emte and local party Acilim Insaat won a US$132.55m contract for line 2 (16.6km from Kızılay south west to Ceyyolu) and also line 3 (15.4km west to Sincan from Batıkent) of the Ankara Metro. Line 3 opened in February and line 2 in March of this year, the latter nearly one year ahead of the original schedule. The Gülermak-Kolin consortium won the contract to complete line 4 which will run 10km north from Tandogan to Kecioren via Ulus and is reported to be due six months after the other lines.

Iraq
In February 2012, Iraq's Transport Minister, Hadi Farhan al-Amiri, stated that the country required a budget of more than US$100bn in the coming years to realise its infrastructure plans, with an estimated US$30bn being required just for rail. Iraq currently has 2,405km of track, with a further 2,343km planned. Securing the necessary financing will remain the main challenge for Iraq's plans going forward. Continued religious and political fighting in large areas of the country has raised concerns for political stability and safety and is likely to delay current projects for the foreseeable future.

Projects of particular note, include:
(i) the US$2bn Baghdad loop railway which will be a 140km long route around the outskirts of the capital;
(ii) the 555km US$7bn Baghdad-Mosul line;
(iii) the US$6.1bn Baghdad-Basra line for which Alstom signed a memorandum of understanding with Iraq's Transport Ministry for in 2011; and
(iv) the US$10bn Umm Qasr-Baghdad railway line.

Baghdad Metro and Monorail
Baghdad Municipality plans to develop a 39km metro within the city. The design for two of the metro's lines is being undertaken by French firm Systra. Line 1 of the metro is planned to be 22km in length, while line 2 will be 18km. In addition to this metro project (which is underground), in February 2013 Alstom signed a US$40m agreement with the Governor of Baghdad to undertake detailed design studies for the first phase of an elevated metro (monorail) project. This project will have two stages and construction was originally
forecast to begin in 2014. However, no construction has commenced and given current instability it is unlikely to commence any time soon.

It is noted that in February this year, China Southern Locomotive and Rolling Stock Corporation (CSR) formally presented the first of a fleet of ten diesel trains for Iraqi Republic Railways (IRR) to Iraq's ambassador to Beijing (Dr Abdul Karim Mostafa) as the CSR Sifang plant, following the trains from China. The 160km/h 10-car long-distance train has two power cars and accommodates up to 343 passengers. The trains are intended to roll on the Baghdad-Basra line.

Iraq's Transport Ministry has also reportedly signed an agreement with the Jordanian Government to construct a 1,150km railway to run between the New Aqaba Port in Jordan and Baghdad in Iraq. About 700km of the railway will be in Jordan and the other 450km will be on Iraqi territory. This project appears to remain stalled in the tender phase.

There have also been discussions between Jordan, Iraq and Egypt during April of this year about a railway project to link the three countries. For all three member countries this should boost their economies and trade.

While there are obvious challenges to these projects going forward and their timing remains somewhat unclear, raising the required market interest and financing will undoubtedly be the most important factors for their successful implementation. Iraq is a market which is receiving a lot of interest and, provided that the political situation becomes more settled (in the right way), could gain traction.

**Iran**

Iran also has a large number of rail projects planned and under way, not least the Tehran metro project. There are reportedly a large number of rail projects being considered or implemented currently.

**Tehran Metro**

The metro network in Tehran has four fully operational lines with further lines planned in an attempt to tackle road congestion and pollution in the city. The new lines have been scheduled over three phases. Phase 1 is fully operational. Phase 2 was due to be completed in 2013, but has been delayed due to a lack of funding. Phase 3 is due to be completed in 2015, and will comprise extensions to Lines 6 and 7, comprising 30km of track each. The extensions are estimated to cost US$8bn in total. In April this year, a 12km extension of Tehran metro line 3, built at a cost of approximately US$735m, between Azadegan and Vali-e Asr was opened. There are plans to extend the line 17km northeast to Hossein Abad. However, despite the improving political relations between Iran and Western powers, the sanctions imposed on Iran continue to present difficulties in terms of access to reliable funding for the project.

**Shiraz–Bandar Abbas**

Iran-based Railway Services & Technical Construction Engineering Company won the contract to build a 580km railway line in the south of the country in 2011. The railway line will run from Shiraz to Bandar Abbas, which is on Iran's Gulf coast and was expected to take 30 months to complete (meaning the railway should have been operational by 2014). There is no reporting which suggests that completion of this project has occurred to date.

In addition to the above, in 2012 it was reported that Iran's plans also involve building an extensive and lucrative rail network from its ports in order to link parts of Central Asia and provide a lifeline for Iranian trade. MEED has reported that other plans include the building of a 1,100km rail link from the northwestern city of Mashhad, along Iran's eastern border, to the port of Chabahar on the Gulf Sea as well as a rail project from Gorgan to Gonbad.

Indeed, these are just some of many railway projects that Iran is planning over the next 20 years. Clearly, however, the current political situation and resultant sanctions make Iran presently a 'no go area' for many international industry participants.

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Paragraph 1.3 of the Invitation for Prequalification for Feasibility Studies for Bahrain Integrated Transit lines March 2011
MEED Top 100 Projects
http://www.meed.com/sectors/transport/rail/oman-gets-to-work-on-rail-plan/3190821.article
http://www.railwaygazette.com/news/infrastructure/single-view/view/oman-rail-co-invites-civil-works-bids.html?sword_list%5B56%5D=projectword_list%5B56%5D=railway&word_list%5B56%5D=authority&no_cache=1, 14 October 2014.
Republic of Turkey Ministry of EU Affairs, Transport Policy http://www.abgs.gov.tr/?p=79&i=2
http://menarailnews.com 10 September 2013
http://menarailnews.com 10 May 2011
http://www.menarailnews.com, April 16 2014
http://www.railwaypro.com 26 June 2013