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הרכבת

A Quarterly Journal on the Railways of the Middle East  
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113:01

**Bridge on the new Valley Line  
Over Road 70. Photo Boaz Levy  
See 113:4:(xvi)**

113:01a

**"Just checking! The Israel Railways Ltd. newest Plasser line  
inspection machine near Goral junction (where the Ashkelon-  
Beer-Sheva line merges with the Na'an-Ber-Sheva line just north  
of Beer-Sheva North/University station). (Photo: Boaz Levy).**

## EDITORIAL.

2016 has certainly started with Israel Railways in expansive mood – the news items below (it is always hard to place them in a sequence of 'importance' and I normally leave them mainly in the sequence in which information arrives, with some slight alterations) speak of new stations, quadrupling of part of the main suburban network in Tel Aviv, completion of phases of new lines to Jerusalem and Beit Shean, schemes for new freight routes and connecting spurs, and more. Tenders for more rolling stock, including electric multiple units for use on the lines which have many tunnels, are being issued. Lod station is being transformed and Tel Aviv Central / Savidor is also being extended and the latest traffic statistics are truly remarkable.

In the middle of this hi-tech we still have the human factor – staff who prefer to watch television rather than do their duty to avoid accidents.... a population for whom certain festive and also memorial days have significance - and a Manager who has decided quite suddenly to move on. So these are times of transition as well as expansion.

The same can be said of certain countries in the Middle East, especially Iran, where political gains on the world arena have led to a rush to 'do business' with a state keen to double and modernise its railway network. Almost unnoticed by the rest of the world, which is focussed on presidential elections in a continent characterised by poor infrastructure, massive debts and poor social services, Central Asia is forming a major economic bloc linked by new railway routes that will bind the West with the East (rather than vice versa as was once the idea). Once more, news from 'Other Middle East Railways' takes up a substantial part of this issue – though with sad, elegiac looks at the situation in Lebanon and Syria – and once more there is little space for any historic items!

Enjoy.

The Editor.

**A photo taken soon after the collision south of Dimona station, 15.03.2016. (courtesy of Aharon Gazit)**



## NEWS FROM THE LINE.

### (i). MAZKERET BATYA STATION PLANS.

From a press release of 02.03.2016 by Israel Railways Ltd.:

"The railways published today – 02.03.2016 - Tender No. 21533 for building a passenger railway station at the urban area of Mazkeret-Batya. The station is to be located on the Lod - Be'er-Sheva line 10 km south of Ramla and 5 km south of Na'an junction, as well as 5 km from the station now being completed at Kfar-Menakhem. [sic. - these distances may be rather vague. Ed.]

The intention is to enable people from surrounding areas to reach both Be'er-Sheva and Tel-Aviv in much shorter times than either by car or by bus, thus avoiding the severe bottlenecks on roads particularly towards the Greater Tel-Aviv Area. The Mazkeret-Batya local authority had pushed towards building the station due to creation of a new business area there and the steadily increasing population, mainly of young couples who are commuters in both directions.

The station will include: a station building of 550sq.m.; platforms of 1,500sq.m. and each 300m long; a pedestrian subway between the platforms; 2 elevators with space for 13 passengers on each; a bus

terminal with 7 parking places for buses; bicycle facilities; a parking area for 320 cars, plus 9 parking places for disabled, 11 for motorcycles, 5 for taxis, and 8 bays for "bring and go".

The beginning of works is estimated as July 2016 with works to last two years. Latest date for submission of proposals: 12.04.2016."

Attached herewith is a computer generated image of the station provided by courtesy of Mr. Shahar Wiesman from the railways spokesman office; credit for the image: Musco Architects Office.

#### (ii). LOD NEW STATION.

From a press release of 16.03.2016 by Israel Railways Ltd.: "The railways will start next week carrying out the project of the "New Lod station"; in the first stage an overhead pedestrian bridge and a two-storey building for the new station will be built; This will also include a combined transportation centre, the railways' management, a bus terminal and a business centre; this report is further to a former report regarding the closure of the lines between Lod, Jerusalem, Tel-Aviv, and Rehovot between 21.03.2016 and 31.03.2016 due to the works.

Attached herewith is a computer generated picture of the pedestrian bridge and the nearby buildings to be built; by courtesy of Mr. Shahar Wiesman; credit for the imaging: "Waxman, Govrin, Geva".

#### (iii). DISRUPTION DUE TO WORKS AT LOD.

From a public announcement of 09.03.2016 in the Israel Railways Ltd. Website: "Due to massive works developing the railway complex at Lod station, there will be changes in rail traffic between 21.03.2016 and 31.03.2016 between Tel-Aviv Hahagana, Lod and Rishon Le-Zion Rishonim stations, as well as between Herzliyya, Ramla, Beit-Shemesh and Jerusalem.

The Rishon Le-Zion Rishonim station will be closed to traffic; on Friday, 25.03.2016 the station of Beer-Ya'akov will be closed; there will be one train/hour in each direction between Lod and Lod Ganei-Aviv between 06:00 and 09:00 and 15:00 and 19:00. There will be no trains between Herzliyya, Ramla, Beit-Shemesh and Jerusalem. Bus shuttle services will be provided."

To this Sybil added:

Starting Monday March 21 and until Thursday March 31, there will be no trains – and no replacement bus service – between Beit Shemesh and Jerusalem because of development work at Lod station. From Beit Shemesh to Lod and Ramle there will be a shuttle bus service as follows:

Sunday to Thursday hourly, on the hour

(06:00, 07:00 etc.) and also at 07:30, last one at 22:00.

Friday 06:30 and every hour, last one 16:30.

Saturday evening to Ramle, Lod and Tel Aviv Merkaz Savidor at 22:30.

From Lod to Ramle and Beit Shemesh: Sunday to Thursday, 06:10 and every hour, last one at 23:10. Friday 06:40 and every hour, last one 15:40. Saturday evening, 22:40.

There will also be frequent shuttle bus replacements from Lod to and from (a) HaRishonim and Be'er Ya'akov, and (b) Ganei Aviv.

Here are the times:

(a) <http://tinyurl.com/jydrub8>

(b) <http://tinyurl.com/jpvwdsp>

(Note that the clocks go forward on March 25, hence the seemingly late times for last trains on Fridays!)

#### (iv). FREIGHT TRAIN SMASH AT DIMONA.

This was a potentially major incident – fortunately without heavy casualties. There were several initial reports with slight differences and discrepancies. Here a composite from 'Times of Israel' and 'Israel News'.

*See picture on previous page.*

"A one kilometre radius of Dimona was closed off Tuesday night 15th. March 2016 after bromine spilled from a train following a train collision in the Negev town. For a few hours following the accident, residents in the area were asked to stay in their homes.

The collision occurred late Monday at the entrance to the railway station in the city. (Other reports say the early hours of Tuesday, half a kilometre south of the station). After emergency services worked through the night, residents were instructed that they could exit their homes. All roads in the area that were closed reopened early Tuesday. This included main road 25.

The freight train collided with three freight cars that had suddenly become uncoupled from a freight train and remained stuck on one of the tracks. One of the wagons (other reports say all three) contained bromine and as a result of the collision the substance began to leak. Four people were slightly injured in the accident, two who suffered from bruising, and two more who experienced itchy eyes. All four were evacuated to Soroka Medical Center in Beersheba. (Other reports say two train guards and five residents were treated by paramedics – the two railwaymen suffered bruising due to the crash, the others suffered eye irritation).

Freight locomotive Alstom Co-Co No. 709 has been heavily damaged and may be

considered as a total loss; in an additional picture one of the damaged cars can be seen. The driver was initially trapped in the cab but was soon rescued by firefighters.

Representatives from the Fire Service, Magen David Adom, the municipality, the Ministry of Defense, and the Ministry of Environmental Protection were all present at the scene of the accident.

Transport Minister Mr. Israel Katz and Ministry of Environmental Protection said that the railways may be accused of negligence, adding that noticing cars on track does not need special talents; the railways authorities said that it happened due to a technical failure; The railways may face a legal claim from Israel Chemicals Ltd. for whom the railways haul the hazardous materials."

On 26.03.2016 it was announced: The investigation of the collision between two freight trains at Dimona station on 14.03.2016, during which a bromide car derailed and the material leaked, has revealed that three failures occurred: the first train driver did not notice that 3 wagons had become uncoupled; the signalman at the station did not announce this; the driver of the second freight train did not notice the standing wagons and collided with them. The railways may face a police criminal investigation and Mr. Zafrir already stated that the railways will fully cooperate.

#### *More details in a report by Steve Tish and Chen Melling:*

"Dimona incident 14th March, 2016  
On 14th March 2016 Freight train number 876, carrying 27 wagons and double-headed by locomotives T710 & T711, was scheduled to depart from Mamshit at 20.58 on route to Dimona. At a distance of approximately 500 & 1000 metres from Dimona station, for reasons as yet unknown, the last 15 wagons of the train became separated, and were left on the section of line.

The duty controller at the Network Rail Control Centre (at Haifa Hof HaCarmel) subsequently received indication that this section was still showing occupied (correctly), despite the fact that the train had arrived at Dimona marshalling yard. He requested that the duty manager check to ascertain if the train had arrived intact, and to ensure that the number of the last wagon coincided with the list on the "visa" (computerized train diary). On the basis of this report, the controller manually cleared the section for the passage of the next train. This was train number 342, ex-Tzefa, scheduled to depart at 21.22 and was due at Dimona at 22.03. It was hauling 32 wagons, including 5 of bromine ammonia solution with a total net capacity of around 215 tons. It was duly cleared to proceed

Scene of train collision in Dimona (photo credit: FIRE AND RESCUE SERVICE)



A one kilometer radius of Dimona was closed off Tuesday night after bromine spilled from a train following a train collision in the Negev town. For a few hours following the accident, residents in the area were asked to stay in their homes. The collision occurred late Monday at the entrance to the train station in the city. After emergency services worked through the night, the residents were instructed that they could exit their homes. All roads in the area that were closed reopened early Tuesday.

The cargo train collided with three freight cars that were suddenly decoupled from a freight train and remained stuck on one of the tracks. One of the wagons contained bromine and as a result of the collision the substance began to leak. Four people were lightly injured in the accident, two who suffered from bruising, and two more who experienced itchy eyes. All four were evacuated to Soroka Medical Center in Beersheba.

As can be seen from the attached picture, freight locomotive Alstom Co-Co #709 has been heavily damaged and may be considered as total lost; in an additional picture, one of the damaged cars can be seen.

into the line section which was already occupied with the 15 wagons ex-train 876. Locomotive number 709 leading train 342 subsequently collided at about 22.05 with the wagons at a speed estimated to be around 30 kph causing serious damage to the locomotive and to the wagons of the dangerous material. This resulted in a leak of approximately 6.5 tons of bromine ammonia.

The emergency services were summoned and consequently closed off the whole area, which was said to be a distance of about 800-900 metres from the nearest neighbourhood in Dimona. Work began immediately on neutralizing the leaked material and 6 persons (including the crew of locomotive 709) were treated in hospital and were released the following morning, and the cordon was lifted at about 07.15 on the 15th March.

Israel Railways continued with the repair of the track, and subsequently the damaged locomotive and wagons were removed to the Dimona workshop for assessment and the section of line was reopened for traffic a few days later. There was no interruption of passenger services.

This serious incident, which very

fortunately did not result in the loss of life or serious injuries raises some very pertinent questions to which the committee of enquiry will demand answers:-

- 1) What caused the 15 wagons to break away from the rest of the train?
- 2) Upon detachment of the wagons, it is unclear whether the driver received a visible or audible cab warning, and whether or not he performed any action as a result.
- 3) The check of the duty manager was apparently carried out according to the regulations, however during the conversation with the Network Rail Control Centre there appears to have been a misunderstanding and the latter did not fully understand the report. He understood that everything was in order.
- 4) Was his report to the controller sufficient for the controller to clear the section, and for him to assume a technical fault was causing the section to still be showing occupied?
- 5) Should the driver of train 342 not have been informed the section ahead may be problematical, with a technical fault, and that he should exercise caution and reduce speed so that he could stop his train ahead of any possible instruction?

Following this accident, which could easily have turned into a major incident resulting in loss of life, Mr. Boaz Zafir, General Manager of I.R and other senior staff were invited to give evidence before a hearing of the Environmental Safety Committee, Southern District, which sat on 20th March. This resulted in a decision to open a criminal enquiry into the accident, and requested that I.R present the committee with a programme to improve safety measures for the transporting of dangerous materials by rail."

In early April came another report by Aharon:

"Additional conclusions (as yet unofficial) from the investigation of the Bromine train collision at Dimona station on 15.03.2016 were published unofficially but confirmed by the Transport Ministry:

The driver of the train from which the three wagons were uncoupled and remained stranded at Dimona station did not pay attention to the warning sign from the Knorr derailment detector as he was busy with a phone call; in the investigation he said the device did not work – but this has been found to be a lie!

The Traffic Inspector at the station was watching a football game, while there was

also a student inspector who did not know what to do and who was asked by the Inspector not to interrupt him watching the game!

Therefore the driver of the second train (which hit the stranded wagons) had not been warned, but it is still unclear how he did not notice the wagons on the line ahead, and it is unclear why he was not warned by the cab instruments.

The railway management responded: "The whole issue is under a governmental investigation committee, and we await the final conclusions."

#### **(v). SAVE MONEY BY RAIL TRAVEL!**

New research by Israel Railways Ltd. Economic Division has revealed that by using rail services people may save more than \$9,750 (NIS 38,000) annually consisting of \$3,333 (NIS 13,000) journey cost + \$6,417 (NIS 25,000) time saving in case of working during the journey. If a monthly free rail ticket is used, the saving between Tel-Aviv and Beer-Sheva for example may reach \$20,526 (NIS 79,000).

The research has found that even when leased cars are used, travelling by rail is cheaper.

And related to the above: From a press release of 30.03.2016 by the Transport & Roads' Safety Ministry:

"Transport Minister Mr. Israel Katz announced today, 30.03.2016, that tariff reform on all transport modes has so far covered 70% of the population but from 01.04.2016 will be extended to cover the whole Israel from 01.04.2016.

Minister Katz has been encouraged from the success of the former 70% tariff reform, as a result of which there has been a rise of 5% in bus ridership, whilst on rail this has been five times higher at 25%!

With the new policy the public will enjoy price reductions of between 55% and 80% by using a monthly ticket on intercity lines (buses and trains) which means a saving of between \$125 and \$168 monthly for commuters."

#### **(vi). TIMETABLE IMPROVEMENTS.**

The railways announced on their website that from Saturday night 26.03.2016 additional trains will be operated, frequency is to be improved and services on Fridays will terminate later as follows:

On the Ashkelon - Netanya line trains will now terminate instead at Binyamina; trains will call between 10:00 and 14:00 at Hadera West and Caesarea-Pardes-Hanna too; additional linking trains to the northern and southern stations will cut waiting times at Binyamina.

On the Tel-Aviv Savidor-Central - Rishon Le-Zion Moshe Dayan (West) section, between 06:00 and 09:00 and between 15:00 and 19:00 there will be 4 trains/

hour, every 15 minutes calling at the intermediate stations of Holon Junction, Holon Wolfson, Bat-Yam Yoseftal, and Bat-Yam Komemiyut.

On the Yavne-West - Beer-Sheva Central section, between 06:00 and 09:00 and between 15:00 and 19:00 there will be 2 trains/hour, every 30 minutes calling at the intermediate stations of Ashdod Ad-Halom, Ashkelon, Shderot, Netivot, Ofakim, and Beer-Sheva North/University.

On the Beer-Sheva Central - Haifa Central the 8 line: the train departing from Beer-Sheva Central at 17:38 will call also at Hadera-West at 19:17.

Due to summer time starting on Friday 25.03.2016, trains will operate on Fridays until 18:00.

Trains on Saturday nights will start approximately at 20:30.

#### **(vii). MORE DOUBLE-DECK COACHES ORDERED.**

From a press release of 20.03.2016 by Israel Railways Ltd.:

"The railways will exercise the option of purchasing 60 additional push/pull double-deck carriages worth 106 Million (NIS 456 Million) from Bombardier Transportation as part of the framework agreement between the railways and the manufacturer. The cars will arrive fitted out for use with both diesel and electric traction.

The timing of the deal accords with the sharp rise in passenger traffic, which is higher than the forecast; the planned deliveries are coordinated with opening dates of new lines: during 2016 the Valley Line (Hedjaz) between Haifa and Beit-Shean is to be opened; also to be opened is a new station called Sapir at Netanya; in 2017 the Acre (Akko) - Carmiel line is to be opened and the station of Kfar-Menakhem (on the line to Beer-Sheva); in 2018 the A1 fast rail link to Jerusalem with the Ha'Uma station at Jerusalem and also the Hod Ha-Sharon - Ra'anana Central - Ra'anana South - Herzliyya - Haifa - Tel-Aviv line are to be opened and the station of Mazkeret-Batya (on the line to Beer-Sheva) also. The A1 will be the first electrified line; in 2019 the electrification will be expanded to additional lines; and in 2020 the linking curve between Modi'in Outskirts and the A1 to Jerusalem will be opened.

The carriages will be delivered during 2017 and the first half of 2018.

Transport Minister Mr. Israel Katz said: "Both the Ministry and the railways are in full active preparations towards the electrical era which will significantly change the railways; therefore it is essential to have the proper fleet in order to provide the best services."

This was reported further in 'R.G.I.' 21.03.2016: "The 106m order announced

on 21. March has been placed within an October 2010 framework contract with Bombardier. Deliveries are scheduled to run from March 2017 to July 2018; The push-pull coaches will operate with Traxx AC electric locomotives. The order will take ISR's fleet of Bombardier double-deck coaches to 425 vehicles."

The website 'railway-technology.com/news also reported Bombardier Transportation Sales Israel head Yossi Daskal as saying "We are proud to continue strengthening our local footprint. Bombardier's story in Israel continues to be a success due to high performance and the excellent relationship Bombardier has built with ISR over the last decades..." The new coaches are to be operated in a new standard eight double-deck coach configuration.

#### **(viii). DOUBLE-DECK ELECTRIC MULTIPLE UNITS.**

Additionally, the railways published on 20.03.2016 international tender No. 51403 - For the Supply of Double-Deck EMU's. These will be in four-car and six-car sets and existing and proven designs are sought. The bidder must demonstrate that they had supplied and commissioned since January 2005 at least 30 such double-deck trainsets and also at least 30 AC electric multiple units and has maintained at least ten such for at least three years - clearly no new and innovative designs are sought and the requirements would rule out several manufacturers which have only recently entered the market.

#### **(ix). 2015 STATISTICS.**

On 26.03.2015 it was reported: The railways finished 2015 with a net profit of \$68 Million (NIS 265 Million). The profit from current activities was \$19.5 Million (NIS 76 million) compared with \$33 Million (NIS 128 Million) in 2014 as a result of one-time costs. The company has a positive cash flow from current activities of \$34.6 Million (NIS 135 Million).

Passengers:

During 2015 the railways carried 52.8 million passengers compared with 48.5 million in 2014; 9% more; when compared with 2009-2011, the growth is 40%.

The revenues from passenger traffic reached \$198 million (NIS 775 million) compared with \$183 million (NIS 713 million) in 2014; 9% more. The daily average ride reached 200,000 compared with 182,000 in 2014; 10% more; the daily record of 245,200 was achieved in December 2015.

The more distinctive lines with rises in traffic were:

- Tel-Aviv - Ashkelon: 18%; mainly thanks to the opening of the Ashkelon - Beer-Sheva line.

- Hod Ha-Sharon – Tel-Aviv: 13%; mainly due to heavy use by those who avoid the severe morning and afternoon bottlenecks caused by works for the Greater Tel-Aviv Area LRV/METRO at different locations.

- Most surprising is the Tel-Aviv – Beit-Shemesh - Jerusalem line: 24%! This is “thanks” to the severe bottlenecks on highway #1, as a result of which even the old sharply-curved Beit-Shemesh - Jerusalem is faster!

Freight:

The railways hauled 7.5 million tons; similar to 2014; revenues reached \$42 Million (NIS 165 million).

Infrastructures:

Electrification:

During 2015, the railways continued progressing the project at various levels: Selection of Bombardier as manufacturer of 62 electric locomotives; Selection of PB as the new project manager; Selection of SEMI as the contractor for electrification infrastructures.

The A1 fast rail link to Jerusalem:

Completion of all the tunnels with a total length of 37 km (twin bored); Completion of the eastern systems' building at Jerusalem HaUma station; The stage of building and maintaining the electro-mechanical systems has started; Completion of track laying along section A between Anava interchange and bridge No. 6.

Additionally, the railways have started upgrading and enlarging existing stations at a cost of \$28 Million (NIS 110 Million) to cope with the growing demands.

Israel Railways Ltd. Chairman of Directorate Accountant General Mr. Husam Bashara and General Manager Mr. Boaz Zafir said: “The railways keep showing profits and positive results from a variety of customers hand in hand with the momentum in developments; we're proud and hope to bring the railways to double traffic to the end of the decade”.

#### **(x). QUADRUPLING TEL AVIV TO HERZLIYYA.**

(i). From a press release of 31.03.2016 by Israel Railways Ltd.:

The railways will start soon preparatory track infrastructure works to link the Hod Ha-Sharon – Ra'anana - Herzliyya line - known as the 'Sharon Railway-531', named so after highway No. 531 in the median of which it runs, and which is under construction - with the Tel-Aviv - Haifa coast line.

The immediate activities involve quadrupling the Tel-Aviv University - Herzliyya section in order to enable the much-increased traffic foreseen when the new line is to be opened.

The \$167 Million (NIS 650 Million) project is to be completed until 2018 and includes: dismantling 540m of tracks, laying 530m of new tracks (on a new alignment west of the existing tracks) and

installing a new signalling system.

Herzliyya station will eventually become the end point of the electric trains which will operate between Jerusalem and Tel-Aviv on the A1 line, this being the first line to be electrified.

In order to carry out the mentioned works, the Tel-Aviv University - Herzliyya section will be closed for traffic in both directions between Thursday, 14.04.2016 morning and Friday, 15.04.2016, inclusive.

As a result, the following traffic changes will take place:

Trains will start/terminate at Tel-Aviv Savidor/Central with the exception of the trains between Jerusalem – Beit-Shemesh - Herzliyya which will start/terminate at Tel-Aviv HaHagana station.

Trains on the Hod Ha-Sharon – Kfar-Sava – Rosh-Ha-Ayin – Petakh-Tikva - Tel-Aviv - Rishon-Le-Zion West – Beer-Sheva service will operate regularly (they don't run over the section being worked on).

Trains from Nahariya and Haifa will terminate at Binyamina and Beit-Yehoshua including intermediate stations.

Traffic will resume on Saturday night, 16.04.2016 with some minor changes to the timetable, while on Sunday morning 17.04.2016, traffic will resume entirely.

The Transport Ministry has instructed the buses operators from Haifa, Zikhron-Ya'akov, Pardes-Hana-Karkur and Netanya, to increase bus services to the Greater Tel-Aviv Area during the two days of track closure; additionally, the railways will operate special shuttle buses between Netanya and Ben-Gurion airport in both directions during the night of 14.04.2016.

(ii). On 17.04.2016 it was announced that all passengers who could not use trains between 14.04.2016 and 15.04.2016 due to infrastructure works last week between the Tel-Aviv University and Herzliyya stations, will enjoy 2 days of free travel as a compensation using any sort of smart card.

(iii). Also connected with the works of quadrupling the Tel-Aviv University - Herzliyya section; a steering committee created by Israel Railways Ltd., the Transport and Finance Ministries has been advised by the British consulting company LBG who recommended laying an underground double-track section in twin-bored 26km long tunnels between Shefayim (a loop station north of Herzliyya) and south-east of Tel-Aviv HaHagana stations, thus linking the Tel-Aviv - Haifa and Tel-Aviv - Jerusalem (A1) lines; the company also recommends laying an additional track on the surface.

The purpose of the proposed \$2.64 Billion (NIS 10 Billion) 26km long tunnel project is to cope with the forecast for 300 million passengers in 2040, compared with 53 million in 2015; according to all

parties involved, the rail network must undergo vast changes in order to be able to cope with such a rise and this work must start immediately.

#### **(xi). I.R. GENERAL MANAGER DECIDES TO LEAVE:**

From a press release of 19.04.2016 by Israel Railways Ltd.:

“The railways' General Manager Mr. Boaz Zafir announced today, 19.04.2016 his intention to leave his job in August 2016 after five years in office; he explained this as his wish to return to the business sector. Although rumours about this step have been heard for some time, particularly after the Bromine train collision at Dimona, many believed that his job would be extended; the facts are however different.

During the last five years the railways have undergone a strategic revolution; the number of passengers has grown by 50% from 36 million in 2011 to 53 million in 2015; punctuality exceeded 95%, being considered the third in Europe after Switzerland and Austria; the railways have turned from losing money to net profit of almost \$70,000 (NIS 265,000); the railways have signed a \$7.3 billion (NIS 28 billion) strategic agreement with the government to enable implementing the 5-year revolution programme.

Mr. Zafir also changed the railways' own concept from being an operator to being a service provider with top priority on the passenger as the consumer. New, fresh and highly professional manpower has been recruited and emphasis has been put on high-level training.

Mr. Zafir said: “It was a privilege to serve in the complex and challenging job and I'm thankful for the opportunity I've been given to implement it; I feel at a personal level that I've completed most of the tasks which I undertook; implementing them required daily challenges; however, with the help of the railways' staff, the directorate, and Transport Minister Mr. Israel Katz, the railways have become a social, transparent, professional and service-focussed company for which I thank to all those who worked with me”.

#### **(xii). ALSTOM APPEAL FAILS.**

From a press release of 19.04.2016 by Israel Railways Ltd.:

The Tel-Aviv district court on 18.04.2016 totally rejected the appeal by Alstom regarding the winning of the the electrification tender by the Spanish company SEMI; the court decided that the tender was granted entirely according to the rules, criticized Alstom for using unacceptable systems of espionage and charged Alstom with \$213,000 (NIS 800,000) legal costs to be paid to the railways and SEMI.

### **(xiii). PASSOVER HOLIDAYS REVISED TIMETABLES.**

Israel Railways Ltd. report on their website service strengthening during the Passover holidays – from 22.04.2016 to 30.04.2016:

On Friday 22.04.2016 and on Saturday night 23.04.2016 trains operate according to Fridays and Saturday nights' timetables respectively.

Between Sunday 24.04.2016 and Wednesday 27.04.2016 trains operate according to the regular time table, but several train services will be extended as following:

On the Herzliyya - Jerusalem line, trains departing from Herzliyya at 09:29, 11:29 and 13:29, regularly terminating at Beit-Shemesh, will instead terminate at Jerusalem Malkha calling also at the Jerusalem Biblical Zoo station. Trains departing from Herzliyya at 12:29, 14:29, 15:29, 16:29 and 17:29 will call also at the Jerusalem Biblical Zoo station.

Trains will depart from Jerusalem Malkha stations instead of Beit-Shemesh at 10:16, 12:16 and 14:16, calling also at the Jerusalem Biblical Zoo station.

On the Beer-Sheva - Haifa line, trains departing from Beer-Sheva Central at 08:59, 09:59 and 10:59, regularly terminating at Tel-Aviv Savidor-Central, will instead terminate at Haifa Central the 8 at 11:21, 12:21, 13:21 and 14:21 respectively and will call also at Tel-Aviv University, Haifa Hof-HaCarmel and Haifa Bat-Galim.

On the Beer-Sheva - Haifa line, trains to Beer-Sheva regularly departing from Tel-Aviv Savidor-Central station, will instead depart from Haifa Central the 8 at 11:06, 12:06, 13:06 and 14:06 and will call also at Haifa Bat-Galim, Haifa Hof-Ha-Carmel, and Tel-Aviv University.

On Thursday, 28.04.2016, the eve of the second Passover holiday, trains operate as on Fridays.

On Friday, 29.04.2016, the second Passover holiday, trains will not operate; the same as on Saturdays.

On Saturday night, 30.04.2016, trains will operate as on a normal Saturday night.

In addition to strengthening rail services to Jerusalem, there will be additional public transport services - buses and LRV - as well as a special bus service Route 111 between Malkha station and the Western Wall in the old city, with full coordination between rail and bus schedules.

### **(xiv). MODI'IN LOOP PLANS – LINK TO NEW JERUSALEM LINE.**

From a press release of 11.04.2016 by Israel Railways Ltd.: "The railways are now starting to construct the so called "Modi'in loop" to link the Modi'in Outskirts station

with the A1 fast rail link to Jerusalem. They announced on 11.02.2016 that the winner of the first of two stages of Tender No. MN/KB/02/15 is Minrav Civil Engineering, a well-known Israeli engineering and construction company which had already performed many rail projects, including work on the A1 line.

The share of Minrav Civil Engineering - almost \$20 Million (NIS 77.3 Million) - includes: design and building of 2.5 km of track infrastructure, piling and bridges, cast concrete at site, supporting walls, excavation and filling up, a formation for track, culverts, under-track passages, landscape rebuilding, etc. Works are anticipated to last 30 months.

Within few months, the railways will select the winner for the second stage of the tender which will include changes at Modi'in Outskirts station: building an additional rail bridge, an additional parking area south of the station, and an overhead pedestrian bridge over the station and over highway 431, in the median of which the station is located.

IR management said: "This project will bring the city of Modi'in the second revolution since rail arrived there from Tel-Aviv, enabling the citizens to reach Jerusalem HaCma station from Modi'in Outskirts station within 17 minutes (22 minutes from Modi'in Central station); it will definitely relieve road congestions at exits and contribute to the citizens' quality of life."

The railways intend to operate two trains/hour in each direction; project management is to be performed by the "A1 Management" team due its rich experience.

### **(xv). JERUSALEM NEW LINE LINK TO THE SOUTH.**

While the A1 fast rail link to Jerusalem is not yet open - though it is making progress - Transport Minister Mr. Israel Katz announced on 24.04.2016 that it will be linked also with the Tel-Aviv - Beer-Sheva line; more details when available.

### **(xvi). VALLEY LINE TRACKLAYING COMPLETED.**

On 03.04.2016, an historic event took place when the last rails were laid on the 60 km revived Valley Line (Hedjaz); the old citizens of the area were invited for a test run riding on a work train which belongs to Lesico Ltd., the track laying and rail welding contractor, which performed works together with Israel Ways, the project's infrastructure manager. *(see photos next page)*

### **(xvii). FREIGHT TRAFFIC FOR THE VALLEY LINE.**

From a press release of 10.05.2016 by the Transport & Roads' Safety Ministry:

Transport Minister Mr. Israel Katz visited today the new port of Haifa which is in an advanced stage of construction and told the press that the existing port, which dates back to the 1930's (although much enlarged over the years) will be upgraded, together with the construction of the new one; however, the most important news was: "We are building the two ports in order to enable Turkey and Jordan to pick up their goods at Beit-Shean - the end of the Valley Line for as long as there is no extension to Jordan - and it will be hauled exclusively by rail between Beit-Shean and Haifa; I am about to sign on an order to take care that goods movement will really be so"!

Other participants in the tour were mayors of Haifa and surrounding cities, senior managers of the railways and of Israel Ports Ltd.

(Note: Pictures show the line as having been laid only with single track so far.)

### **(xviii). COMMUNICATIONS FAILURE.**

On 01.05.2016 a mysterious communications failure caused trains to be delayed by 20 minutes, while punctuality was down to 63.5%! However, in the afternoon of the same day a car accident on the Jabotinsky Road at Petakh-Tikva - one of Israel's most congested and under which parts of which the METRO Red Line is to run - caused people to be stuck for hours; somebody envied those using train services and others said that the need for the metro is obvious!

### **(xix). INDEPENDENCE DAY – SERVICE ALTERATIONS.**

On the National Memorial Day – 11.05.2016 - and on Independence Day - 12.05.2016 - trains will operate to a special timetable, which will include special bus services to cemeteries from nearby railway stations and back, while other services will be reduced. Families who are relatives of victims of war or terror events will enjoy 50% reduced fares. On Independence Day there will be no reserved seats.

### **(xx). LEVEL CROSSING WORKS.**

The railways will carry out maintenance works to replace a track section at level crossing No. 34 at Kfar Shemaryahu (north of Herzliyya) between Friday 13.05.2016 at 12:00 and Saturday night at 21:00. As a result, the road crossing it will be closed.

### **(xxi). HEAT WAVE.**

On 15.05.2016 it was reported that due an extra heat wave of up to 44° centigrade in some areas, train speed was restricted to 80 km/h and punctuality was down to 87%; the peak was expected the next day – 16.05.2016 - after which temperatures were expected to return to normal (around 30° centigrade).



Valley track laying completed



View from the bridge over Road 70 between Haifa and Kfar Yehoshua. Photo Boaz Levy



**(xxii). COOL STUFF.**

From a report of 23.05.2016: The railways in partnership with Smart Sale Company have introduced a new service of automatic machines selling cooled items like milk, several sorts of cheese, dairy products, etc. at railway stations.

Prices are more or less identical to those of supermarkets and the sale is made by passing a credit card through the slot, selecting the requested item and closing the machine door; the customer has time to check the item regarding its shelf life, ingredients, etc. and is debited only after closing the machine door. The machine is called in Hebrew "Zarkhaniya" which means a minimarket.

In the first stage such machines have been introduced at the stations of Herzliya and Beit-Yehoshua with the intention to expand this to additional stations.

**(xxiii). 2016 FIRST QUARTER STATISTICS.**

From a press release of 26.05.2016 by Israel Railways Ltd.:

"The railways published today – 26.05.2016 - the achievements of the first quarter of 2016, according to which growth continues hand in hand with strong positive results:

The first quarter of 2016 brought an operational profit of \$9.2 Million (NIS 35 Million); twice as that of the first quarter of 2015 - \$4.48 Million (NIS 17 Million); the net profit was \$9.2 Million (NIS 35 Million) compared with \$52.3 Million (NIS 210 Million); the reason is that in 2015 the railways had a one-off income of \$50 Million (NIS 190 Million) mainly from selling areas around stations for real estate use.

For the first time in its history the registered capital crossed the NIS 1 Billion (\$263 Million) level and is now NIS 1.023 Billion (\$269 Million).

The total income was \$149 Million (NIS 565 Million) compared with \$140 M. (NIS 533 Million) in 2015; the most significant growth in income was from freight, where income reached \$13 Million (NIS 50 Million); 22% more than in 2015 at \$11 Million (NIS 41 Million).

**Passenger transport:**

During the first quarter of 2016 the railways carried 14.8 million passengers were carried, compared with 12.6 million in 2015; up by 17%; the forecast for the end of 2016 is for 60 million passengers compared with 53 million in 2015.

The income from passenger services totalled \$46.6 Million (NIS 177 Million) compared with \$47.7 Million (NIS 181 Million); the decline is explained by calculations against the government due to the reform in fares which was launched in January 2016 and which caused the reduction.

During March 2016 a monthly record of 5.4 million passengers has been achieved. During the first quarter of 2016 the daily average passenger traffic reached 215,000 and on peak days of Sundays and Thursdays even 250,000 compared with 188,000 during the first quarter of 2015; 14% and 33% more respectively.

Passengers trains' average punctuality was 96.7%, compared with 96.6% in 2015 and 95.3% in 2014.

**Freight haulage:**

Freight haulage during the first quarter of 2016 reached 2.3 million tons compared with 1.9 million tons in 2015 - up by 21%; this was achieved mainly by new contracts signed last year, increasing the number of trains run during each day and providing a high quality, reliable, and punctual service for customers.

**Infrastructures' development:**

2016 is characterized by hard work regarding the promotion of new lines including the intensive works on the A1 line to Jerusalem and other intensive works of upgrading "veteran" stations like: Tel-Aviv Savidor-Central, Tel-Aviv Hashalom, Haifa Lev-Ha-Mifratz, Haifa Hof-Ha-Carmel, Binyamina, Pardes Hanna-Keysariya, Hadera West, Netanya, Rehovot, etc.

Both the railways' Chairman of Directorate Chief Accountant Mr. Husam Bashara and the General Manager Mr. Boaz Tzafirir said: "The fact that the registered capital reached the NIS 1 Billion (\$263 Million) level and is now NIS 1.023 Billion (\$269 Billion) proves the company's stability.

We are proud of the growth of both of passengers and freight traffic, both significantly important for the economy; we promise to keep growing; This is an opportunity to thank our customers for the trust in our company and of course to the railway employees, without whom we would not have reached our achievements".

**(xxiv). ELTON JOHN SPECIALS.**

The railways provided special additional trains both northwards and southwards of the Tel-Aviv University station on 26.05.2016 after the Elton John show that night at Joshua Gardens adjacent to the station.



*Artist's impression of new station at Lod*

## TENDERS.

- (i). **Tender No. 31507:** An annual agreement for supply of Hardware (bolts, screws, nuts, discs, and pins); The contract is for 12 months with optional extensions of up to additional 48 months. Latest date for submission of proposals: 29.03.2016.
- (ii). **Israel Railways Ltd. tender No.11611:** Providing Pest Control services at all railways' areas: The intention is to divide services between two areas, north and south. The contract is for 24 months with optional extensions of up to additional 36 months. Latest date for submission of proposals: 18.04.2016.
- (iii). **Tender No. 41601.** Invitation to pre-Qualify for Design & Build of the ETCS Level 2 On Board Project. Details on the IR website. Bids by 10.05.2016.
- (iv). **Tender No. 11601:** Invitations for quotations for Complementing Transportation to/from rail terminals: The contract is for 12 months with optional extensions of up to additional 60 months. Latest date for submission of proposals: 14.04.2016.
- (v). **Tender No. 21527:** Providing Acoustic Engineering Design and Inspection services: The contract is for 24 months with optional extensions of up to additional 24 months. Latest date for submission of proposals: 07.04.2016.
- (vi). **Request for Information on-track Turnouts Measurement System.** "ISR hereby requests information regarding turnout measurement system of turnout's rails and crossing profiles and turnout's geometry and Rails Corrugation measurement system and Turnout Component and surface defect Video Monitoring System.... to enable ISR to explore the option of purchasing of the system. The system... must be designed to enable bi-directional turnout rails and crossing profiles and geometry measurement..... and to operate efficiently near high voltage electric wire line, on electrified track with 25kV AC and on non-electrified track with CWR and jointed track..."
- (vii). **Tender No. 41602.** For the Supply of Second-Hand 20-foot Flat Rack Containers with Collapsible Ends. Bids by 09.05. 2016.
- (viii). **Tender No. 51403.** For the Supply of Double-Deck Electric Multiple Units. For units in four-coach and 6-coach configurations and complementary services and options as defined in the Tender Documents. The bidder must have designed, manufactured and fully assembled since 1.1.2005 at least 30 double-deck passenger trainsets and 30 electric multiple units, compatible with AC electrical systems and suitable for speeds up to 140km/h. Bids by 08.08.2015.
- (ix). **Israel Railways Ltd. tender No. 21610:** A Clean Air system at Tel-Aviv HaShalom railway station: The tender requirements are for designing, installing, operating and maintaining a monitoring of polluted air and removing it from the station's platforms, by minimizing particles of NOx, NO2, and PM 2.5 concentrations, thus keeping the air clean as per the Israeli "Clean Air 2008" regulations. The system has to be designed to be capable of cleaning the air automatically and continually either by air filters or another technology. The project is to be implemented in the DBOT (Design, Build, Operation, Transfer) system. The design and implementation time is not to exceed 10 months. The contract is for 48 months plus optional extensions of up to an additional 36 months. Latest date for submission of proposals: 17.05.2016. (Note: it should be mentioned that this station is particularly suffering from both air pollution caused by trains but also from the adjacent west side of the Ayalon highway (Road 20) as well as from the road's noise in addition to trains' noise.)
- (x). **Tender No. MS/RC/2016/2:** Erecting and operating automatic machines for selling cellular accessories: The contract is for 12 months with optional extensions of up to additional 24 months. Latest date for submission of proposals: 09.05.2016.
- (xi). **Tender No. 11607:** Providing supply and maintenance services of portable fire-fighting equipment: The contract is for 24 months with optional extensions of up to additional 48 months. Latest date for submission of proposals: 02.06.2016.
- (xii). **A call for joining a Pool of Suppliers** regarding the provision of Repair and Maintenance services for the Forklifts in service at railway stations: The forklifts are located at the rail terminals of B'nei-Brak, Hadera West, Ramat-Hovav, and Tzefa. The contract is for 36 months. Latest date for submission of proposals: 12.05.2016.
- (xiii). **Tender No. 21606:** Extending platforms at Tel-Aviv Savidor-Central station: Latest date for submission of proposals: 26.05.2016.
- (xiv). **Tender No. 11623:** Providing Stewardess Services at stations, on trains, and on events: The contract is for 24 months with optional extensions of up to additional 48 months. Latest date for submission of proposals: 23.05.2016.
- (xv). **Tender No. MS/RC/2016/4:** Permission for Advertising on boards at railway stations and sites, including marketing, installation, and maintenance: The contract is for 12 months with optional extensions of up to additional 12 months. Latest date for submission of proposals: 05.05.2016.

(xvi). A call for joining the railways' media suppliers with whom the Railways will be in contact for creating a contract: The contract will be for 12 months with optional extensions of up to additional 24 months. Latest date for submission of proposals: 04.05.2016.

(xvii). **Israel Railways Ltd. Tender No. 21602:** Providing consulting services for schedules and schedules management of the railways' development program: The contract is for 36 months with optional extensions of up to additional 24 months. Latest date for submission of proposals: 16.05.2016.

(xviii). **Tender No. PMR-1/16:** Pre-Selection for candidates to participate in the tender for Design, Build, Finance, Operation and Maintenance of an area at Modi'in Central station in the D.B.O.T. System. including basement, buildings on the surface and above, apartments, businesses and parking area for 300 cars. Latest date for submission of proposals: 22.06.2016.

(xix). **Israel Railways Ltd. Tender No.21602:** Providing consultancy services for schedule and schedule monitoring of the railways' development programme: The contract is for 24 months with optional extensions of up to additional 36 months. Latest date for submission of proposals: 16.05.2016.

(xx). **Israel Railways Ltd. Tender No. MN/KB/01/16:** Design, building and maintaining the radio communication system for the A1 fast rail link to Jerusalem: The contract is for 10 years. Latest date for submission of proposals: 30.06.2016. The winner is required to design, build and maintain the radio communications system of the railways as well rescue forces, cellular systems, linking and activating end stations and interfaces, and to carry out testing and commissioning activities. The communication systems must be cellular based according to RF including RF simulation and forecast.

The requested radio communication site has to include at least 3 transmitters, duplexer communication, combiner, antenna, and adjusting system or an existing radio site of an approved configuration. The cellular site (BTS-Base Transceiver Station) has to include TRX and APCO/TETRA sites, communication equipment, duplexer, combiner, antenna, control system and adjusting system.

The winner has to use RAMS mechanisms based on CENELEC EN50126. The cellular system has to provide full coverage for the passengers of trains running at up to 160 km/h and WI-FI all over the A1 including tunnels, interconnecting tunnels, bridges, and at control rooms, security rooms and field security vehicles. The railways' intention is to expand the existing cellular systems

by adding GSM and IDEN. The communication equipment to be installed in tunnels has to follow the IEC 60068-2-64 and EN 50124. All the communication cables have to follow Low-Smoke Halogenated, Fire Retardant Jacket IEC 332-1 standards.

The winner has to provide full coverage of the following existing radio systems:

- The Israel Railways Ltd. VHF system, and future GSMR system.
  - The Israeli Police, Fire Fighting Association, and Rescue Forces radio systems.
  - The IDF-Israeli Defense Army Rear Command (formerly Civil Defense Command) Orange Lightning' radio system.
- The Red Star of David (Israeli equivalent of the Red Cross) first aid organization radio system.

#### **(xxi). INVITATION TO PRE-QUALIFY IN TENDER NO. 41601**

Design-Build of Israel Railway's ETCS L2 Onboard Project

"ISR wishes to inform that it has decided to conduct "face to face" meetings regarding the Invitation to Prequalify in Tender No. 41601 the Design-Build of Israel Railway's ETCS L2 Onboard Project. The face to face meetings shall be held at ISR's headquarters on June 7th & June 14th, 2016, between 09:00 – 17:00 (Israel Time). Please note that face to face meetings shall take place separately with each participant on one of the above mentioned dates.

For the avoidance of doubt, participation in the face to face meetings is not a pre-requisite for participation in the tender.

Parties interested in participating in the face to face meetings are requested to confirm their attendance by no later than May 24th, 2016, by e-mail to Ms. Anat Regev, International Procurement Coordinator..... Additionally, please submit, to the above email and by the above date, any suggested topics for discussion at the face to face meetings with respect to the Design-Build of Israel Railway's ETCS L2 Onboard Project or the Tender process."

#### **B. TENDERS AWARDED.**

(i). The railways have announced that the winner of Tender No. MS/RC/2015/11 - Renting an area at Tel-Aviv Savidor-Central station for operating a taxi station, is: Services for Castel Taxis Union Corporation Ltd. at \$118,000 (NIS 450,000) annually.

(ii) Tender No. 31507 - an annual frame agreement for supply of bolts, screws, nuts, and discs was won by the Israeli supplier Bolts & Screws Center 1957 Ltd. at \$53,000 (NIS 200,000)/year.

(iii). The Israeli company M.M.M. United Concealing Works (1985) Ltd. won Tender No. 11612 for preparing soil to absorb fuels at a contamination level of TPH 100-5000 at an approved site.

(iv). Lesico Ltd. won Tender No. 11511 for supply and maintenance of mobile suction machine for rolling-stock toilets; the value is ₪798,000 (NIS 3 million); up to 8 machines will be supplied.

(v). The railways have announced that the winning bidder for Tender No. 11522: Consultancy Services for Risk Management is: Ernest & Young (Israel) Ltd.

(vi). The railways have announced that the winner of Tender No. MS/RC/2016/2 for introducing and operating automatic machines for sale of cellular phones, gadgets and accessories is: M.A. Automates Ltd. at \$27, 596 (NIS 162,240) annually.

#### **C: TENDERS POSTPONED.**

(i). Invitation to Pre-Qualify in Tender No. 41512 – The Design-Build of Israel Railways' ETCS L2 Tracksides Project. Latest date for submission of proposals : postponed from 15.03.2016 to 30.03.2016.

(ii). Israel Railways Ltd. Tender No. 41607: Date for bids postponed to 1. June 2016.

113.06.

## **LIGHT RAIL.**

### **A. TEL AVIV.**

(i). STATE-PRIVATE SQUABBLE.

After five years of discussions at court between the Finance Ministry's Accountant General and MTS (the former Red Line concessionaire led by Siemens and the millionaire Lev Levayev) regarding the cancelling of the concession by the state, the court has decided that MTS will pay the state \$1.33 million (NIS 5 million) while MTS will retain their bank guarantees of \$37 million (NIS 140 million).

(ii). ALSTOM LOSES APPEAL.

The Tel-Aviv district court rejected yesterday - 20.04.2016 - the appeal of Alstom and CAF against NTA claiming that they had selected CRRC, a company with very little experience in LRV and no such vehicles of CRRC running in Europe. The court found the tender in order and while nothing has been said against CAF (except the rejection), Alstom has been warned against giving inaccurate data and even using espionage, similar to their appeal against SEMI.

(iii). NTA Tender 2016/ 0036:OPERATION AND MAINTENANCE OF RED LINE. The wording here in this lengthy document includes:

"NTA is a government-owned company, appointed by the Government of Israel to promote the Tel Aviv Metropolitan Area Mass Transit Network. NTA hereby invites proposals for the Operation and Maintenance of the LRT Red Line project. .... for ten years from the commencement of the Full Operation phase, with the right for NTA to extend such term by an additional period of up to six years. The Bidder... (must have) operated for a period of at least five consecutive years within the ten years preceding the Bids Submissions Date a Line or Lines which collectively incorporate all of the following characteristics: Route length of at least 15km (on an individual line); at least 6km of underground route length; at least 3 underground stations; a fleet of at least 40 Passenger Vehicles.... Annual Ridership of at least 30,000,0000 passengers.... Operation with Automatic Train Protection. At-Grade operation with 'line of sight' driving. Maintenance of track work in a Line with a route length of 15km and in a Line with an underground length of 6km; maintenance of underground and at-grade structures in a Line with 3 underground stations; maintenance of electromechanical equipment, including elevators and/or escalators in a Line with an underground route length of 6km and in a Line or Lines with 3 underground stations... Maintenance of signalling systems... maintenance of communication equipment and installations, of traction power systems, maintenance of Overhead Line Equipment..... " The specifications also include experience in automatic fare collection, maintenance of rolling stock and so forth.

Bids are to be submitted by 15th. September 2016. The 'Threshold Requirements' include further definitions – e.g. 'Line' can mean 'a double-track light rail line, a double-track metro line or a double-track tram line.'

(iv). NTA Tender No. 2016/0043: Providing Counting Services for passenger flow: The contract is for 36 months with an optional extension of up to additional 12 months. Latest date for submission of proposals: 18.05.2016.

(v). NTA Tender No. 2016/0052: - TAMACC - Tel-Aviv Train Management Control Center:

The contract is for 24 months with optional extensions of up to additional 48 months.

Latest date for submission of proposals: 02.06.2016.

## OTHER MIDDLE EAST RAILWAYS.

### A. TURKEY.

#### (a). TÜLOMSAS LOOKING FOR EXPORT ORDERS.

From 'R.G.I.' 04..03.2016: "Tülomsas looks east for export orders: state-owned rolling stock supplier Tülomsas says it is optimistic about winning more export business in Asia and North Africa as the liberalisation of national railway TCDD requires it to adopt a more commercially-driven business model. Speaking to 'Railway Gazette International' at the Eurasiarail trade fair in Istanbul on March 4, Export Manager Sibel Onal Akcin said that the company was optimistic of winning more orders for the PowerHaul diesel locomotives which it assembles in Turkey to a GE Transportation design. To date the company has supplied 20 locomotives to TCDD and 10 for European operators, and Akcins suggested that the opening of the Iranian market should present further opportunities 'especially among the private operators'. Other target markets include Pakistan, she added.

Tülomsas has also developed two shunting locomotive designs, the 522kW DH7000 and 895kW DH 2000, which are equipped with Cummins engines and Voith transmissions.

In addition the company expects to receive 'next month' certification that its Eanoss hopper wagon meets European TSI standards. This would be its second wagon design to meet European standards, and Akcin said the company is 'in negotiations' with potential customers in the EU.

'In the next ten years we expect increased competition in the Turkish

### B. JERUSALEM.

#### (i). INDEPENDENCE DAY

The Jerusalem LRV services were to operate on Independence Day - Wednesday night, 11.05.2016 to Thursday night 12.05.2016 as follows: All through the night 24:00 to 02:00 every 14.5 minutes; on Thursday between 02:00 and 05:30 every 20 minutes; between 05:30 and 06:00 every 14.5 minutes; between 06:00 and 22:00 every 10.5 minutes; between 22:00 and 24:00 every 14.5 minutes.

### C. HAIFA.

#### CABLE CAR SCHEME.

*We are faced with a slight technical problem here – this news item refers to cars suspended from a cable rather than running on rails, so it is a moot point whether Harakevet should get too involved! However, it relates to public transport and will link to the Lev HaMifratz station:-*

From a press release of 17.05.2016 by the Transport & Roads' Safety Ministry and the Haifa Municipality: "Transport Minister Mr. Israel Katz today told the mayor of Haifa Mr. Yona Yahav during a working visit that he has instructed the Ministry to promote the long-awaited \$73 million (NIS 280 million) cable car project which will provide a fast and reliable transport solution for the people of Haifa and surroundings.

The project will be 4.5 km long and will link the Haifa University, located at an altitude of 450m on Mount Carmel, the Technion-Technical Institute of Israel located on the same mountain at a lower point, and the Lev-Ha-Mifratz Transportation Centre which includes the central bus station for this area of the city, the railway station of the same name to which the Valley Line soon to be opened is linked, and finally the cable car project.

According to the plan cars of 10 passengers capacity will move along the line at 16 seconds intervals from each stop to each direction; travel time between Lev-Ha-Mifratz Transportation Centre and the Haifa University will be 18 minutes; between Lev-Ha-Mifratz Transportation Centre and the Technion 10 minutes and between the Technion and the Haifa University another 8 minutes.

The traffic forecast at the first stage is for hundreds of passengers/hour to grow to thousands of passengers at a later stage.

Immediately after receiving the budget, Yefe-Nof (the managing company) will start detailed design including publishing a tender for the cars and for building the infrastructures.

The decision for the project was made after finding that it integrates within the overall transportation system of Haifa; it will serve many students at both academic institutes but will also aid tourism as it will run over one of the city's most beautiful areas.

The mayor of Haifa thanked Minister Katz for his support, mentioning that the project will be added to city unique transportation systems which includes the Matronit (BRT), and the Carmelit (Israel's only active metro so far).

The city has in fact already a short cable-car line on its west side between the sea and Mount Carmel at a point called Stella Maris (Star of the Sea) with a nice view of this area, but used exclusively for tourism.

Fares will be the same as on other public transport modes including multi-liner smart cards, half-priced senior citizen tickets, and student tickets."



"Joy in a Box!" says the poster - less joy for Tel Aviv motorists while the boxes for the new Red Line tunnel are being excavated. (Photo: Aharon Gazit).

railway supply sector,' Akcin confirmed. 'In future, although we will be in the TCDD group, we will be expected to operate in a more commercial manner. We feel we are already well placed to win more orders in the Middle East, North Africa and other regions where we are already supply components, such as Thailand.'

#### **(b). FIRST NEW TRAM FOR KAYSERI.**

From 'R.G.I.' 23.03.2016: "Kayseri Metropolitan Municipality took delivery of the first of 30 trams from Bozankaya on March 23. It will now undergo month of testing on the standard gauge network.

Kayseri Metropolitan Municipality placed a 42M order in August 2014 for 30 trams that will augment its existing fleet of 38 AnsaldoBreda Sirio vehicles. The 100% low-floor Bozankaya trams are being built in Ankara, and are being fitted with traction equipment from Traktionssysteme Austria and Polish supplier Medcom to run on the 750VDC network. The bi-directional trams are 35m long and have five sections.

The Kayseri contract marks Bozankaya's entry into the tram manufacturing market, although it has previously supplied bodysells for light rail vehicles and other major components for rolling stock applications. As well as the plant in Ankara, it has a factory in Salzgitter in Germany.

Daily ridership on the 34.4km network is expected to reach to 150,000 passengers once deliveries of the trams are completed."

#### **(c). ANTALYA LIGHT RAIL EXTENSION.**

In 'R.G.I.' 04.04.2016: "Test running started on the Antray light rail extension in Antalya on April 3. The extension to Expo 2016 and the airport is due to open for passenger service on April 22. This is the first extension of the city's light rail network since the initial line opened between Fatih and Meydan in 2009. The 15-stop section will run for 15.4km from Meydan to Expo 2016, with a 2.4km branch line to the airport. Construction has taken 1.5 years."

#### **(d). ANTALYA TRAM ROLL-OUT.**

From 'R.G.I.' 07.04.2016: "The Eurotem joint venture of South Korea's Hyundai Rotem and Turkish company Tüvasas rolled out its first tram for Antalya at its factory in Adapazari on April 4. Eurotem won an order for 18 trams in August 2015. Due to be delivered to Antalya between April and November, these will augment the existing fleet of 14 CAF trams supplied for the opening of the Antray line in 2009. Extra rolling stock is required because the line is being lengthened. A 15.4km extension to Expo 2016 with a 2.4km branch to the airport is due to open on April 22. Test running on this section started on April 3."

#### **(e). ISTANBUL METRO LINE M7 TRAINS ORDERED.**

From 'R.G.I.' 26.04.2015: "Istanbul Metropolitan Municipality has awarded Hyundai Rotem a US\$316M contract to supply 75 four-car metro trainsets, the supplier announced on April 25. Deliveries are due to take place between 2016 and the end of 2021. The trains are to be used on Line M7, which will connect Kabatag and Mahmutbey on the European side of the city. The 18km line will have 15 stations and will be electrified at 1.5kV DC overhead."

#### **(f). IZMIR THROUGH RUNNING.**

From 'R.G.I.' 23.04.2016: "Izmir suburban rail operator started through running between its two lines on April 17. In order to decrease congestion caused by passengers changing at Alsancak, which serves as the city centre terminus of both lines, several services in the morning and evening run through the station, connecting the ends of the Northern and Southern lines. There are 14 direct services in each direction in the morning, most running between Menemen and Cumaovasi. Some are extended at the northern or southern end to reach the respective termini. In the evening there are 15 direct south-north services and 14 in the other direction, with the last direct train arriving at Tepeköy at 01.12."

#### **(g). TCDD VELARO TESTS.**

In 'Eisenbahn Revue' 4/2016 p.186 is a photo and item that two TCDD 'Velaro' coaches were at the Vienna Arsenal on 10th. February for tests.

### **B. EGYPT.**

(a). A two-day conference took place in Cairo, 29-30th. March 2016 – the second 'Future Rail and Metro' Conference. From the publicity: "Creating a platform to increase multimodality and examine projects and technologies to maximise capacity safely and efficiently. Egypt has long been far too reliant on its road network, with overcrowded and dangerous roads causing a large number of problems. As part of a national strategy to rectify this, the country has embarked on a program to vastly increase the capacity of its rail and metro networks, launching projects to modernise existing routes whilst creating vital new networks.

With major projects on the horizon such as the recent tender of Cairo Metro Line 4, the creation of a new high-speed rail network and the development of the country's freight network, this is a sector witnessing major growth as part of Egypt's vision for the future.

The 2nd. Annual Future Rail and Metro Conference, supported by the Ministry of Transport, Egyptian National Railways

and Cairo Metro, will seek to serve as a platform to address these issues and provide recommendations as to how best to modernise rail and metro systems." Speakers included: Eng. Mohammed Mahmoud Ahmed, General Director for Strategy and Investment projects, ENR; Shams Mohammad Yamma, Chief Executive Director, Afghanistan Railway Authority, and Galam El Shamy, Vice Chairman for Freight, ENR.

#### **(b). SIEMENS TO MODERNISE SIGNALLING.**

From 'R.G.I.' 05.04.2016. "Siemens has finalised a contract to supply ENR with signalling equipment for the Zagazig – Abu Kebir and Benha – Port Said routes, a total of 260km with 21 stations. Commissioning is scheduled for 2020. The existing mechanical interlockings are to be replaced with centrally-controlled electronic systems, under the project, which aims to improve safety, raise the maximum running speed from 120 to 160km/h and increase passenger and freight capacity. Siemens is to supply the interlockings, point mechanisms, level crossing equipment and telecoms, and will equip the operations control centre in Zagazig. The final contract announced on April 4th. follows an initial agreement in December, and forms part of a wider government programme to modernise signalling across the entire network."

#### **(c). PROPOSED REHABILITATION OF HELIOPOLIS TRAMWAY:**

From 'R.G.I.' 18.05.2016: "The Ministry of International Co-operation and the European Bank for Reconstruction & Development have signed a memorandum of understanding which could lead to EBRD contributing US\$250M to a planned US\$500M rehabilitation of the out-of-use Heliopolis tramway between Ramses station and the Almaza district of Cairo.

The memorandum is an early stage in the process, and timescales are still to be agreed. EBRD said it expects to provide a sovereign loan of up to US\$125M to finance infrastructure works which would be implemented by the National Authority for Tunnels, while a second tranche of up to US\$125M would be provided 'potentially to a private company for the procurement of rolling stock and for the operation and maintenance of the fleet'.

In preparation for the proposed revival, the Bank is to provide a grant from its Infrastructure Project Preparation Facility to fund a feasibility study and conceptual design. It will also seek to mobilise grant funding for implementation.

A declaration of intent for France to support Egyptian tram and metro projects was signed by the Minister of International Co-operation and the French ambassador

when France's President Hollande visited Cairo during April. Agence Française de Développement would contribute \$80M for rehabilitation of 12 km of the Heliopolis tramway."

## **C. IRAN.**

### **(a). TEHRAN METRO SERVING MEHRABAD AIRPORT.**

From 'R.G.I.' 18.03.2016: "The Tehran metro started running to Mehrabad Airport on March 15, when a branch of Line 4 opened with a station serving Terminals 1 & 2 and one serving Terminals 4 & 6. The 2.8km branch runs southwest from a new station at Bimeh, between Meydane Azadi and Sharak-e Ekbatan. A shuttle service operates from Bimeh using three-car trainsets with additional luggage space. The branch was built by Boland Payeh Co under an EPC contract. Test running began on January 10."

### **(b). ELECTRIFICATION.**

From 'Fahrplancenter News' No. 54 p.16: "For some years electrification of major railway routes has been planned, and now the railway in the Islamic Republic has come a great step closer to this aim.

On 23.11.2015 the Iranian State Railways signed an agreement with the international arm of the Russian State Railways (RZD) for electrification of the 495km line between Gamsar (on the Tehran – Mashhad line) and Incheh Borum (on the border to Turkmenistan). The contract is worth \$1.42 Billion, which will be met by a Russian credit. In addition to electrification of the line at 25kV AC the tunnels will be widened and the various other structures adapted as necessary; in addition several sections will be rebuilt as double track in order to increase the overall capacity of the route.

In June 2015 a contract was signed between Iran and China, according to which the 926km long line between Tehran and Mashhad should also be electrified at 25kV. 85% of the cost of over US 1.9 Bn. will be financed from a Chinese credit, the rest taken over by the Iranian government,

The lines to Mashhad and Incheh Borum should become ready for electric operation at about the same time in around 2019. Less than two years later the planned electrification of the 630km line Tehran – Tabriz should also be completed. On this line many works for realignment and route corrections are already taking place."

### **(c). EXPANSION PLANS.**

From the 'AlMonitor' website. Posted April 7, 2016 Author: Alireza Ramezani  
Iran hopes to get its trains back on track  
TEHRAN, Iran:— Iran's development of its rail sector has been slow for more than

three decades. Since the 1979 Islamic Revolution, only 3,418 miles of railway have been built to extend the existing 2,796 miles of track.

A report released in January by the parliament's Research Center said that the annual budget proposed by President Hassan Rouhani's government would increase allocations for the development of the rail sector by 12.8%, to about 21.26 Trillion rials (\$702.2 Million at the official exchange rate) for the fiscal year ending March 20, 2017. The expansion of the rail budget, however, still appears to be far from sufficient. Addressing aging rail cars and other infrastructure deficiencies will require billions of dollars in investment.

The Construction and Development of Transportation Infrastructure Company, under the Ministry of Roads and Urban Development, already lags behind regional and industrialized countries in terms of the length of the rail network and in cargo and passenger services. The company is still struggling to finish the 46 projects that were supposed to become operational by March 19 of this year. Thus, according to the Research Center report, the proposed budget for fiscal year 2016-17 is set to allocate 8.78 Trillion rials (\$290 million) for all the unfinished projects, and the remaining rail funds — about 12.48 Trillion rials (\$412.2 Million) — will go toward a new electrified line project to connect Esfahan to Ahwaz.

Upon completion of the pending projects, Iran will have expanded its rail network to 7,456 miles. Meanwhile, it is also planning to double the network over the next decade and replace rolling stock that trundles along at 55 miles per hour with high-speed trains on electrified lines, an undertaking that Minister of Roads and Urban Development Abbas Akhondi has said will require \$28 billion to complete over five years.

A more developed rail network would provide a range of benefits to Iran, where the road accident rate is about 20 times the global average, according to UNICEF. A modern and well-developed rail transport system would also help cut fuel consumption and reduce air pollution, two major challenges the Iranian government has been confronting in urban areas for years.

According to Majid Babai, a rail industry expert writing for Donya-e Eqtesad, the leading economic newspaper, Iran transports nearly 35 Million tons of freight and about 27 Million passengers per year by rail. That is, Akhondi has said, about 8% of cargo and 6% of passengers. Babai has criticized rail's small transport share, noting that the government has failed in the past decade to establish a dedicated regulatory body for the rail sector despite calls by top authorities to accelerate the privatization of industries.

For now, the government hopes to more than double the rail network's capacity for passenger transport by March 2021. At present, the average age of rail cars in Iran hovers around 29 years. This figure needs to be reduced to 15 years to meet global standards, said Massoud Ahmadi, technical deputy head of Iran Railways, in an interview last September with the Azad News Agency. Worryingly, wagons as old as 55 years are still being used in the network.

Mohsen Pour Seyed Aqaei, the managing director of Iran Railways, said in September that some 64 million passengers would be able to use trains for transportation if the private sector added 1,500 passenger wagons to the national fleet by the end of the sixth five-year development plan, in 2021. He also said he expects private investors to import 618 cargo locomotives and 28,500 cargo wagons. The government's contribution to the sector will include 230 shunting locomotives, 186 passenger locomotives, 944 express trains, 650 suburban trains, 15 heavy relief units and 20 light relief units, according to Pour Seyed Aqaei.

While the Rouhani administration is urging investors to take part in upgrading the rail fleet, it seems that in the coming years, it first and foremost wants to focus on establishing an "integrated" domestic rail network. In this regard, a key strategic goal is to make Iran a regional transportation hub, a well-connected businessman familiar with the administration's economic policies told Al-Monitor on condition of anonymity.

The source said that both Rouhani and the supreme leader, Ayatollah Ali Khamenei, share this objective, and he also asserted that foreign investment is seen as key to fulfilling this objective. The businessman added that top officials have been planning to turn Iran into a hub that could link European countries to central and other parts of Asia.

The roads and urban development minister had mentioned this vision in January, highlighting the need for Iran to be connected with regional markets by sea, air and land, including by rail. "We have to revise our transportation programs in a way that would enable us to be connected to rail networks in Asian countries," Akhondi said, noting that an integrated rail network is a strategic part of infrastructure in cities and across the country.

Akhondi also called for the "real" privatization of the rail sector, encouraging "socialist officials" to dare to embrace the social consequences of economic reform, referring to a possible rise in transportation costs. He admitted, however, that few investors have the massive amount of capital the industry requires. For instance, Akhondi said, the renovation of the rail

fleet alone will require 100 trillion rial (\$3.3 Billion) in investment.

In Akhoundi's view, it is of great importance to connect the national rail network to the northern and southern port cities, Iran's main gateways. To achieve this objective, however, the administration must identify and announce investment possibilities and ease cumbersome regulations. More important, the power centers that can ensure a safe business environment should prepare to pay a reasonable price for the inflow of needed capital, namely, helping reduce anti-foreign investment sentiment, because the transportation system is the heart of the national economy and can move Iran toward a robust economic recovery.

Read more: <http://www.al-monitor.com/pulse/originals/2016/04/iran-railway-network-train-development-akhoundi.html#ixzz45Ey6wJ5m>

#### **(d). "IRAN: JOINING THE DOTS"**

– this is the title of an article in 'The Economist' April 2nd, 2016, pp.50f. "Some treats ahead for railway enthusiasts.

The 10,500km (6,500 miles) journey from Yiwu City in eastern China through Kazakhstan, Kyrgyzstan, Uzbekistan and Turkmenistan was sluggish. But when the first Chinese train pulled into Tehran station after a 14-day haul, Iranian officials hailed a great leap forward. "We're becoming the global hub between east and west," boasted one minister. By April, when the new trans-Kazakh railway opens fully, executives in Iran hope to have cut the journey time to China to just eight days – a month less than the sea route takes. Should Turkey get on board, the line might even challenge the Suez Canal as a primary Chinese and Iranian route to Europe. Iranian companies will no longer be limited to an 80M-strong local market, President Hassan Rouhani's advisers promise, but will be connected to the European Union's 500M.

Other rail links are coming down the line. Within six months Abbas Akhoundi, Iran's British-trained transport minister, will open a track to Afghanistan's mines, which will ship minerals to India via a re-vamped south-eastern port, Chabahar, by-passing Pakistan. Within two years Iran will have built a bridge over the Shatt-al-Arab river into Iraq and into the Fertile Crescent, he says. Fresh track will open the way through Azerbaijan to Russia and the Central Asian republics. "When we were inward we had poor cross-border links," says Mr. Akhoundi. "If we want to be outward-looking we need to improve them accordingly." Iran also plans to more than double its internal 10,000km rail network over the next decade and replace rolling stock that trundles along at 90kph with high-speed trains on electrified lines.

Once the upgrades are complete, the 420km journey to Isfahan will take 90 minutes and the 920km trip to Mashhad less than six hours.

The hitch, of course, is finance. In Iran's sixth five-year plan, now awaiting parliamentary approval, Mr. Akhoundi wants to spend \$28 Billion on railways, \$20 Billion on roads, \$50 Billion on upgrading the country's Shah-era air fleet and \$7 Billion on airports (including extending Tehran's main airport, Imam Khomeini, so that the largest modern airliners can land there.) Yet the low oil price means that his government can barely pay public-sector salaries, let alone pay for infrastructure. So it has been wooing foreign investors instead.

They seem keen. To finance the Mashhad line, China has reportedly offered a \$2 Billion loan, apparently underwritten by Iranian oil proceeds it had frozen during the time of sanctions. South Korea is exploring a similar deal. And while Italians recently waited in the wings, French rail executives, model trains in hand, paced the corridors of a Paris hotel waiting to greet Mr Rohani on the first trip by an Iranian president to Europe for 17 years. But with most foreign banks fearful of American fines, raising credit remains difficult.

A "silk rail" between east and west will also require better relations with neighbours who fear Iran's post-sanctions rebound. "The nuclear deal has proved a double-edged sword," moans a member of Iran's Chamber of Commerce. "While relations have improved with the West, they have deteriorated closer to home." Russia suspects that Iran will come to challenge its dominance of regional markets. And the United Arab Emirates, which backs Saudi Arabia in the region's sectarian power struggle, fears that Iran, with its many tourist attractions, might challenge its position as a regional transport hub.

Much will depend on Mr. Rohani's diplomatic skills. Turkey's prime minister Ahmet Davutoglu, visited Tehran 4th. April with six ministers and discussed a high speed rail link that might bridge Lake Van and triple bilateral trade. Despite arguments over Syria. But should tensions persist, Iran is also exploring the seas. In February an Iranian cargo of petrochemicals arrived in Antwerp, the first Iranian ship to offload in Europe for six years. IRISL, the national shipping line, has plans to ship to the Far East, Oman and eventually the Americas, it hopes to enlarge its 160-strong fleet by floating some its stock by the end of this year. Iran Air might go the same way after two years of restructuring, says the transport minister. Get ready for Iran's re-connection with the world."

#### **(e). NEW BRIDGE TO AZERBAIJAN.**

From 'R.G.I.' 29.04.2016: "Construction

of a railway bridge over the River Astarachay which forms the border between the two similarly-named towns of Astara in Azerbaijan and Iran was formally launched with a groundbreaking ceremony on April 20.

Guests at the event included the heads of the two national railways and the ministers who co-chair the Azerbaijan-Iran Joint Commission for Economic, Trade & Humanitarian Co-operation.

The 82.5m bridge is to be funded and built jointly by the two countries under the terms of an inter-governmental agreement, with completion scheduled for the end of 2016. Around 8.3km of new track will be laid to extend the existing 1,520mm gauge Azeri railway into Iran, where there will be a further 1.7km of line.

The planned completion of a 164km extension of Iran's 1,435mm gauge rail network from Rasht to Astara would complete a north-south rail corridor along the western side of the Caspian Sea, enabling through rail services to link Iran's ocean ports to Russia with a break of gauge at the Iran-Azerbaijan border."

#### **(f). MEMORANDUM OF UNDERSTANDING WITH HYUNDAI**

:From 'R.G.I.' 6.5.2016: "National railway RAI signed a memorandum of understanding with Hyundai Rotem on May 3 for the supply of 150 diesel multiple-unit cars worth US\$260M. The contract is expected to be signed in late July, and the DMUs are to be used on routes covering 960 km. In 2004 Hyundai Rotem was selected to supply 150 cars, but the deal was suspended following the imposition of sanctions on Iran in 2010. Rotem delivered 68 cars, but received no payment. Negotiations will soon get underway to complete this order, as most sanctions were lifted earlier this year."

#### **(g). SUPPLIERS BIDDING FOR IRANIAN BUSINESS.**

From 'R.G.I.' 16.9.05.2016: "Kazakh national railway KTZ is among the international players targeting emerging opportunities as the Iranian market opens up to greater international participation. KTZ has a number of industrial subsidiaries involved in a range of supply activities, including local production of rolling stock derived from international designs. Through its Tulpar-Talgo joint venture with KTZ, Spanish company Talgo is supplying 603 coaches to KTZ as part of a fleet renewal programme, with 436 produced since Tulpar-Talgo opened a factory in Astana in 2011.

Speaking at the Rail Expo 2016 trade show in Tehran, Tulpar-Talgo Executive Technical Director Nurlan Esimkulov told Railway Gazette that while the company's main goal is to renew KTZ's

inter-city fleet, it is also looking at export opportunities, with Iran a possible export market for vehicles suitable for running on 1,435mm gauge tracks. According to Esimkulov, Tulpar-Talgo is 'in the final stages of making a commercial offer' to Islamic Republic of Iran Railways for rolling stock to operate on the main line between Tehran and Mashhad, where electrification work began in February this year for completion by the end of 2019.

KTZ's electric locomotive joint venture with Alstom, EKZ, is also looking at possible export orders for its KZ8A freight and KZ4AT passenger loco designs, building on the contract it won in May 2014 to supply 50 twin-section locos to Azeri national railway ADY from its factory in Astana. EKZ's General Director Bernard Paille said that while it is 'having an initial look at Iran', the company's main focus is on winning orders across the 1520mm gauge networks of Central Asia, where 'many Soviet-era locomotives will become life-expired in the next five years'.

Although establishing EKZ's Astana factory took 'a bit longer than we planned', Paille believes its locomotive designs are now 'proven in the harshest climatic conditions'. The next milestone in the development of the business, which is 50% owned by Alstom with the remaining shares split equally between KTZ and Transmashholding, will be the start of local production of main transformers which is expected by the end of 2017. These are currently sourced from Alstom and ABB sites in France and Switzerland.

Among established western suppliers, Bombardier Transportation sees 'clear similarities' between Iran's railway expansion programme and that of neighbouring Turkey. Earlier this year, Bombardier finalised a high speed trainset production agreement with Turkish firm Bozankaya, and it says it is considering partnership opportunities in Iran as well. According to recently-appointed Chief Country Representative for Iran, Dieter Brandenburg, the company hopes its Traxx locomotive family could win orders in Iran 'where a proven product traced back to an OEM is a clear advantage'. However, its initial focus is on hauled passenger stock and possible tenders for metro cars in Tehran.

Addressing the inaugural Oil Rail Ports conference taking place alongside the exhibition, Iranian Industry Mining & Trade Minister Mohammadreza Nematzadeh suggested that RAI's locomotive fleet would double in size by the end of the decade, as the rail seeks to tap into opportunities in the oil transport and Eurasian transit freight markets."

#### **(h). METRO EXPANSION PLANS.**

From R.G.I. 17 May 2016 "Iranian cities

seek 4,000 metro cars. To cope with rising road congestion, air pollution and the need for urban mobility, Iranian cities are expected to call tenders for at least 4,000 metro cars by 2025, Industry Minister Mohammadreza Nematzadeh told the inaugural Oil Rail Ports conference held in Tehran on May 15-16.

With several cities — including Shiraz, Tabriz and Esfahan — having opened metro networks in the past five years, the supply industry is anticipating a surge in demand as the relaxation international trade restrictions make access to the Iranian market easier.

Having already worked with Chinese supplier CRRC to deliver 135 metro cars for Shiraz Line 1, domestic manufacturer IRICO has now formalised a long-term partnership with South Korean supplier Hyundai Rotem. IRICO was established in 2003 by one of Iran's largest road vehicle manufacturers, and in recent years it has been developing a DMU design for national operator RAI in conjunction with Hyundai Rotem.

Now the two companies have begun producing 120 metro cars for the first stand-alone metro line in the city of Karaj, a satellite town west of Tehran linked to the capital by express suburban Line 5. The first trains for Karaj Line 2 will be rolled out from IRICO's plant at Abhar 'in around 14 months', according to IRICO. The standard gauge trainsets will feature 20 m long cars operating in eight-car formations using a 750V DC power supply; maximum speed would be 80km/h.

Meanwhile, expansion in Tehran is attracting considerable attention from international suppliers. A sixth metro line is currently under construction and tracklaying is underway on the Line 1 extension south from the city to Imam Khomeini International Airport. Among the companies examining the market potential is Transmashholding, which is seeking export orders for its Metrowagonmash subsidiary, the largest metro car builder in Russia."

#### **(i). TEHRAN – ESFAHAN HIGH SPEED LINE.**

From 'R.G.I.' 27.05.2016:

"The Tehran–Esfahan high speed railway, which is expected to carry passengers in 2021, will be built to European TSI standards ('Technical Specifications for Interoperability'), according to national railway RAI's Project Director Dr Jabar Ali Zakeri.

The 410 km route will be designed for 250 km/h operation, and is being delivered in two phases. This reflects the staggered approval of the project by the Iranian government; preparatory works on the southern section between Qom and Esfahan began in 2010, while the northern

route between Qom and the capital is still at an early stage of preparatory works.

RAI has appointed a Chinese consortium led by China Railway Engineering Corp to undertake civil works, and Zakeri told Railway Gazette International in Tehran on May 17 that the contractor has completed two-thirds of the substructure of the Qom – Esfahan section.

RAI has also appointed Italian consultancy Italferr, a subsidiary of national railway holding company FS, in a supervisory role until at least the end of 2016. Included in its remit is the task of ensuring the Chinese teams comply with European TSIs and other technical standards.

'We are in the final stages of negotiations with our Chinese partners', Zakeri said. 'We hope to work together to find common ground to ensure that this railway is interoperable with the future extensions and new lines we have planned.'

The public transport market between Tehran and Esfahan is currently dominated by long-distance bus services, with just two passenger trains linking the cities each day. The high speed line would reduce the rail journey time from around 7h to 2h, RAI says."

*(A more detailed outline of the Tehran – Esfahan project and RAI's wider high speed programme will appear in the July issue of Railway Gazette International, along with an exclusive interview with RAI President Dr Mohsed Pourseyed Aghaei.)*

### **D. QATAR. U.A.E.**

#### **(a). DOHA METRO TUNNEL BREAKTHROUGH.**

From 'R.G.I.' 24.03.2016: "Qatar Rail celebrated the completion of tunnelling on the Red Line North section of the metro when a TBM broke through between Legtalfiya and Qatar University on March 21. Boring of the 11.3km tunnel started on July 19 2014 and used four earth pressure balance TBMs. They achieved an average of 30m per day at their peak, with the best daily rate of 42m set by 'Lebretha' on March 29 2015.

Work on the Red Line North package is being carried out by the ISG joint venture of Impreglio, SK&EC and Gafar Al Mosnad. Covering the section from Msheireb to Lusail, it includes seven underground stations and two above ground. QR reports that this section is more than 70% complete. 'We and our colleagues in ISG have had to overcome some significant challenges,' said Qatar Rail Managing Director Abdulla Al Subale. 'It is well known that one of our TBMs was flooded one year ago and the achievement today shows how effective our recovery operations were and that overall project progress was not affected.'



The north-south Red Line will link Lusail to Al Wakra, with a branch to Hamad International Airport. There will be 18 stations on the 41km route. Construction is split into two packages, with a further five TBMs working on the southern section.

Tunnelling for the first phase of the metro is now 85% finished, with completion expected in the autumn. Six TBMs are being deployed on the Gold Line and 10 on the Green Line. QR reports that the project is 37% complete. Opening of the first three lines is expected in the fourth quarter of 2019.

Fujita Corp, which is building the Red and Green Line depots, has awarded Drake & Scull Rail a 340M Riyal contract for mechanical, electrical and public health building services."

### **(b). QATAR METRO CAR AND TRAM DESIGN.**

The designs for the future Doha metro cars and Lusail Light Rail Transit vehicles were unveiled by national railway project promoter Qatar Railways Co. The styling aims to combine Qatari heritage and culture with modern technology.

'Across our projects, our build and design stages have been guided by the powerful coming together of tradition with modernity,' said Qatar Rail's Managing Director Abdulla Al Subaie on April 17. 'Deeply entrenched in Qatari culture and heritage, the Lusail Tram and Doha Metro designs celebrate the convergence of our country's history with groundbreaking technologies and cutting-edge solutions.'

AL FARAS. The metro trainsets are branded Al Faras, after the Arabian mares which have been prized for war or for racing since ancient times. Qatar Rail said the name symbolises intelligence and speed, representing the advanced technology used on what will be 'one of the fastest driverless trains in the world' with speeds of 100km/h. The 'dynamic shape' of the horses inspired the front ends of the vehicles, which are 'powerful yet slender and elegant' with the shape of the windows resembling a horse's eyes.

Each of the 75 trainsets will have two Standard class cars with 88 seats and one car split between Gold class with 16 seats and Family class with 26 seats. The interiors will be 'inspired by the progressive architecture present in Doha's skyline, combining traditional and modern elements.'

Kinki Sharyo is to design and build the metro trainsets at its Osaka factory in Japan, as part of the metro's railway systems consortium which is led by Mitsubishi Heavy Industries. The styling is the result of 'close co-ordination with Qatar Rail and our aesthetic design team', according to Thierry Boussillon, Deputy

Programme Director at Mitsubishi Heavy Industries. 'It combines the most modern technology with a unique yet elegant shape, and Qatara culture and heritage.'

AL MEHMEL. The trams for the Lusail LRT network are branded Al Mehmel, and inspired by a type of traditional dhow used for pearl fishing. The design concept focuses on the sea, with 'calm, cool, elegant and tranquil elements of that medium.'

The 33km tramway is being built by a consortium led by Alstom and the QDVC 51:49 joint venture of Qatari Diar and Vinci Construction Grands Projets. The 28 Citadis trams will be 32m long, 100% low-floor vehicles offering 'high-end passenger comfort' and designed for extreme weather conditions. They will use the APS ground-level power supply system. 'There are currently more than 1,800 Alstom light rail vehicles in operation throughout the world,' said Gian Luca Erbacci, Alstom Senior Vice-President, Middle East & Africa. 'Each Citadis has its own specific design and is customised to reflect its city's image and culture. We are very happy to have partnered with Qatar Rail to come up with a unique design that will certainly please the passengers and residents of Lusail.'

Qatar Rail reported that 99km out of 111km of tunnelling for the Doha Metro had been completed as of the first week of April, and 35% of construction works for the Lusail LRT were complete. The first phase of the metro is expected to be completed in 2019-20, with the tramway following in 2020. Completion of the metro, four-line tram network and a long-distance railway linking Qatar with the GCC Rail network is expected by 2030.

'The official unveiling of the Doha Metro and Lusail Tram designs is an occasion for us to look at how close we've come to bringing our vision to life,' said Saad Ahmed Al Muhannadi, CEO of Qatar Rail. 'This new milestone is an opportunity for us to bring the progress of our projects back to the future of transport in Qatar, one that is designed and built to world-class standards of modernity and innovation but, most important, that remains deeply rooted in our country's history and community.'

Under a separate contract, an 11.5km catenary-free tramway is being built to serve the Education City development. This will be operated by a fleet of Siemens Avonio trams with onboard capacitor and battery energy storage."

### **(c). PARIS LINK.**

From 'R.G.I. 03.05.2016: " RATP Dev and Lakhraim Business group company Zain Capital have formed a joint venture to bid for public transport projects in UAE. Announcing the formation of RATP Dev

Transportation LLC on April 26, RATP Dev said that its aim is to 'serve the growing needs of the UAE for advanced public transportation solutions.' Plans for the joint venture had been announced in June 2015. 'The UAE is a key public transportation market within the MENA region and has a unique vision of becoming a smart city, with all the mobility and connectivity requirements this entails, as well as practical infrastructure needs to serve the growing population, increasing number of visitors and major events such as World Expo 2020' said RATP Dev Chief Executive Francois-Xavier Perin."

### **(d). MANAGEMENT CONTRACT::**

From 'R.G.I.' Metro, 18.05.2016:

"Qatar Rail has awarded a four-year, 151-6M Riyal project management contract for the Lusail light rail network to a joint venture of Hill International, Italferr and ASTAD Project Management. Hill has a 50% stake in the joint venture. The 38.5km network of four lines will have 32 stops, including seven underground. Due to open in 2020, the tramway is being built by a consortium led by Alstom and the QDVC joint venture of Qatari Diar and Vinci Construction Grands Projets. It will be operated with a fleet of 28 Alstom Citadis low-floor trams using the APS ground-level power supply system.

### **E. IRAQ / SYRIA.**

In 'Fahrplancenter News' No. 54 for Oct. 2015-April 2016 p. 16 is a brief essay by Samuel Rachdi on the current situation. It makes sad reading and is worth reproducing (translated) in full. After making clear that he is politically neutral and merely "reporting it how it is" he writes:

"For some time it has been known that the railway installations in the combat regions of Syria and in Iraq have been extremely badly damaged or indeed totally destroyed – it is irrelevant from which side – and the recent air attacks have made things even worse. Should the war ever come to an end (which is desired by all) a totally new railway will be necessary between Mosul and Damascus, in order to create once more a reliable form of transport with appropriate capacity in the region.

The effects of the war are overwhelming everywhere, but those in the areas controlled by the so-called 'Islamic State' ('IS') show the most total destruction. The inventory prepared by the Iraqi Railways IRR in the areas which have been liberated indicate destruction at 100%. Sleepers have been removed over hundreds of kilometres or so badly destroyed that they cannot be re-used. The concrete sleepers were taken for the construction of fortresses or simply blown up where they

lay. Vehicles are no longer recognizable as such and the railway stations are simply 'skeletons of buildings,' says a spokesman for IRR.

In Syria no such report has yet been prepared as to the situation, but one cannot expect anything positive when such is eventually done. Ar Raqqa on the main line from Halab (Aleppo) to Al-Qamishlie is today the so-called capital of the IS and therefore this important line is cut. Already over a year ago vehicles standing in the station were badly damaged, and had even been knocked off the rails - probably though explosive charges. (An aerial photograph of the station area in February 2015 demonstrates this.) Around Deir-ez-Zawr (130km east of Ar Raqqa) the tracks disappear into numerous bomb craters and the earthworks and construction works on the new line which just before the war began was under construction from Deir-ez-Zawr to Al Qa'im in Iraq seem to be largely flattened again. Further press reports indicate, the Hedjaz station in Damascus was badly damaged by bombs – this has been confirmed from several sources.

All the new passenger coaches and locos which were delivered from China just before the war broke out, with a combined value of some 250 Million US Dollars, have been completely destroyed – likewise all the new modern railcar sets which a few years ago were set to work to speed up journeys. The main workshops in Aleppo have been so badly bombed that only a new construction will allow work to recommence. Already in 2012 a passenger train between Hama and Aleppo was victim of a bomb attack – on the open line it ran over a cooking pan filled with explosives. Fortunately there were no fatalities.

Several bridges have been blown up on the line Aleppo – Lataqqiya, and on others explosive charges have been fixed that could be set off at any moment.

Especially worrying is a statement from a 'Responsible Person of IS', whereby Railways in general are classed as being as such "Western, unmoral things like the ruins of Palmyra." [But what has the one to do with the other? SR] According to this spokesman, "The Arab-Moslem Man does not need any Railway; Railways have only been used to contribute to the repression of Religion. In an 'Islamic State' transport by horse, donkey and wagon would be the only correct form, as was the case 1400 years ago."

The Editor (Samuel R.) cannot help here but wonder how it could therefore be that IS fighters travel by aeroplane in order to join the IS forces, and that IS uses innumerable trucks and pick-up vans and modern cross-country vehicles for its purposes. If only they would content themselves with donkey carts and insist

on consistency, perhaps some problems at least would be easier to resolve....."

## **F. AFGHANISTAN.**

### **(i). HERAT LINE**

#### **FEASIBILITY STUDY.**

From 'R.G.I.' 18.04.2016: "The Ministry of Public Works has awarded Canadian consultancy Canarail a contract to undertake a technical feasibility study for a proposed railway which would run from the northwestern city of Herat to the railfreight terminal at Towraghondi on the border with Turkmenistan.

The contract was signed on April 4. The study is expected to take six months to complete, with the Asdian development Bank covering the US\$1.6M cost.

Minister of Public Works Mahmoud Baligh said the line would form part of the Lapis Lazuli Route, a proposed trade corridor linking Afghanistan, Turkmenistan, Azerbaijan, Georgia, Turkey and Europe, supporting ambitions for Afghanistan to become a regional transport hub. 'We have to develop the railway network to reach major economic powers,' said Baligh, adding that this would support economic growth and help to increase domestic revenues.

Separately, the Italian ambassador has reportedly said that Italy would provide US\$45.5M to support completion of the Afghan section of the Iranian-backed 1,435mm gauge line which is under construction to link Herat with Iran.

Meanwhile, on April 7 Governor of Faryab province Asyed Anwar Sadat attended a ceremony to start work on a project to extend the line which is currently being built from Atamyrat in Turkmenistan to the Imamnazar border crossing with Afghanistan. This second phase would cover around 36km from the border to Andkhvoy. An opening date has not been set."

### **(ii). INDIA – IRAN – AFGHANISTAN ROUTE.**

From 'R.G.I.' 27.05.2016: "On May 23 the Presidents of Iran and Afghanistan and the Prime Minister of India signed a trilateral agreement to develop a transport and trade corridor from India to Afghanistan via the port of Chabahar in southeast Iran, while Iran and India also signed a series of bilateral agreements which include Indian support for the development of the port and a 600km rail link to the existing Iranian network at Zahedan.

India has allocated US\$500m for the development of Chabahar, and Iran's President Rouhani said he welcomed Indian companies' investment in the construction of the port and railway. Media reports said Indian consultancy Ircon could be involved in the railway project, with rails to be supplied from India.

Construction of the Chabahar – Zahedan railway had been officially launched with a ceremony at Konarak in December 2010, at which time completion had been envisaged within five years.

The development of an international transport corridor through the port is intended to support trade between India, Iran and Afghanistan, as well as with the wider Central Asian region and to Europe via the North – South Transport Corridor through Azerbaijan. India's Prime Minister Modi said this could bring a 50% reduction in the cost of moving freight to Europe compared to traditional sea routes.

The route through Chabahar avoids the political, practical and security problems of transiting Pakistan, and provides a geopolitical counterbalance to the Chinese-backed and managed port at Gwadar in Pakistan which is at the end of an developing land transport corridor from China."

## **G. KUWAIT.**

From 'Sputnik News', 22.04.2016, from Moscow (via Israel and Germany!): A protocol of Friday's fifth Russian-Kuwait intergovernmental commission stated that Russian Railways company has been in talks on its possible participation in construction of a 106-mile railway in Kuwait. Russia's state-owned company Russian Railways has been in talks on its possible participation in construction of a 106-mile railway in Kuwait, a protocol on Friday's fifth Russian-Kuwait intergovernmental commission stated. "The Joint Stock Company Russian Railways is in talks to participate in the construction of a 170-kilometre [106-mile] railway running from the border with the Kingdom of Saudi Arabia to the south of Kuwait," the document read. The railway will be part of the railway network of the Cooperation Council of Arab States of the Gulf (GCC), which comprises Saudi Arabia, Kuwait, the United Arab Emirates, Qatar, Bahrain and Oman, according to the document.

## **H. LEBANON.**

From the website 'ME Eye' <http://www.middleeasteye.net/in-depth/features/stroll-lebanon-s-vanishing-railroad-882527480#block-disqus-disqus-comments>

The building's main gateway is broken down. Clay roof tiles have partly fallen off and in some parts are covered with green grass. Mona al-Akal stands in front of the two-story building with yellow walls and a red gable roof. Her last visit here was about 45 years ago. The big, square holes in the second storey walls remind her of the windows that were once there, facing Lebanon's main train factory in the northern city of Rayak. -

Mona remembers the time that her uncle, Aziz Abdallah Tabet, was the managing director of the Rayak Station and Train Factory. Her uncle lived in this building. Back then, the front garden was full of flowers, and the back garden was for growing vegetables. Today, nothing is left from that glorious era of rail transport in Lebanon.

One hundred and twenty years ago, the first steam train took passengers from Beirut, and after nine hours, they entered Rayak station. Now, the station is entirely forgotten. Foxes and owls live in the empty train factory. Plants and trees grow inside the buildings and the motionless locomotives.

In 1990, with the end of the 15-year civil war, many Lebanese hoped that trains would again run on the tracks. The end of the war coincided with the global return to railroad transport. But Lebanon's railway, once connecting Europe to Africa, remains desolated, and no train runs over the 408 kilometres of railroad.

"Because of the highly corrupt nature of the Lebanese political system, the government and business elites were able to close down the railroads," Eugene Sensenig-Dabbous, chair of the department of political science at Notre Dame University in Lebanon, told Middle East Eye.

Imperial power rivalry, world wars, regional conflicts, civil war and political factional confrontations have deeply influenced the rise and fall of rail transport in Lebanon.

The rise and fall of the railways

At the end of the 19th century, merchants and European powers were looking for new markets and territorial expansion in the East. The spread of rail transport was the focal point of this new world. In 1895, Lebanon's first track was completed, connecting the port of Beirut to Damascus through Rayak.

After Beirut, a railway for commerce was constructed at the port of Tripoli. By June 1911, a railway connected Tripoli to Homs, but this line was short-lived. Ottoman Empire forces ripped up the Tripoli-Homs rails, looted stations and confiscated equipment during World War I. They used the removed rails and gear to complete the Damascus-Baghdad line, which had more military importance. This was not the last war that played a pivotal role in Lebanon's railroad history.

The Second World War had a positive influence on Lebanon's rail transport system. British troops built the Tripoli-Beirut-Naqoura line on the country's coastline, linking to Haifa in Palestine, and ultimately, to Cairo in Egypt. The line had been necessary for the transport of British troops, but with the end of the war and the outbreak of the Arab-Israeli conflict, the need vanished. Since then, a wall has blocked the tunnel at the end of the

Tripoli-Naqoura line connecting Lebanon to Palestine.

The Lebanese Civil War was the final nail in the coffin of Lebanon's railway network. In 1975, with the outbreak of war, most of the trains were halted, and train stations were turned into barracks. The Syrian army occupied Rayak and Tripoli stations in the north and east of the country. During the 1982 invasion, Israelis finished off the stations and railway infrastructure in the south.

Since 2007, Fadi Yeni Turk, photographer and filmmaker, has been documenting the history and current situation of Lebanon's railways. In his small gallery on Beirut's Mar Nicholas stairway, he shows photos of his eight-year walking excursions on the railways of his homeland.

"All warring factions made a profit from the railway network during the civil war," Fadi says, viewing pictures of Syrian army bunkers reinforced by the rails from Lebanon's tracks and small bridges that smugglers made using the steel ties near the Syrian border during and after the civil war.

However, the civil war was not the only cause for the suspension of rail transport in Lebanon. "It was something bigger than the civil war," Elias Boutros Maalouf, co-founder and manager of Train Train NGO told MEE. "The main reason was corruption."

### Cars eclipse trains

The bullet-riddled wall in Bhamdoun's train station shows the civil war's unhealed wounds. But what is now killing the moribund station is not the war - it's the car. The highway that connects Beirut to Damascus passes through the Mount Lebanon village of Bhamdoun, and the old train station is located exactly in the middle of the highway's workshop.

The highway's constructors use the station as a depot for reinforcing bars and ironware. The train station lost its roof years ago, and now the walls are in peril. A big generator leans over one of the station's walls, and a huge drilling rig is digging a well near the station's water tank. Doorways and windows are now just empty frames.

The rivalry between the car and trains in Lebanon has existed since the 1950s. Back then, cars were transporting passengers and goods on the newly constructed Beirut-Damascus highway, while the country's locomotives and rail technology were becoming dated.

The slow rack-and-pinion trains were no longer attracting people, and Lebanon's railway system could not compete with cars without undergoing renovation. In December 1949, a report predicted "a strong probability that the railway lines in Lebanon will eventually disappear"

because of inconvenient speed and price.

No one took the prediction seriously. Political vying, sectarian animosity, class conflict, and finally, the civil war left no place for taking care of the country's railway. Even during the 1990s and the country's reconstruction era, policymakers avoided the issue of railway reconstruction because of the influence of car dealers and highway construction companies.

### Post civil war era

After the civil war, for a short while, the "Peace Train" ran between Dora and Byblos. In just 49 working days from 7 October 1991, the "Peace Train" transported 14,727 passengers. That was the last time a locomotive moved on the country's railway.

In 2002, the Ministry of Transport and Public Works decided to revive the Tripoli-Homs line. Again, the political confrontation between Lebanon and Syria obstructed the project. Other studies were also conducted by the Public Transport Authority and the European Union on the feasibility of restoring the Beirut-Byblos and Beirut-Tripoli lines, but all were in vain. Authorities have not shown interest in any of those projects.

Since 2010, the Lebanese NGO, Train Train, proposed several projects to restore the Rayak train station, the Byblos-Batroun line and Beirut's Mar Mikhael station. The authorities' response to the proposals was very simple: silence. Meanwhile, Maalouf raises public attention by organising talks, showing documentaries and launching photo exhibitions of Lebanon's old trains.

In Maalouf's opinion, the railway authorities do not respond to his projects for the same reason that they neglected the railway's renovation in the 1960s and 1970s, which was "political rivalry and corruption".

Beirut's Mar Mikhael station is the perfect illustration of the authorities' method of evaluating restoration proposals. A bunch of heavyweight bouncers guard the building, and the latest car models enter the station's area at sunset. In 2014, the train station was turned into a fashionable open-air bar charging an average of \$12 per drink. An antique locomotive has even been converted into a DJ booth. In June 2015 the abandoned building was transformed into a library and reopened to the public. Despite the lack of attention to Lebanon's railroad, Sensenig-Dabbous has hope for the restoration of the forgotten transport system. On 11 May, at the premiere of the documentary 'On The Rails and the Trains for Lebanon' photo exhibition, he quoted Mahatma Gandhi, who once said that when you pick up a hopeless cause, people firstly ignore you. Secondly, they laugh at you. Thirdly, they fight you, and fourthly you win. Concluding his speech Sensenig-Dabbous said, "I'm

happy to say some people who do not like railways in this country are now fighting us. It means we are almost there.”

In addition, some interesting pictures may be found on an Al-Jazeera site:-  
<http://www.aljazeera.com/indepth/inpictures/2016/04/trip-time-lebanon-disappearing-railway-160428105018442.html>

## I. ABU DHABI.

In the Deutsche Bahn onboard magazine 'Mobil' 04/2016 pp. 102-104 is a brief illustrated article (text by Oliver Keppler, photos Oliver Tjaden) on the activities of DB in Abu Dhabi. (Translation by the Editor).

“The big difference between his job in Germany and here? Stefan Aupperle has to stop and think. It is not as though there are no differences, but more that the loco driver has to think where to start. What about the way to work, for example – before, he passed grazing cows as he drove – now it is wild camels who walk past the DB site 180km west of Abu Dhabi each morning. Instead of driving through the Alps the 31-year old drives today through the magnificent sand dunes of the Rub-al-Khali Desert. Oh yes, and the poisonous snakes which like to crawl into the shade of the locomotives, they don't have those in Bavaria either.

Aupperle sits in his driver's cab; next to him is a refrigerator filled with bottles of water. It is 10am and the thermometer has already passed the 40° mark. Soon he will set off towards Shah, one of the largest gas fields in the Emirate. Here his train will be loaded with granulated sulphur – a by-product of the gas extraction. Then he will bring his freight to the harbour of Ruwais on the Gulf coast. Up to three of the American SD-70 diesel locomotives will be coupled together to pull 100 wagons. His tool for performing this task is a monster – 1.8 kilometres long, 11,000 tons heavy. “You don't get such trains in Germany.” An ICE is just 400 metres long.

The Bavarian works for DB Cargo. In Abu Dhabi Aupperle and around 40 other Germans are building what most countries already have – a railway. In the first phase a 264km long stretch has been established in the desert. It links two large gas fields with the sea. In a second phase the metropolis of Abu Dhabi could be linked as well, and then not only freight but also passenger trains can use the tracks. Also planned is a link to the neighbouring Emirate of Dubai and one day a pan-Arab network that would link Qatar, the Emirates, Oman and Saudi Arabia together. When this idea will ever become reality is however unknown.

Just two years ago, in June 2014, DB formed a Joint Venture with Etihad Rail. The Emirates' organisation was seeking an

experienced partner and decided for the DB. “They knew that we had the technical know-how,” says Niko Warbanoff, who as Vice-Chairman is leading the project from the German side. “What we are doing is real pioneer work. None of our colleagues had any experience of the desert or the kind of trains that are used here.”

Warbanoff is the face of the DB in Abu Dhabi. The 40-year old commutes regularly between Berlin and the Emirate, and in the past years has got to know the Arab mentality well. “Family matters are very important here. How is your wife, how are your children? These are important questions that need to be asked at every meeting. That is how one builds up trust.”

Warbanoff however does not work for DB Cargo, he is the head of the Executive Committee for DB International. Here in the desert both organisations are represented. DB Cargo concerns itself with the technical railway questions and DB International is responsible for the infrastructure and has the necessary experience in foreign countries outside Europe. Members of staff are active in over a hundred countries or have concluded projects. Wolker Weiß, who has worked for Deutsche Bahn since 1973, has in this period worked in Singapore, China and Saudi Arabia. As head of Infrastructure the 64-year-old now heads in Abu Dhabi an international team of 90 staff, who are responsible for the infrastructure and hence for the safe operation of the trains. Amongst other things they check the fences along the line, which are there to keep gazelles and camels away, and check that not too much sand blows onto the tracks. “Otherwise the train could derail,” says Weiß. Specially-equipped vehicles are then sent out to check the line and clear it. In addition the rails are checked for cracks, for they might stretch at temperatures at over 50°.

These are weather factors which one does not experience in Germany. For engine driver Aupperle this is what makes the job exciting. “You carry responsibility, you have to respond quickly, if you get into a sandstorm or can no longer see the rails in front of you.” He seems to enjoy the work on the loco, the colours of the desert, the sunsets. He will stay here three years, then go back to his job in Bavaria. Does he miss Germany? “Not really,” he says. “Though – a rainy day in Germany is also something fine!”

## J. DUBAI. NEW LOCO OF NETHERLANDS CONSTRUCTION FOR DUBAI.

In the Dutch 'Rail Magazine' No. 333 p.54 is an illustrated article by Jos Burgemeester on a smart new yellow Bo-Bo (but see below) diesel loco constructed by Bemo Rail at Warmenhuizen near Alkmaar which in February was undergoing trial running on the Hoorn – Medemblik museum tramway. It is described as BRD 150 (this standing for 'Bemo Rail Diesel' of 15 KiloNewton, works no. 226.

The new BRD 150 diesel loco for Dubai at Hoorn museum railway depot 23.02.2016. (Photo Harald Jans, from 'Op de Rails'.)



(Translation from Dutch by the Editor). “The machine has been built for export to Iran and built according to the customer's specifications. It has been built for the recently-opened Metro at Isfahan where, amongst other duties, it could haul away stranded metro train sets. It weighs 56 tons and is ca. 11m long. Seven ballast blocks are fitted below the running plate on each side, each weighing 700kg. - to add to the adhesion weight. Maximum speed is 50km/h. Diesel-hydrostatic transmission is fitted and a Deutz TCD 16.0VB diesel motor. In fact the wheels are all individual and not formed into four wheelsets.” See [www.bemorail.net](http://www.bemorail.net) for further details.

The article implies it will initially be exported to Dubai and only later transferred to Isfahan in Iran; a similar loco is currently under construction for use in Taiwan.

## K. SAUDI ARABIA. (a). PASSENGER TRAIN MAINTENANCE TENDER.

From 'R.G.I. 06.05.2016: “Saudi Railway Company (SAR) invites the specialized companies in maintenance services for modern high speed passenger trains sets to participate in prequalification for tender of providing maintenance services for modern high speed passenger trains sets procured from CAF for Saudi Railway

company. Those who are interested are invited to provide the following: 1- Filling up the RFI through the following links: Request for Information and Prequalification Document

2- Provide the requested information no later than 19/5/2016 to the following address:

Saudi Railway Company – SAR. Procurement and contracting Dept.; Al Kindi Plaza, Diplomatic Quarter- Building 77; P.O. Box 64447 Riyadh 11536. E-mail: Train.Maintenance@sar.com.sa Tel.: +966 11 2501111; Fax: +966 11 480 7517”

### **(b). HARAMAIN OPENING DELAYED.**

The completion date for the Haramain High Speed Rail line has been put back by a further 14 months from January 2017 to the first quarter of 2018, Spain's Development Minister Ana Pastor said on May 10. Pastor also said Saudi Arabia had agreed to bring its payments to the railway systems consortium up to date.

Railway systems and rolling stock for the 450 km Makkah – Jeddah – Madinah line are being supplied under a €6.7Bn contract which was awarded in October 2011 to the Al-Shoula Consortium of two Saudi and 12 Spanish companies, including Renfe, Adif and rolling stock supplier Talgo (RGI 7.12 p32). Opening had been envisaged for 2014 when the railway systems contract was signed in January 2012. However, the project has faced difficulties including allegations of delays to the completion of the civil works which are being undertaken under separate contracts, windblown sand in the inhospitable climate and disputes within the consortium. (The difficulties faced by the project were discussed in more detail in the February 2015 issue of 'Railway Gazette International' magazine).

### **(c). HARAMAIN PLANS.**

An earlier article in the 'Saudi Gazette' of Makkah, 20.11.2014 envisioned that "The high-speed Haramain Railway will run seven trains between Makkah and Jeddah in one hour. (It) will link the holy cities of Makkah and Madinah via Jeddah and Rabigh. There will be two trains between Makkah and Madinah and four trains between Makkah and Rabigh in a day and the railway will transport a total of 19,600 passengers in an hour. This was announced by Mohammed Al-Suwaiket, president of the Saudi Railway Organisation (SRO). He made the remarks.... on 19.11.2014 while addressing a meeting on 'Haramain Railway: A Development Project' organised by the Makkah Chamber of Commerce and Industry at the Rusaifah railway station, the Saudi Press Agency reported. ... The railway will be a pioneering project with regard to Saudization of jobs. There will

be around 3,098 officials and employees of the railway, of which about 75 per cent will be Saudis. Some of the Saudi staff, including engineers and drivers, are currently receiving training in Spain,' he said.

According to Al-Suwaiket, the railway will be the first high-speed electric train designed to suit the environment of the Middle East region. The railway has a plan to transport more than 6.2 billion passengers within 12 years. There will be 35 trains and a special train for the elderly people. Al-Suwaiket said that 86 per cent of the construction work of Makkah railway station in Rusaifah has been completed at a cost of over SR3Billion. Speaking on the occasion, Maher Jamal, president of Mallah chamber, said that the railway will be instrumental in having a massive facelift of Makkah, Madinah, Jeddah and Rabigh. The 450km railway, with a speed of 300km per hour, is estimated to cost SR37.5 Billion.

Transport Minister Jabara Al-Seraisy recently said that 80 per cent of the project had been completed and that railway lines had been laid in some places. Apart from relieving road congestion for millions of pilgrims and citizens, the rail track is expected to cut down the amount of time taken to travel between Makkah and Madinah to two hours, and between Jeddah and Makkah to half an hour. The project includes high-speed trains fitted with the latest equipment and five ultra-modern passenger stations - one each in Makkah, Madinah and Rabigh and two in Jeddah. The project is over two years late and was originally planned to open in 2012 after starting of construction in March 2009. As of August 2014, the Madinah – Rabigh section is scheduled for services by the end of 2015, suggesting a phased opening.”

### **L. INTERNATIONAL LINKS.**

“Russia, Iran, Azerbaijan Agree on Game-changing Transportation Corridor.”

From 'Near Eastern Outlook' of 6th. May 2016: [A rather polemical viewpoint! Ed.]

“All but overlooked by Western mainstream media in their focus on the recent flare-up of military tensions between Armenia and Azerbaijan in the simmering conflict over the mountainous enclave of Nagorno-Karabakh is the announcement by Russian Foreign Minister Sergei Lavrov, following talks with his Iranian counterpart, that work will now begin on a long-discussed North-South Transportation Corridor along the Caspian Sea. Significant is the fact that Azerbaijan has also agreed to participate in the project. If so, it suggests that Russian diplomacy and economic infrastructure development have again trumped the Washington urge for wars everywhere to hold their grip on

an eroding global superpower hegemony.

On April 7, at a meeting in the Azeri capital of Baku just hours after Azerbaijan pulled back from a full-scale military assault over Nagorno-Karabakh—an attack being openly urged by the increasingly desperate Turkish President Erdogan—Russian Foreign Minister Sergey Lavrov told assembled media that Russia, Iran and Azerbaijan had agreed to begin talks on implementation of the North-South Transportation Corridor. Beside Lavrov at the announcement stood the Iranian Foreign Minister Javad Zarif and Azeri Foreign Minister Elmar Mamamdyarov.

Lavrov declared, “We discussed issues that deal with the material sphere of cooperation. We agreed that our relevant agencies will start detailing practical aspects of implementing the project of ‘North-South’ transport corridor along the western Caspian coast. This envisages work with participation of the transport ministries that should consider technical and financial parameters of the project. This also envisages cooperation between customs and consular services, and we have agreed on that today.”

Completing the Golden Triangle

With the agreement between Russia, Iran and Azerbaijan, a huge step has been taken to secure the greatest economic space in the world – The Eurasian Heartland. This is the space that the British Godfather of geopolitics, Sir Halford Mackinder warned his life-long was the only major threat to the continued hegemony of the British Empire, later the American heir, the American Century.

The direct, modern transportation corridor, known since initial talks in 2002 as the North-South Transportation Corridor, will ultimately link India and Iran and Azerbaijan to the countries and markets of the Eurasian Economic Union which includes not only Armenia, but Russia, Kazakhstan, Kyrgyzstan and Belarus.

The North South Transport Corridor from India through Iran and Azerbaijan along the Caspian to Moscow and beyond will transform the economic space of Eurasia.

The transport corridor will transform the economies of the entire Eurasia from Russia to fellow Shanghai Cooperation Organization (SCO) country India. The members of the increasingly strategically important SCO are China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, and Uzbekistan. This year India and Pakistan formally accede to full SCO membership, and it is expected that Iran, currently an official Observer, will be offered full membership later this year now that sanctions have been lifted. China President Xi Jinping announced his support for Iranian full membership during his

important January, 2016 talks in Teheran where the two agreed formal Iranian participation in the One Belt, One Road New Economic Silk Road project being spearheaded across Eurasia by China's Xi. Now with the Teheran-Moscow Corridor Iran closes the Golden Triangle, Beijing-Teheran-Moscow, a major economic and geopolitical advance.

Economics of the transport corridor

Completion of the North-South Transport Corridor will significantly transform the economic space of all Eurasia.

The Corridor will be a modern ship, rail, and road route to move freight between India, Iran, Azerbaijan, Russia, Central Asia and on—potentially if the EU states ever become sensible and drop support for Ukraine's war government and drop EU sanctions on Russia – to the ailing economies of the European Union. The new corridor will connect some of the world's largest cities including Mumbai, Moscow, Tehran on to Iran's Caspian Port of Bandar Anzali and from there on to Russia's Caspian port Astrakhan that is at the mouth of the great Volga River.

In 2014 dry run tests of two routes were conducted. The first was Mumbai to Baku via Iran's port at the strategic Strait of Hormuz, a major chokepoint for Persian Gulf oil and LNG gas flows. The second was Mumbai to Russia's port at Astrakhan via Bandar Abbas, Tehran and Iran's Caspian port at Bandar Anzali. The aim of the study was to identify and address key bottlenecks. Significantly, the study showed that India-Russia transport costs were reduced by "\$2,500 per 15 tons of cargo."

A study conducted by the Indian Federation of Freight Forwarders' Associations found the route is, "30% cheaper and 40% shorter than the current traditional route." That current route runs from Mumbai through the Red Sea and the Suez Canal across the Mediterranean and Gibraltar on through the English Channel on to St. Petersburg and Moscow. A look at the map reveals how strategically vulnerable that existing route is to possible NATO or US interdiction.

The US coup d'état in February, 2014 in Ukraine, installing the US State Department's hand-picked gaggle of "pro-Washington" corrupt oligarchs and neo-Nazis to disrupt relations between Russia and the EU, temporarily forced the North-South Transport Corridor plans on to a back-burner. Now, as the reality of the China Eurasian One Belt, One Road Great Project takes on concrete form, the addition of the Iran-Azerbaijan-Russia North-South Transport Corridor creates an integral economic, political and militarily coherent space that may soon auger in what future historians will call the Eurasian Century, as the American Century and its post-1944 world hegemony crumbles

much as the Roman Empire in the Fourth Century AD. Again, the East creates while all the West seems able to do with success is to destroy.

F. William Engdahl is strategic risk consultant and lecturer, he holds a degree in politics from Princeton University and is a best-selling author on oil and geopolitics, exclusively for the online magazine "New Eastern Outlook"

## M. ISLAMIC FINANCE.

An interesting development: From 'R.G.I.' 9th. March 2016: "The Development Bank of Kazakhstan's DBK-Leasing subsidiary has completed its first rolling stock transaction meeting Islamic 'Ijara' leasing requirements. The 1Bn. Tenge deal covers the provision of 113 LPG tank wagons for use by Eastcomtrans for 10 years, with defined payments and the lessor responsible for insurance and maintenance. 'This transaction is very important to for the financial sector of Kazakhstan as it increases opportunities to attract foreign investment to the economy,' said DBK Deputy Chairman Elena Kogay. 'In order for Islamic financing to develop in our country, it is necessary to use these tools in active financial operations. In this regard, I want to emphasise that for the first time in Kazakhstan a leasing company has financed the project under 'Ijara' conditions. We plan to develop this product in our subsidiary company DBK-leasing, as Ijara by its nature is similar to financial leasing."

## N. HEDJAZ – JORDAN.

*The big news here is a proposed railtour organised by Iain Scotchman of the Branch Line Society, from November 10-17th. 2016.*

From the excellent illustrated brochure:

"At present, regular workings are confined to weekly excursions on Saturdays only from Amman to El Jiza for the local population. These are also available to tourists although poorly advertised. Train charters are offered over the operational sections of the JHR, northwards to Mafraq and southwards to Qatrana (English transliterations of these place names are variable!). To the south of Qatrana the former line is apparently out of use for some 25km as far as the connection with the branch to the Wadi el Abyad potash mine. The privately-owned Aqaba Railway Corporation carries potash from mines in this area to the port of Aqaba on the Red Sea. The possibility of extending the tour to traverse the Aqaba Railway is an aspiration under investigation (see below). A diesel and steam loco

with some passenger vehicles reside at Wadi Rum station, testament to a failed attempt to introduce tourist trains between there and Aqaba in the mid-2000s.

Thanks to our member Iain Scotchman, the possibility (not booked yet) of riding the much sought after Aqaba Railway freight lines from the central Jordan potash mines to the Red Sea port of Aqaba via Wadi Rum has arisen. It is not certain how many days would be needed, probably five. More people will come for the enhanced itinerary and this will significantly reduce the cost per head.

### THE TOUR (Provisional itinerary):

? Day 0: Arrive Amman, direct or via Israel (interesting loco-hauled services option available).

? Day 1: JHR Amman (museum and Depot visit) - Al Mafraq - Amman - El-Jiza.

? Day 2: JHR - El Jiza - Qatrana (first three nights in Amman Airport Hotel if available).

? Day 3: Qatrana to El-Abyad Mine (closed?) - El Hasa (probable northern limit of ARC operations)

train if these links are actually operational/easily restorable or coach if not. Overnight in Karak?

? Day 4: ARC El-Hasa Mine - Ma'an - Depot visit ? Overnight in Petra?

? Day 5: Ma'an - Aqaba Potash Terminal - Wadi Rum - Aqaba port, Depot visit. Stay in Aqaba.

? Day 6: Aqaba to Amman by coach. Potential Petra etc add-on.

### Getting There

Direct flights from London are offered by British Airways and Royal Jordanian Airlines. For EU citizens, Jordanian tourist visas can be purchased on arrival at Amman airport at a cost of JD40 (about £40, the Jordanian Dinar is very similar in value to the £) or in advance from the Jordanian Embassy (£60 single entry, £180 multiple entry, with a £7.50 fee in addition: <http://jordanembassy.org.uk/consulate/visas/>

For the more adventurous, Israel provides a possible arrival route via Tel Aviv and the Allenby Bridge road crossing via Jerusalem. However, it should be noted that this land crossing can be subject to considerable delays, requires a Jordanian tourist visa and also incurs an Israeli exit fee of about \$US 52.

### Travel and Health Advice

Around 73,500 British nationals visited Jordan in 2014 and most visits are trouble free. Travellers should behave

sensibly and avoid large crowds, political gatherings and demonstrations. The current UK Foreign Office travel advice for Jordan can be found here:

<https://www.gov.uk/foreign-travel-advice/jordan>

It is essential to take out comprehensive travel and medical insurance in advance. Travellers should be up to date with routine vaccination courses and boosters as recommended in the UK and should in addition be vaccinated against Hepatitis A and Tetanus. See: [http://travelhealthpro.org.uk/locations/jordan/#Vaccine\\_recommendations](http://travelhealthpro.org.uk/locations/jordan/#Vaccine_recommendations) Background, Culture and Weather

Jordan has a very rich cultural and historical background and is extremely welcoming to tourists, with many trips from Amman to the Dead Sea, the ancient city of Petra, the extensive Roman remains at Jerash (amongst others), the early Christian church at Madaba and the outstanding Crusader castles at Karak and Shobak, to name but a few. The Red Sea resort of Aqaba is a further potential attraction.

A couple of 8 minute videos of the interesting line in vivid countryside (note our tour would be diesel hauled):

[https://www.youtube.com/watch?v=We0\\_CN65Mlo](https://www.youtube.com/watch?v=We0_CN65Mlo)

<https://www.youtube.com/watch?v=fCfiMm-fbn4>

and <https://www.youtube.com/watch?v=y4e9ljTj8b4>

The southern section: <https://goo.gl/7DsX77>

Distances: Mafrq to Qatrana is 95 miles by road, the capital Amman is about midway, Qatrana to Port Aqaba is over 150 miles by road the railway is much longer.

Members and non-members who might be interested in joining this unusual BLS trip, on a cost-sharing basis with some other 'familiar faces' (usual BLS Fixtures T&Cs apply) or have any queries are asked to please contact Iain Scotchman as soon as possible to give an idea of viability at:

[iain.scotchman@branchline.org.uk](mailto:iain.scotchman@branchline.org.uk)

Iain has travelled in Jordan before and there will be some seasoned foreign travellers to help and advise although it is anticipated that many will be on their first trip to the Kingdom."

Especially recommended for aficionados is:

<https://www.youtube.com/watch?v=YVXA7PfCcOc> - this includes many scenes of the extensive Museum at Cadem in 2012 – one wonders what it looks like now.

113:08.

## NOTES AND COMMENTS.

### (i). ANOTHER HOLOCAUST WAGON MEMORIAL IN ITALY.

Thanks to Reinhard Dietrich for a copy of some pages from 'Italien in Vollen Zügen' – actually a German translation of an English book by Tim Parks! This is from p.128 of the German version: (re-translated by the Editor).

"When France declared war on Italy, an armed Italian train that ran along the Costa Azura (Côte d'Azur) shot at French navy ships. For the entire period of the war the trains carried troops, refugees, weapons and prisoners in large quantities. Finally the railway was bombed by the Allies and blown up by the Germans during their retreat. Following Italy's capitulation in 1943 the Germans, who had occupied the centre and north of the country, made Verona their main transport node, since there the East-West line (Milano – Venezia) and the North-South line (Roma – Berlin) crossed. From Verona, from the same platform from which I boarded the train of the living dead, Jews and other undesired persons were crammed into sticky or freezing goods vans and taken over the Brenner Pass and further to the gas chambers of Auschwitz and Birkenau. One of these vans is kept still at Verona Porta Nuova and exhibited each year at the Piazza Bra on the Holocaust Memorial Day.

In the Second World War 2,104 railwaymen died, 407 of them in the resistance. The workers who tried to sabotage the German war effort deserve great recognition, in that they destroyed locomotives and signal boxes. At the end of the war some 7,000 km of railway line had been destroyed in one way or another, and also 4,750 railway bridges. Paradoxically, although the system was never fully restored to what it had been pre-war, by 1950 the number of passengers had doubled compared to the 1930's, even if the amount of freight transported has dropped. ..."

### (ii). LUND MEMORIAL.

I am informed that another wagon is displayed at Lund in Sweden but have been unable as yet to find more details.

### (iii). STUTTHOF MEMORIAL.

At the site of this camp, east of Danzig, some wagons are preserved – the camp (some 34km. East of Danzig) was served by a narrow-gauge (750mm) line from Tiegenhof to Stutthof – now Nowy Dwór Gdński to Sztutowo. The Westpreussischen Kleinbahn was built from 1900 onwards and by 1940 had a route length of 336km., 31 steam locos, 40 passenger carriages, 12 luggage vans and 1011 goods wagons. Last regular passenger services ceased in 1996.

In its final years the line was worked by type Mbx2 FAUR bogie diesel railcars built in Bucharest 1984-1986. It is now worked in summers as a museum line – see the Polish website [www.ptmkz.pl](http://www.ptmkz.pl). There is a halt with a small shelter called Sztutowo Muzeum. Some 65,000 died here from 1939 to May 1945. A bogie van and a bogie open wagon stand on a length of track.

### (iv). THE DRIVE-IN CINEMA AT TEL BARUCH JUNCTION.

An article appeared in 'Haaretz' on 13.03.2016, by Yael Gruenpeter: entitled 'Disney, Porn and Train cars: The History of Israel's only Drive-In Movie Theater.'

"On March 8, 1973, Haaretz reported on the scheduled opening of Israel's first drive-in movie theater in north Tel Aviv. The article noted that two movies would be screened every night – the first for families, the second for adults. The story also said the proposed parking lot was designed to hold 960 cars and that the ticket price would be determined by the number of passengers in the vehicle. Many people felt the opening of the "US-inspired movie theatre" showed that Israel had "arrived".

On March 9, two days before the official opening, at which the Walt Disney cartoon 'The Jungle Book' was to be shown, Haaretz film critic Yossef Sharik explained how the theater would operate. He also noted that it would be called Drive-In because no one had come up with a suitable Hebrew name. "Everyone understands the English word, and no-one would understand the Hebrew word that would be substituted for it," Sharik wrote. He also said the concept was quite simple. Viewers would drive up to the gate, stop and then pay for each person in the car ("Children under 6 free", he noted). He added that after finding a parking space, the driver would place "a speaker hanging on a hook" inside the car. This would allow everyone to enjoy the movie – projected into a giant asbestos screen measuring more than 6,200 square feet (576 square metres), while reading the 62-centimeter-high sub-titles.

About a week after the opening, a Haaretz reader named Avraham Ne'eman sent a letter to the editor in which he listed the disadvantages of the arrangement, especially with regard to safety - he said the exit from Drive-In involved going through a level

crossing without signals or a barrier. Also, people who were watching them movies for free by sitting on the hill near the Tel Aviv University campus opposite risked their lives each time a train passed. Ne'eman also complained about traffic jams on Rokach Boulevard as a result of the new attraction.

In the early 1980s the management started screening pornographic movies (at midnight). This development gave some residents of Tel Aviv the sudden urge to commune with nature late at night, especially for those willing to climb over the railway embankment, sit on folding chairs and watch the silent move for free. Porn films tend to not to be that dialogue-heavy, and the occasional whistle of a passing train was the only soundtrack for these viewers.

In March 1990 Yehuda Koren wrote an article in Ha'aretz describing the viewing experience. "At around 12.30AM the steam whistle sounded.... we all revelled in the great talent of the director, who complemented his work of art with unusual effects..... While we were still marvelling at the contribution made by the whistle and the rushing sound of train cars, from the left side of the screen an actual train appeared. With no less than 28 cars that disappeared, one after another, behind the thighs of the leading actress. The perfect coordination was repeated in the course of the night, evidence of the creative thinking by the railroad management, which found an additional source of income for its train cars – providing special effects for porn films."

After years of decline, the Drive-In eventually closed in 2000. it is now the site of the Drive-In Arena, where basketball team Hapoel Tel Aviv plays its home games. This opened in 2014."

This is of course pure whimsey – in no way did IR make any income from this juxtaposition! At this period three or so diesel-hauled freight trains would take the north-to-east curve at Tel Baruch each night working southbound from Haifa; the northbound trains would have come past long after the film had finished...

#### **(v). ROBERT JEFFREY IN EGYPT: AN INTERESTING BIOGRAPHY.**

From 'Grace's Guide to British Industrial History', an obituary of 1878 to Robert Jeffrey (Bey), 1813 – 1877. Fascinating in the insights it gives into contemporary careers, where British engineers moved smoothly between several countries, cultures and languages introducing new technology!

"Mr. Robert Jeffrey (Bey) was born on 9th. February 1813 at Shilbottle, near Alnwick, Northumberland. He was never actually apprenticed but in the year 1834, when

about twenty-one years of age, he entered the service of Messrs. Robert Stephenson and Co. at their Engine Works, South Street, Newcastle-on-Tyne, then under the able direction of the late Mr. Hutschinson, he soon became an expert workman..

In December 1839 he was selected by the late Mr. Robert Stephenson MP... to act as foreman over a portion of the works at La Ciotat, near Marseilles, which Messrs. Louis Benet and Co. intended to devote to the construction of locomotive engines. When the first three engines were finished, he took them to Naples, where he erected them upon the line, and for a time superintended the locomotive service between Naples and Torre del Greco. After completing his contract time of service at La Ciotat, he returned to Newcastle.

In November 1841 he became temporary locomotive superintendent on the Leeds and Selby Railway.

In April 1842 he took charge for Messrs. Robert Stephenson and Co. of the two first long boiler engines constructed by the firm for the Dusseldorf and Elberfeld railway. On arrival, he found that line almost at a standstill for want of motive power, but he soon improved the rolling stock and with the aid of the new engines placed in traffic on a sound footing. The Directors demonstrated their satisfaction by a substantial pecuniary recompense.

In December 1842 he was sent by Robert Stephenson and Co. to Naples in charge of six locomotive engines for the service between that city and Caserta; and on this line, in spite of severe opposition from rival engineers, both English and American, he was successful in demonstrating the good quality of the engines entrusted to him. In June 1843 he was appointed to the position of Locomotive Superintendent on the Leghorn and Florence railway, where he had almost everything in the way of machinery to create, and by incessant and intelligent attention to his duties and indomitable courage, he overcame all the difficulties of the position with credit to himself and advantage to the railway company.

In March 1857 he returned to Newcastle, with further marks of the satisfaction of his employers. For some time H.H. Said Pasha, then Viceroy of Egypt, had been discontented with the management of the locomotive department of the Egyptian Government railway; while the complaints of the British Government and of the Peninsular and Oriental Steam Navigation Company were incessant as to the defective service on the railway. His Highness, therefore, through the late Mr. Hugh Thurburn – then of Alexandria – applied to the Council of the Institution of Civil Engineers to select a competent person for the post of superintendent of the locomotive engine and carriage department. Sixty-five applications were

received, and after careful investigation of the qualifications and experience of all the candidates, Mr. Robert Jeffrey was selected in November 1857.

He immediately started for Egypt and commenced the great work of his career. He found the whole establishment at Boulac for the repairs of locomotives and carriages an Augaeon stable of the worst description; but, nothing daunted, he set to work 'with a will' and in spite of passive and active opposition he soon made his mark. Mr. Hugh Thurburn never failed, on occasions of difficulty, to place any correct statement before H.H. Said Pasha, who appreciated the sturdy qualities of Robert Jeffrey and accorded him the utmost confidence.

At first the labour was excessive. The locomotive and carriage-shops at Boulac were but scantily provided with useful tools, and the distribution of the establishment was entirely without system; whilst the engines, carriages and wagons were of many different types, as the Viceroy never hesitated to give an order to supply something for the unfortunate railway to any one who was merely presented to His Highness. Patient labour, however, eventually prevailed and Jeffrey persuaded the authorities to adopt certain types of engines and rolling stock, and to adhere to them. In this vital principle, however, he was only partially successful.

The next great difficulty was the conduct of the European drivers of the engines, who were of all nationalities and generally inefficient. A staff of Englishmen was selected for the service, and sent over upon good pay and under stringent rules; but the climate and the love of strong drink overcame them. Then, after trying everything in favour of his countrymen, Jeffrey proposed to H. H. the Viceroy to attempt to train native Arab drivers for the service. The suggestion was adopted, and it was agreed that Jeffrey should receive a premium of 65100 sterling [sic. - there must be a dot or two missing here! WLR] for every Arab driver he could train to pass the examination of a competent committee. The experiment was successful, and there are now only a few English drivers in the service.

At the time of the International Exhibition of 1862 Mr. Jeffrey accompanied H. H. Said Pasha, the Viceroy, to Europe and selected many articles for the Egyptian railway service. Soon afterwards the Viceroy died; but the merits of Mr. Jeffrey were too well established to permit him to be disturbed. Moreover he had impressed H.E. Nubar Pacha, who then held the position now so efficiently filled by General Marriott, C.S.I., and who had long known him, with the valuable character of the services he could render; so that when an enlightened and liberal superior like H.E. Nubar Pacha was appointed Minister of



Public Works, Mr. Jeffrey felt very satisfied that every useful suggestion would be laid before H.H. Ismael Pacha, the present Khedive. Careful private reports upon the line and works were made by an engineer who enjoyed the confidence of H.H. the Khedive. Improvements were effected in every branch of the service; the all-essential point of unity of type of engines and rolling stock was, as much as possible, enforced, and the railway assumed almost an European aspect. The energy and physical powers of Jeffrey were severely taxed, but he was equal to the occasion; and he had the satisfaction of finding that his services were recognised by increased remuneration and in 1864 he received from H. H. the Viceroy the title of Bey.

Once, when the line was so blocked by cotton bales and other merchandise that an entire stoppage of the traffic was imminent, he was appealed to by H.E. Nubar Pacha. His response was to commence systematically with powerful gangs, to remain day and night upon the scene of action for upwards of a week, and not to leave until every bale was cleared away.

When an outbreak of cholera occurred, and the majority of the employees, workmen and drivers abandoned the railway and the works, Jeffrey with his secretary, Mr. C. G. Harrison, remained true to their trust. They rallied the few English drivers who could be found, reassured them by example, kept them up to their work, and maintained the passenger service of the line throughout that dreadful visitation.

Time and hard work in such a climate had, however, made certain ravages upon his naturally strong constitution and when, in 1866, he resigned his appointment and returned to England, he was comparatively only a shadow of his former self. He, to a certain degree, regained his health and was enabled to travel frequently to the Continent, but the seeds of disease could not be got rid of, and an length, feeling more than usually unwell, he went to Manor Farm, Ilford, Essex for change of air, and within a few weeks died peacefully on the 21st. December 1877, in the arms of his only remaining son, Thomas Jeffrey, who had recently returned from Canada at the invitation of his father - his two daughters being in South America.

Mr. Robert Jeffrey was elected a Member of the Institution on the 3rd. of December 1861. He was a well-developed specimen of the good old-fashioned type of the British workman; strong physically and mentally, and determined to do his duty under all and any circumstances."

#### (vi). A GERMAN RAILWAY EXECUTIVE IN EGYPT.

By coincidence the 4/2015 issue of 'Die Museums-Eisenbahn' has on pp. 30-33 an autobiography of Friedrich Lenz who founded and ran the Lenz & Co. building and operating various minor railways (Kleinbahnen) all over Germany and sometimes elsewhere. Lenz was born 1846 in Pflugrade (now Redlo) in Pommern, initially intended to study theology, then to become a building engineer, studied in Stettin and elsewhere and in order to subsidise his studies took a post in the technical office of the Berlin – Stettin Eisenbahn; in 1870 he did military service with the Holstein Artillery Regiment No. 9 and later became a contractor building several sections of railway line and other infrastructure. Following an intensive period of building railways in Mecklenburg he had established a relationship with the 'Berliner Handels-Gesellschaft' Bank.

"At the end of the 1880's this bank, together with the Bankhaus Robert Warschauer, commissioned me to examine a scheme prepared by some Dutch men for a railway from Assiout to Girge in Egypt. Following the approval for construction by the Egyptian Government the scheme had been transferred to the consortium Berliner Handels-Gesellschaft/ Robert Warschauer and Suares frères & Co of Cairo.

During my stay in Egypt I was also drawn as an expert into examining a scheme for a railway from Keneh through the desert to Kosseir on the Red Sea. The Commission established by the Government included also Generalkonsul von Brauer, later the Prime Minister of Baden, and Baron von Richthofen as a member of the Debt Repayment Fund. In addition I prepared examinations and reports on schemes for railways Keneh via Luxor to Assuan, though I was not involved in the actual construction. In Egypt it was English engineers who supervised construction on the waterways and French engineers who supervised railway construction and operations. The Chief of these was Herr Prompt, his deputy Nicours. I had favourably impressed both these gentlemen in that I was able to get for them very quickly from Krupps materials they needed for the improvement of the operational line Alexandria – Cairo and then turned down any extra payment for this.

In Suez I received, through the German Consul acting on behalf of the Reichskanzler, the request to continue straight on to Siam in order to examine railway projects there, plans which were currently wavering between the two governments. But I went first back home, in order to inform myself as to the actual status of the negotiations, and only

set off again in August in the steamer 'Bayern', one of the four new 4,500ton passenger steamers of the Norddeutscher Lloyd which had been built by Vulkan in Stettin...."

#### (vii). EGYPTIAN MONORAILS.

In Spring 2016 the Narrow Gauge Railway Society published an excellent booklet ('The Narrow Gauge No. 236') by John L. Townsend on 'Caillet's Patent Mono-Rail System'. Although not much is known about the originator of this system of balancing wagons of various sizes and configurations on a light single rail using double-flanged wheels, propulsion being by hand or horses, there were various patent applications and contemporary press reports, mainly from Australia though there are reports of such lines being laid in the Gold Coast, India, Ceylon etc. On p.31 is a citation from 'Engineering Magazine' that "Single-rail roads of this construction have found successful application in Egypt, Mexico and the French colonies..." On p.34 is a note from an Australian newspaper of 1902: "A capital example of a wheelbarrow tramway is the line from the Casino of San Stelthano down to the beach at Alexandria. There are mono-rail lines at the Egyptian prisons." On p.36 is a reference to a previous article of 1996 by David Mander which refers to lines in use in Egypt in 1895.

On p.38 is a positive reference: "From Sanitary Station, Moise Wells, Suez. June 29th. 1895. To Monsieur E. Azmy Bey, Alexandria.

We have pleasure in owing receipt of the Monorail Plant ordered from you 45 days ago for our work at the Moise Wells.

As this is the first time the Monorail System has been operated in Egypt for construction purposes, we have pleasure in acceding to your request to give you the cost of transport before and after adopting the system.

For this purpose we select the transport of bags, each containing 50 kilos of chalk, from the point of discharge at the Moise Wells up to the Warehouse, a distance of about 500 metres.

Formerly in a day of 10 hours' work one man carrying one bag made 22 journeys, that is to say carried in all 1,100 kilos. His wages being five francs, the cost per ton amounted to four-and-a-half francs. With the Monorail System one man in 10 hours carries 200 bags = 10,000 kilos; cost per ton, half-a-franc. Allowing for interest and depreciation on the Monorail Plant at the rate of 20% per annum, the economy in cost of transport works out at 90%.

I should add that the lightness of the plant and the ease with which it is laid down are an important factor in its favour. On the same day that the material was delivered, the line of 500 metres was laid down and the 10 cars were put together

and running in less than six hours.

We are, Sir,

yours faithfully,

A. Guetin & M.

Charvaut.”

Other testimonials are mentioned on the next page as coming from Lieutenant Colonel R.M. Barklie R.E., On Her Majesty's Service in Alexandria, Egypt; and E. Crookshank, R.E., Inspector-General of Prisons, Cairo.

### (viii). CONSTRUCTION OF THE NEW JERUSALEM LINE.

The 'Jerusalem Report' of 08.02.2016 had a rather good article pp.22-27 by Amotz Asa-El on the new Jerusalem line – not just the standard journalese clichés one expects (though there were a few). But for the record here are some excerpts.

....”The most expensive and ambitious public works project ever launched in the Jewish state will lead fast trains into the country's deepest tunnel after crossing its longest bridge, longest tunnel and tallest bridge. Drivers climbing the highway to Tel Aviv from Jerusalem's Ramot neighbourhood these days pass between 14 pairs of cement pillars that shoulder a massive bridge under construction. Emerging from the elevator that lifts the builders of this imposing structure above the intercity traffic, one gets a view of how the 90-metre bridge – Israel's tallest – will unveil Jerusalem to passengers less than 30 minutes after they boarded in Tel Aviv.

Looking through the windows to their left upon emerging from an 11.5 kilometre tunnel – Israel's longest – a panorama of northwestern Jerusalem will unfurl, from the Nebi Samuel minaret through the Belz synagogue to Calatrava's Bridge of Strings, before the train is again engulfed by a tunnel – the journey's fifth and last – as it crawls under the Sakharov Gardens into the basement of the glass-and-steel cube that will be Jerusalem's version of New York's Grand Central Station.

..... The new station, whose main structure and tunnels are already intact between the Central Bus Station and the International Convention Centre, is 80 metres underground, one metre deeper than Washington Park Station in Portland, Oregon, the deepest train station in North America (Kiev's Arsenalna Metro station is the deepest in the world at 105.5m.)

In Jerusalem, after descending through multiple escalators, passengers will stand briefly on a platform from which they and another 1,000 passengers will board a westbound train while another 1,000 people emerge from the eastbound train across the platform that has just arrived from Tel Aviv following a 90-second stop at Ben-Gurion Airport.

When the first train leaves from Jerusalem

to Tel Aviv in winter 2018, Israel's political and financial centres will finally be properly rail-linked, like Washington and New York, Moscow and St., Petersburg, and Beijing and Shanghai,

Launched by the Sharon government in 2003, the project is a massive undertaking – financially, technically and administratively. At 6.8 Billion Shekels, its price tag is higher than the entire annual welfare budget. Yet this budgetary challenge is dwarfed by the project's technical, administrative and regulatory challenges. Though simpler than the engineering, budgeting stalled the project by some two years after Israel Railways demanded that the originally 2 billion Shekel budget be trebled, citing underestimated costs. The Treasury, therefore, decided, during Ehud Olmert's premiership, to suspend the project until the budget was reviewed. When it was finally re-budgeted, the project was stalled again, this time for environmental reasons as a coalition of green organisations argued that one of the railway's planned bridges would severely damage nature in the Yitla gorge, the biblical site of a town by that name belonging to the tribe of Dan. The greens demanded that the bridge be replaced with a deep tunnel. Yet such a solution, besides being financially exorbitant, would have undermined – figuratively and literally – the scheme's entire engineering vision.

In terms of length, at 57 kilometres, the line is Lilliputian compared to New York - Washington, (362) and Beijing - Shanghai (1,318). This is why the line will make do with a speed of 180 kilometres per hour as opposed to 250kph for other fast trains. Similarly, the new Jerusalem station at 815 metres is situated at a fraction of the altitude of assorted railways ranging from Switzerland to China that are higher than 400 metres. The local challenge was the steepness of the incline starting at sea level and the need for speed rather than scenic vistas. “We don't know of a single project elsewhere with the complexities of this one,” high Speed Link Project Director Dror Sofro [said]... Moreover, unlike other fast train routes, the flatness of which allowed construction to take place simultaneously from their opposite ends, in Jerusalem's case work could only proceed from one end, the western, because only there, on the Judaeen foothills, is the land flat and spacious enough for heavy equipment to be properly parked and deployed. Similarly, unlike ordinary fast trains, which generally avoid long bridges, the one at the entrance to Jerusalem is so long and tall that when on the bridge trains will have to brace for potentially destabilizing winds by limiting their speed to 160kph, explains safety officer Tomer Miretzki from under his hard hat while the wind buffets him

while atop the bridge....

The new train route avoids the mountainous meandering creeks, running instead along a mostly straight continuum of 16 tunnels and bridges. At the same time, the route's planners tempered its incline at both its ends. In the east, the Jerusalem station was lowered for this reason by 80 metres; in the west, the Judaeen foothills approach, the train will climb a 1.2km bridge – Israel's longest – that, rather than cross a ravine or avoid a town, will lift it at a two-degree angle above the Ayalon valley's cotton fields. Consequently, the trains will begin climbing before reaching the mountains, and thus tunnel into them from well above their foothills. The environmentally contentious Yitla gorge emerges where the tunnel that is past this bridge ends. “Had the Greens' demands been heeded, the station in Jerusalem would have had to be 200m deep,” says IR official Batsheva Landau-Segev..... after having stalled the project through court injunctions, the Greens were overruled by a High Court decision that allowed bridging over the gorge, while ruling that the parallel bridges will rest on a single pillar each, and that these be planted not in the riverbed below them but in the slope just above. The environmentalists' cause may have been compromised, but it was still well served by the struggle since special efforts were made to minimise the project's imprint on the landscape. Most unusually, the earth. With its vegetation, that was excavated while the bridges were planted is being preserved to be restored to its original location.

Meanwhile the project's massive digging demanded technologies previously unseen in the Holy land, most notably the massive tunnel-boring machines (TBMs) which travel through the mountainsides while twirling huge blades, clearing back the earth they dig and, at the same time, walling the tunnel they create with cement. Problems appeared periodically, including the recent cracking of a floor in one of the project's 68 escape tunnels. ....

“The tunnels have been dug, the bridges are nearly complete. By the end of next year we will have laid the rails, and then we will electrify the railway all the way to Herzliya – the first such scheme ever done in Israel,” [says Shahr Wiseman]....

Since this task, as well as the project's deep digging and tall bridging, had never been done in Israel, foreign contractors were hired from Germany, France, Italy and Russia in order to build separate segments of the route, while partnering with Israeli firms. As a result, local companies have earned priceless engineering knowledge from their foreign partners....., much the way Japan hired foreigners to build its first trains in the 19th century and, after seeing how the first several lines were built, it constructed the next one on its

own. ....

The experience of travelling to Jerusalem will thus be revolutionised, as will the city's place in Israeli life. While technologically inspiring, the new railway will be historically demystifying, as the ride between Israel's commercial heartbeat and spiritual fountainhead becomes a brief and relatively colourless voyage, much the same as the ride between, say, Amsterdam and Hague. Passengers will miss some familiar sights on the road to Jerusalem, which in its current path is not only scenic but patriotic. For nearly 70 years, eastbound commuters entering Shaar HaGai have been greeted by the monumentalised wreckages of the armoured vehicles in which IDF fighters broke the 1948 siege of Jerusalem, but the fast train's route will avoid them. The old, 80-minute train route beginning from outside the Malha Mall in the city's south will continue to operate, serving tourists, school trips and the town of Beit Sshemesh, IR officials promise. It will, therefore, serve as a nostalgic reminder of the past when the underused train route to Jerusalem was so slow and quaint that passengers would joke that the driver was about to ask them to get off the train and push it uphill.

The new route, by contrast, is expected to take some 70,000 passengers daily between Jerusalem and Tel Aviv, a volume which, by then, should be roughly one quarter of Israel's entire rail-borne passenger load. The short train ride will open Tel Aviv's diverse job market to thousands of Jerusalemites who until now have rejected the idea of a daily commute from the city, whose biggest employers are the government and the Hebrew University. Jerusalem will thus offset the economic marginality to which it has been condemned since antiquity, when Herod connected the coastal plain to Rome through the sophisticated port he built in Caesara. The ability to live in Jerusalem and work in the coastal plain will raise Jerusalemites' relatively low average income and therefore change the city's demographics.

At the same time, many of the government offices in central Tel Aviv will gradually migrate to Jerusalem. Bracing for this transformation, Jerusalem's municipality is planning a new commercial complex comprising office towers, hotels, theatres and shopping centres that will cluster round the new train station. The location of the planned complex, back-to-back with Jerusalem's light railway, along with the latter's planned extensions to the Hebrew University's campuses on Givat Ram and on Mount Scopus is expected to attract young adults. The result may be a less conservative and more secular Jerusalem....."

#### (ix). PROGRESS IN THE SOUTH.

The same article cited above continues to describe progress with various IR expansion plans but I have decided to incorporate some of these under a separate heading.

"The southern lines and the doubling of the coastal tracks have already more than trebled the overall number of train passengers since 2001 from an annual 15 million to nearly 50m million. .... the railway revolution is planned ultimately to be capped by a line to Eilat – a 380km route that will take two hours, mostly by upgrading the existing passenger route to Dimona and freight route to Nahaml Zin. The remaining leg is to be built from scratch along the Arava rift.

The Eilat project, whose costs are expected to exceed the initially calculated 7 billion shekels, has been planned and approved in principle, but has yet to be budgeted and launched. Even so, down south, Israel's unfolding railway revolution is already palpable.

Ofakim, halfway between the Gaza Strip and Beersheba and for decades one of Israel's most drab and off-the-beaten-path towns, inaugurated in early January its train station, a modest but handsome structure of glass, steel and red brick. Two mornings later, the cars of 100 commuters occupied the station's well-planned parking lot, alongside a bus station and special parking slots for bicycles and motorbikes.

A 20-minute and 13-shekel train ride north of there, in Sderot, 300 cars were parked outside a vast and well-stocked Hyper Cohen supermarket, lynch-pinning a newly-built strip mall with elegant shops for clothing, bedding, baby goods, kitchenware and liquors, as well as a restaurant, a café and trendy sushi bar.

It is hardly a year since the first locomotive arrived here, and as a midday train arrives punctually from Ashkelon some 100 people pour out as naturally as they would at any railroad station, only here the tunnel under the platform leads to the station's aesthetically-arranged concrete triangles, designed to resist rockets from nearby Gaza.

'The strip mall is just the beginning', says IR spokesman Weisman. He predicts that the stations will become engines of development, including a planned dormitory adjacent to Ofakim station, where low-rent apartments will be offered to students a mere 17-minute train ride from Ben-Gurion University in Beersheba.

Midway between Sderot and Ofakim, the Netivot station's facade is dominated by what might be the country's largest clock, some three metres in diameter. Inside the impeccable station of marble and limestone, in his orderly office, station manager Shai Sitbon describes his day...

"I get here every dawn at 4.30am" he says. "I check that the station is properly maintained and clean and that all is working and in place: cleaners, security men, safety workers, stewardesses, cafeteria and machines." Just outside his office stand eight silvery automatic ticket gates.

A native of Nahariya.... the 30-year old Sitbon originally joined Israel Railways as a security guard after completing his IDF service in the Givati infantry brigade. After working up north as an inspector, he married a woman from Netivot where the couple moved while he worked as a shift manager in Lod, outside Ben-Gurion Airport.

"It was one big complication," he says, recalling the 'prehistoric' days before Netivot was linked to the railway 11 months ago. "I would go to Lod by cab, then return by train to Beersheba, where I would take a ride after which I would walk home 15 minutes by foot."

Now, every morning, he sees hundreds of locals board the trains to Beersheba and Tel Aviv. In the first months, he recalls, the old-timers came every day just to see that their town's link to the railway system was not a mirage. Pointing through his station's facade, Sitbon indicates a concrete forest of skeletal apartment buildings under construction where workers are labouring under five cranes. "This is the impact of the trains," he says of the budding neighbourhood where he and his wife, now parents of three, bought a three-bedroom apartment in a seven-storey building. "Everyone wants to live next to the train station," relates Sitbon, an embroidered Israel Railways symbol decorating his uniform's blue sweater and red tie. He thinks he knows all the faces of the hundreds of commuters who board the train every morning. And it's mutual. "Everyone knows you in this town if you work on the railway," he says. "I'm a celebrity here.""

#### (x). LEBANON.

In 'Narrow Gauge News' 333 (March 2016) p. 12 is a note on an extensive 60cm gauge line used for removal of rubble and spoil during archaeological excavations at Byblos Castle, originally laid in the 1930's and apparently used until recently.

HaRakevet is created in Berlin  
by Rabbi Walter Rothschild.  
Layout and printing  
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in Leeds UK

# Finding a collection of Railway Stamps and Covers from the Middle East.

The UPA Stamp Auction Catalogue dropped through my letterbox and hit the floor with a dull thud. It was heavy, listing 26,510 lots comprising stamps and postal history and ran to over 300 pages.

Where should I start browsing – that was the question. I realized it was logical to start at the beginning and I had not been reading for very long when I came across Lots 55 and 56. They were described as follows:

*1940s-1980s Railway Thematics collection from a variety of countries in a large lever arch file, includes Fujeira, Iraq, Iran, Jordan, Kuwait, Lebanon, Palestine, Syria and UAR, includes covers, stamps and mini-sheets. Heavy lots – so ask about postage costs.*

I put in by bid and waited and then the email arrived, my bid was successful and the lots had been posted to me.

A large parcel came to my home, many times larger than the enormous auction catalogue. Opening it I found a treasure trove of railway philatelic material put together by an Austrian collector. My main interest was the covers and I have chosen three that I consider representative.

The first is from Iran. The cover commemorates the opening of the Teheran Tabriz Railway and is dated the 24th of April 1958. The rail link stretches for 736 km and was built between 1939 and 1959 linking the capital Teheran with Tabriz, a city in the northern extremity of the country by the border with Azerbaijan.

The second is from Syria and is an envelope sent from the headquarters office of Chemins de Fer Syriens (Syrian Railways) in Aleppo to Siemens, Vienna, Austria in July 1963.

The third is from Jordan and commemorates the opening of the Hejaz Railway Museum in 1999.

My particular collecting interest is in the covers – but there are many railway stamps in the collection – if anyone is interested email me at [ngrizzard@aol.com](mailto:ngrizzard@aol.com) and I'll be happy to tell you exactly what's available.

**Nigel Grizzard,  
Leeds UK**

