MARITIME STRATEGIC EVALUATION FOR ISRAEL 2020/21

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Logistic Corridors between the Indian Ocean and the Mediterranean – Existing trade routes, planned ones and China possible future involvement

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Introduction

This chapter surveys the main trade routes (both existing and planned) that connect between the Indian Ocean and the Mediterranean. It describes the main overland routes, the ports that they connect to and the political and economic challenges they involve.

The main conclusion presented is that in the existing political situation in the Levant there is greater feasibility for projects that are contained within the borders of a single country while the feasibility of large cross-border projects is relatively low. Nonetheless, the rise of Iran as a regional power and the formation of a Sunni-Israeli alliance in response increases the chance of creating routes from the Gulf region by way of Jordan to the port of Haifa (israel).

Similarly, and despite the 'boom' in infrastructure investment in western Asia as a result of China's Belt and Road Initiative, it appears that in the foreseeable future China will not be involved in investment in overland cross-border logistic projects in the Levant (such as railways) due to the political risk involved. On the other hand, China is deeply involved in investment in the region's seaports.

The factors influencing the trade routes

The main trade route between Asia and Europe is of course the Suez Canal and it is one of the most important trade routes in the world. Approximately 10%–13% of global trade passes through it (Hellenic Shipping News, 2019; Reuters 2020). The efficiency of seaborne trade makes the Suez Canal the most economically alternative for long-distance trade between China and East Asia on the one hand and Europe on the other.¹ At the same time, there are discussions among the various players and countries in the Levant region regarding additional options for establishing trade routes (some of which are new while others are a revival of old routes) between the Indian Ocean (its northwestern extension, namely the Red Sea, and its northern

¹ In recent years, there has been discussion of another route between Asia and Europe along the northern coast of Russia.

extension, namely the Persian Gulf) and the Mediterranean. These overland routes would achieve several goals for the countries involved and in principle they can be divided into three categories:

- Financial gain: There is a massive flow of trade between Asia and Europe. Even a small fraction of revenue derived from such trade for logistic and transshipment services represents a major source of income. In addition, a major trade route is accompanied by trade-related economic development such as financial services (banking, insurance and legal services), development of manufacturing industry, etc (Hall et al., 2011 pp 81).
- Political leverage over users of the trade routes: In view of the economic dependence of most countries on trade, such as the import of energy and food products, the control of trade routes creates political leverage that can be translated into a higher international status and economic growth.
- 3. Diversification of independent trade routes as a component of national security: We have already mentioned the leverage attained by the owners of trade infrastructure over its users and therefore is it reasonable to assume that countries which feel constrained or threatened if their trade routes are controlled by a competing country or non-state organization will seek to diversify their trade routes, including the development of independent routes. In the Mediterranean region, the maritime trade routes converge to a number of chokepoints, namely the Strait of Hormuz at the entrance to the Persian Gulf, the Bab el Mandeb Strait at the southern entrance to the Red Sea and the Suez Canal that connects between the Red Sea and the Mediterranean. The convergence of sea routes in the Middle East to a number of chokepoints, some of which are located in political unstable areas, constitutes a potential risk to the flow of international trade and a risk to the supply chain.

The construction of infrastructure for trade routes is primarily influenced by three types of factors: geography, politics and technological-logistic considerations, which are related to the economics of trade. From a **geographic** perspective, the movement of trade is influenced by the terrain and topography of the land, such as mountain ridges, deserts, swamps, etc., while the sea routes are influenced primarily by the location of straits. There are also **political** factors that are critical in the movement of people and goods. Closed borders between states that are enemies; areas with a low level of personal safety due to terror and piracy; and administrative restrictions on movement or alternatively the encouragement of trade are among the factors with a significant influence on the movement of people and goods. However, political constraints—unlike mountain ridges or rivers—are a manmade obstacle and can

apply differentially to people of different nationalities or religions and to different types of goods. **Technological and logistic** factors also play an important role. Technology allows the construction of infrastructure that facilitates the movement through hard terrain and also the creation of new passages, such as the digging of tunnels through mountain ranges, the expansion and deepening of straits, bridging over wide valleys, etc. At the same time, technology also makes it possible to build means of transportation with greater capacity (such as ships, trains, etc.) and that are more efficient and lowers the cost of trade through economies of scale.

The advantages in creating overland connections between the Indian Ocean and the Mediterranean, alongside the surge in investment in infrastructure created by China's Belt and Road project (see below), which has also attracted local partners, have created an expectation in the Levant region of land corridors being built between the Indian Ocean and the Mediterranean.

China's Belt and Road Initiative

In 2013, China announced the Belt and Road Initiative which is meant to connect China to Eurasia and East Africa by means of physical infrastructure. The initiative includes a land component consisting of logistic corridors in Central Asia and Western Asia (since essentially there has been no significant land trade through Central Asia since the days of the Mongols and the ancient Silk Route) and the expansion of maritime connectivity by means of a network of seaports between China and Europe, including in the Mediterranean. Although the academic literature, the media and the public often treats the initiative as a single unit, it is in fact two separate frameworks: (a) the 21st Century Maritime Silk Road and (b) the overland Silk Road Economic Belt. These two initiatives were announced separately by President Xi of China: the Economic Belt Initiative was announced in September 2013 in Kazakhstan and the maritime Silk Route was announced in October 2013 while the Chinese President was visiting Indonesia (State Council et al., 2015). The two initiatives are each of interest to different players inside China: the Silk Road Economic Belt Initiative involves the building of logistic corridors that include rail lines, energy pipelines (natural gas and oil) and highways (including tunnels, bridges, etc.). It is instrumental in economic development within China and primarily the development of the western provinces, as well as regional development of the West and Central Asia.

In contrast, the Maritime Silk Road primarily involves the building and operation of seaports, as well as the accompanying industrial zones. The industrial zones often include industrial parks that are built and managed by the Chinese and house factories of Chinese manufacturers. In addition, there are Chinese investments in heavy infrastructure, such as mines, energy facilities, etc. The core of the initiative is to ensure sea routes for the export of Chinese goods (both from China and by Chinese companies operating abroad, primarily in the aforementioned industrial parks) and also the import of energy products and inputs by China. For this reason, the Maritime Silk Road initiative is more relevant for the broader commercial and business sectors in China (Gonen, 2018).

The Chinese initiative has led to a wave of infrastructure investment throughout Eurasia, and there are many additional plans for investment throughout the Middle East.²

Chinese companies operate the following container terminals in the Mediterranean (COSCO, 2020; Hutchison Ports, 2020; Israel Ports Company, 2015):

- 1. Alexandria (Egypt): two terminals owned by the Hutchison company of Hong Kong (Dekheila and Alexandria) and a planned third terminal (Abu Qir).
- 2. Port Said (Egypt): The COSCO company controls 20 percent of the Suez Canal Container Terminal (SCCT), which is the main transshipment port on the Suez Canal, together with CMA CGM.
- 3. Haifa (Israel): concession held by the Shanghai International Port Group (SIPG) for the operation of the Hamifratz Port starting from 2021 and for a period of 25 years.
- 4. Piraeus (Greece): the COSCO company.
- 5. Saloniki (Greece): the Terminal Link company, a subsidiary of the China Merchant Port Holding company.
- 6. Kumport (Turkey): China Merchants Port Holding company.

Furthermore, in the context of the Belt and Road Initiative, both China and Chinese construction and operating companies have been mentioned as being involved in the building of overland trade routes in the Middle East (for further details on Chinese involvement—if it exists—see the description of the routes below).

² In the context of the building of infrastructure, a differentiation should be made between direct investment (FDI) and the export of services. FDI consists of investment that leaves the source countries for the target country and includes ownership over the assets and infrastructure at a rate of over 10 percent of the asset's value and a major say in its management. On the other hand, the export of services involves the building of infrastructure by a foreign company only in the role of subcontractor. This is a service provided for payment and when completed the subcontractor has fulfilled his function; it is not an owner of the asset nor does it have any influence over its management.

Trade and transportation routes between the Indian Ocean and the Mediterranean

This section describes the main potential trade routes between the Indian Ocean and the Mediterranean (some of which are new and some of which have existed for many years), including a description of the initiators of the route, its advantages and disadvantages and the risk in the development of the routes as perceived by the players in the region. It is worth emphasizing that maritime trade is significantly more efficient than overland trade and it is not being suggested that land transportation projects will replace the flow of trade through the Suez Canal. What is being suggested is that the overland projects will provide diversification and flexibility in trade routes and the creation of excess capacity in view of potential barriers that may arise at one of the chokepoints described above, as well as providing logistic services to in-land destinations.

From a geographical perspective, the overland routes can be divided into two categories: routes that connect the Red Sea to the Mediterranean and routes that connect the Persian Gulf to the Mediterranean.

Suez Canal (Egypt): The original canal was inaugurated in the mid-19th century. When President al Sisi came to power in Egypt in 2014, a project to expand the Suez Canal was announced that would include a doubling of its width (though not along its entire length) with the goal of allowing more and larger ships to use the canal. The expanded canal was partially opened in August 2015. Alongside the expansion of the canal, the project included the establishment of industrial parks alongside it. The expansion of the canal was funded by Egyptian internal sources, including a loan from its citizens and the voluntary collection of gold jewelry in the streets. This is a national project that was financed independently, an important achievement for Egypt. The expansion of the canal was accompanied by the building of transshipment ports and industrial parks in order to provide employment to Egypt's huge and relatively young population and in order to take advantage of Egypt's position along the canal, which is a major global trade artery, while providing additional export, logistics and port services.

Apart from the element of self-reliance, the Chinese Tianjin Economic-Technological Development Area (TEDA) company³ built and invested in an industrial park outside the city of Sokhna at the southern end of the canal. In the context of national infrastructure development in Egypt, it is worth also mentioning the building of the

³ For further information see. <u>http://www.setc-zone.com/eng/zatdsysjmhzq/index.shtml</u>.

new administrative capital of Egypt which will be located in the area between Cairo and the Suez Canal.

Europe Asia Pipeline Company (EAPC) – Formerly Eilat Ashkelon Pipeline Company (Israel): During the 1960s, a joint project was carried out by Iran (pre-revolutionary Iran under the rule of the Shah) and Israel which included oil terminals at the cities of Eilat and Ashkelon and a pipeline between them. Over the years, the Company's energy infrastructure was expanded to allow for the two-way flow of oil, the enlargement of the Company's storage and the expansion of its activity also to natural gas.

All of EAPC's activity is confidential according to law and is not subject to public scrutiny (*Law for Oil Conveyance and Storage by an Operator*, 2017). Israel and Iran are currently in a process of international mediation—at least officially—with regard to the profits from the project (Harris, 2013).

Connection of a rail line to the city of Eilat (Israel): The idea of connecting the southern city of Eilat to the Israeli national train grid was already proposed in the 1950s and is brought up for public discussion in Israel every few years. Such a rail connection would make it possible to transport goods by rail from the port of Eilat on the red sea to Israel's Mediterranean ports and from there to Europe and also in the opposite direction, thus circumventing the Suez Canal. In theory, this can already be done today using trucks (and indeed there are sometimes containers that are transported overland from the port of Ashdod to the port of Eilat in this manner); however, this occurs only on a small scale and transportation by truck is not feasible on a large scale.

From an engineering perspective, this is a massive project but nonetheless feasible. Such a rail line would be about 300 km in length from Eilat to the city of Dimona and from there the goods would be conveyed by existing rail lines to the port of Ashdod or Haifa. The rail line would pass through the Arava desert region which is part of the Great Rift Valley, an almost completely desolate strip of land about 200 km in length through which the rail line would reach the southern Dead Sea area, which is about 400 meters below sea level. From there, it would climb 1200 meters to Ramat Arad (at the heights of 800 meters). Such a project would also involve moving the port of Eilat from its present location (see below).

It is not within the scope of this chapter to discuss the project in detail. We would only mention that a project of this scale would naturally have both positive and negative impacts of various types (for a more detailed discussion, see Feitelson et al., 2013). If and when Eilat is connected to the Israel Railways system it will apparently have a huge positive impact on the development of the Arava and Negev regions, as well on regional commerce; however, it will also have an adverse effect on the economic and demographic fabric of Eilat, and will have far-reaching implications for the marine environment in the Gulf of Eilat. It is also worth mentioning the possible geostrategic implications for relations between Israel and Egypt.

The current port of Eilat is quite small and is meant to meet only the local needs of the Israeli economy. Israeli trade with the ports of Asia travels through the Suez Canal on the way to Israel's Mediterranean ports. Eilat's port cannot handle the flow of global trade and from a geographical perspective, namely due to mountain ridges surrounding Eilat, there is no room for the logistic yards that such a large port would require. The quarrying of the hard granite mountains around Eilat in order to build a logistic yard would be difficult and costly. The upshot is that if it is decided to make the port of Eilat into a major port it must be moved northward to the area of Nahal Arava, located on the border with Jordan, and it will be necessary to build a canal port, such that a ship will enter an excavated canal and its cargo will be transferred by cranes from both sides. From an environmental perspective, such a project will destroy the coral environment due to the suspension of sand in the water. From an economic and demographic perspective, the project would transform Eilat from a tourism and marine center into a port city, since massive ships and trains cannot coexist with tourism.

From an economic perspective, the basic analysis points to the high cost of construction due to the topographic obstacles, which require the establishment of a double rail line and uninterrupted railway traffic in order to justify the financial investment. Such railway traffic will feed into the Israel Railways system which is already overburdened. For example, cargo trains do not currently travel during the daytime in order leave the routes open for passenger traffic, primarily during rush hour. Thus, such a project will place a burden on the existing railway infrastructure in the Center of Israel at the expense of passenger traffic.

While the business sector in Israel of course supports the project and both Prime Minister Netanyahu and Minister of Transportation Miri Regev have spoken of its necessity, the connection of the port of Eilat to the railway network has political, social and environmental implications that will likely delay its implementation for many years. The main political implication is competition with cargo traffic through the Suez Canal. The new Suez Canal is the flagship project of President al Sisi and the project could be interpreted as an Israeli provocation. The revenues from the Suez Canal are estimated in 2019 to be 104.6 billion Egyptian liras (\$6.65 billion) which represents about 10 percent of the Egyptian government's total revenue (Reuters, 2020). In other words, the building of a rail line might be interpreted as an economic threat to Egypt, as a provocation to the Egyptian President personally and as a threat to Egypt's state revenue, even if overland transportation would not constitute a major threat to the flow of cargo through the Suez Canal. The peace treaty signed between Israel and Egypt in 1977 is one of Israel's main strategic assets and it can be assumed that Israel does not want to endanger it (Halevi, 2014).

The second issue is social-demographic and is related to the character of the city of Eilat, which is currently a tourist city whose main revenue is generated by hotels. It offers recreation on the coast of the Red sea, diving among corals, sailing and numerous other attractions in a desert atmosphere. It has a population of about 50 thousand and it is visited by over 2.5 million tourists annually, much of which is domestic tourism (ISR Ministry of Tourism, 2020). Becoming a regional hub port that is part of one of the world major trade route would mean transforming Eilat into a logistics center. Tourism and water sports cannot coexist with the traffic of massive ships and the continuous arrival and departure of train traffic.

Thus, it would appear that a project to connect the port of Eilat to Israel's national railway system would be a problematic venture and an expensive—though feasible—engineering endeavor. Such a project is also feasible from the perspective of internal Israeli politics and does not require international coordination as do cross-border projects. Nonetheless, it is strategically problematic for Israel's relations with Egypt and if it is carried out will completely transform Eilat – from a tourist city to a logistics center and there will be huge implications for the local population as well as for the marine environment in the northern part of the Gulf of Eilat.

An Aqaba-Ma'an-Irbid-Haifa railway connection

The port of Aqaba is Jordan's only access to the sea. The Jordanian coast is only about 26 km long and there is a shortage of coastline for the building of infrastructure.⁴

Jordan's population is largely concentrated in the northwestern region of the country, about 400 km from the port of Aqaba. In other words, cargo that is handled at Aqaba has a long overland distance to travel either to or from the country's population and

⁴ An exchange of territory between Jordan and Saudi Arabia, which was carried out within the framework of a 1965 agreement, gave Jordan additional waterfront.

industrial centers. The port of Aqaba also exports phosphates which are brought there by a slow rail line that connects the city of Aqaba to the city of Ma'an.⁵

The Jordanian railway network is in a rundown condition and most transport of goods is by truck. From a historical perspective, the Hijazi railway line cuts across Jordan from North to South but is not operational. According to media reports, Jordan has completed a feasibility study for expanding the old—though still active—railway line from the port of Aqaba to the city of Ma'an. According to the reports, the building of the railway line will be financed by the Saudis. The city of Ma'an is located on the historic Hijazi rail line and there are plans to rehabilitate it (Jordan Times, 2019).

From a geographic perspective, the most attractive option for logistically serving Jordan's large population centers in the northwestern part of the country is from the port of Haifa which is only 70 km from the border crossing between Israel and Jordan near the city of Beit Shean (the Sheikh Hussein Bridge). Israel recently inaugurated a new railway line to the city of Beit Shean and there is work being done to connect it to the border crossing. (The new railway line is also following the route of the branch of the Hijazi train). From the border crossing, it is only 30 km to the city of Irbid and 70 km to the capital of Amman, as opposed to 400 km and 330 km, respectively, from the port of Aqaba.

In other words, by building a railway line of only a few dozen kilometers to the northwestern part of the country, it is possible to logistically serve the large population centers in Jordan from the port of Haifa on the Mediterranean and by means of a modern railway system. This will eliminate the need for goods traveling between Jordan and Europe (such as fresh agricultural produce) to traverse the Suez Canal. Not only is the route much shorter but it also saves the cost of passing through the canal,⁶ the cost of transshipment at the port of Aqaba and the overland transport of goods for about 400 km between the port of Aqaba and the northwestern region of Jordan (Frantzman, 2018).

⁵ During the Iran-Iraq war, Iraq's ports on the Persian Gulf were closed. As a result, all of Iraq's trade flowed through the port of Aqaba. This was a period of prosperity for the economy of southern Jordan through which trucks carrying goods traveled for hundreds of kilometers by way of the desert. In peace time, when Iraq's ports are operating normally, the transport of goods between the port of Aqaba and Iraq is too costly, and certainly in the case of trucking (as opposed to rail transport).

⁶ The cost of passing through the canal for a medium-sized ship can be up to \$250 thousand.



Figure 1: The distance for overland transport from the ports of Haifa and Aqaba to the Irbid area in Jordan (author's modifications of the original picture – Almuhtady et al., 2019)

In addition to the possible railway connection between Israel and Jordan in the area of Beit Shean, Israel is conveying water to Jordan in this location in compliance with the 1996 peace treaty between the two countries. Furthermore, a gas pipeline is currently being built from Israel's gas fields in the Mediterranean to Jordan in the same route. The sale of the natural gas is by way of an Italian mediate company (Reed, 2014; Cohen and Barakat, 2014).

The overland corridor from Haifa to Jordan and the Persian Gulf states

A discussion of the overland corridor that connects Haifa on the shores of the Mediterranean and Jordan must also take into account the countries located beyond Jordan, to the East and to the South, namely Saudi Arabia and some smaller states

(the UAE and Bahrein) which are located on the Persian Gulf. There are numerous reports in the media of a warming of relations between Israel and the Sunni world, thus strengthening the alliance against (Shiite) Iran, the common enemy. In this context, it is of course worth mentioning the normalization agreements between Israel and the UAE (the Abraham Accords) and between Israel and Bahrein, which were signed in September 2020 at the White House.

In addition, there are friendly relations between Israel and Oman and Prime Minister Netanyahu visited the Omani Sultanate in 2018 (Government of Israel, 2018). These developments would not have been possible without the explicit approval of Saudi Arabia, the dominant player in the region.

Saudi Arabia is surrounded geographically by three straits: the Strait of Hormuz in the East, the Bab el Mandeb Strait in the South and the Suez Canal in the North. Saudi Arabia is experiencing rapid infrastructure growth which includes a railway network on a more or less East-West axis and the development of ports on the Red sea. These projects are also partly a reaction to the Iranian threat on its eastern shores and the shift of economic activity westward, partly due to national programs for the diversification of the country's economy away from the traditional dependence on oil exports (Saudi Vision 2030). Nonetheless, in addition to the Saudi move westward, the country is definitely interested in diversifying its trade routes, with the goal of providing alternatives to the sea route that passes through the aforementioned straits. This includes an overland route to the Mediterranean by way of Jordan, by means of connecting the road systems (and rail lines in the future) of Saudi Arabia and Jordan at the Al Hadithah border crossing and from there using the Jordanian transportation system in the direction of the port of Haifa.

The UAE and Bahrein are in an even more difficult position, in that their sea trade is by way of the Strait of Hormuz which is under Iranian control. Thus, they would definitely be interested in the diversification of their trade routes to the west by way of a land corridor to the Mediterranean.

A railway connection, as described above, between the port of Haifa on the Mediterranean eastward to Jordan's population centers and from there to the city of Irbid and the capital city of Amman and southward in the direction of Aqaba on the basis of the historic Hijazi rail line, as planned by Jordan, on the one hand, and in the direction of Saudi Arabia, on the other hand, will connect the Indian Ocean and the Mediterranean. Such a connection makes a lot of sense economically and essentially will connect the cities of Jordan to two ports – in the South, a port on the Red Sea- Aqaba, and in the West, a port on the Mediterranean- Haifa.

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However, the establishment of long-distance trade routes across the Middle East would create significant security challenges to protect the routes against terror and crime.

The possibility of using the port of Haifa to serve northern Jordan is feasible and has been discussed for many decades. As described, Israel and Jordan are connected through the supply of water and in the near future through the supply of gas. Nonetheless, and despite the economic and commercial advantage of transshipping goods by way of the port of Haifa to Jordan, there is no significant movement of goods along this route. There are two main reasons for this:

The first is opposition on the Jordanian street to any ties with Israel. In this context, it is worth mentioning that the Palestinian minority in Jordan makes up about 30 percent of the population and therefore there is opposition to consuming goods that arrive by way of Israel. The second is that by local Jordanian procedure, containers are prohibited to be transported through the border crossing between Israel and Jordan and the goods must be transferred "back to back" from one truck to another. The transfer of the goods between trucks is time-consuming and does not allow for trade on a large scale. This situation is the result of both security considerations and Jordan's desire to maintain as much economic activity in the port of Agaba as possible, in addition to the fact that the King's power base is located in the South of Jordan, where Agaba is located (Ehud Gonen, 2020).⁷ For these reasons, and despite the large-scale plan for reviving the railway network in Jordan, including from the city of Aqaba northward, Jordan is not apparently planning a connection to the border crossing with Israel at this stage. This is despite the fact that this would be a short connection of only a few dozen kilometers that would reduce the costs of Jordanian trade.

Overcoming the political issues of a trade route between Israel and Jordan can be accomplished by the mediation of a foreign operator, as in the case of the gas pipeline between Israel and Jordan (which as mentioned is mediated by an Italian company) or by means of a partnership with companies from the Arab countries that would operate the old port of Haifa (the current government owned port), which is currently in the process of privatization. Press reports have mentioned the interest of a Dubai company in being part of a consortium that would purchase the port (Ben Gedalyahu, 2020). A partnership with a Dubai company in the port of Haifa may blunt the public opposition in Jordan to trade by way of Israel.

⁷ Gonen, E. (2020). Interview with prof Professor Asher Susser.



Figure 2: Summary of the discussed trade routes

Trade between Jordan and Syria has often been disrupted in recent years due to the closing of the border crossing between the countries due to the civil war in Syria. Nonetheless, the border crossings between Jordan and Syria at Nassib and Alramatha were opened in 2019 and it appears that Jordanian traders prefer this route to the Mediterranean by way of ports in Syria and Lebanon over the route to Haifa. This is in spite of the superior logistical infrastructure in Israel and the lack of political stability in Syria and Lebanon.

The border crossings from Iraq to Syria (the Shiite crescent) are marked in green; the border crossings between Saudi Arabia and Jordan are marked in black. The existing rail lines are marked by solid lines; planned rail lines are marked by dotted lines.

An oil pipeline from Iraq to the Mediterranean

Connecting the large oil reserves in Iraq by means of a pipeline to a port on the Mediterranean will enable the flow of oil while circumventing the Suez Canal and shortening shipping times to Europe. A pipeline has a relatively high capacity (which is of course dependent on the diameter of the pipeline, the type of pumps, etc.). There are three main historic routes for oil pipelines in the region that's depart from Kirkuk (Iraq): the Kirkuk-Haifa line (Israel), the Kirkuk-Baniyas line (Syria) which branches off from it and the Kirkuk-Ceyhan line (Turkey).

The Kirkuk-Haifa oil pipeline: During the British dominance of the Levant following the First World War, a 940 km oil pipeline was built from the city of Kirkuk in Iraq to the refineries at the Bay of Haifa on the Mediterranean. The pipeline's route connected Iraq and Mandatory Palestine by way of Jordan. Pumping stations were built along the length of the pipeline and airports were built alongside it, most of which are still in use today. The pipeline was in operation during a period of 13 years (1936–1948) until the establishment of the State of Israel. There are no plans to build a new pipeline along this route.



Figure 3: The oil pipelines from Iraq to the Mediterranean – the Kirkuk-Haifa line (Israel), the Kirkuk-Baniyas line (Syria) that branches from it and the Kirkuk-Ceyhan line (Turkey). (Source: the author)

In 1952, a branch of the pipeline was added that connects the city of Haditha in Iraq to the port city of Baniyas in Syria (the Kirkuk–Baniyas pipeline). This branch operated until 2003. Syria, which is ruled by the Alawite Baath party, supports Iran

and therefore it was not willing at times of political tension in the region, to provide Iraq with access to export its oil to the Mediterranean sea through its territory. A subsidiary of Gazprom, the Russian gas company, won a tender to rehabilitate the Syrian portion of the pipeline; however, it does not appear that the pipeline will be rehabilitated but rather it will be reconstructed. If this does occur, it can be assumed that the Russians, who have a significant presence in Syria and engineering capabilities for building a long-distance energy pipeline, will be the ones to implement it.

The **Kirkuk-Ceyhan pipeline** was built in the 1970s and circumvents Syrian territory. The pipeline is active despite repeated attacks on it as the security situation deteriorates in Iraq and on the southern border of Turkey.

The Shiite Crescent

The Shiite crescent is a land corridor that Iran is trying to establish based on a Shiite continuum or the presence of local pro-Shiite groups from Iran to the Mediterranean coast of Syria and Lebanon.

The motivation for building this corridor is primarily based on a military strategy to provide logistic support to Shiite militias that are loyal to Iran in Syria and Lebanon (Hezbollah) and to allow for the movement of military forces along this route and perhaps in the future to establish a naval base or a port on the Mediterranean coast in Syria or Lebanon. Such a corridor will cross the border between Iraq and Syria, primarily in the area between the city of Qam in Iraq and al Bukamal in Syria or south of there in the area of the city of Rutba in Iraq.

This corridor would achieve the strategic objectives of Iran and would allow it to "paddle their feet" in the Mediterranean. More than being an overland logistic corridor for purposes of trade, this is a geostrategic initiative to fulfil Iran's aspirations for religious and national expansion. Iran supports President Assad in the civil war in Syria (which began in 2011) and it is possible that part of the war's endgame from the Iranian perspective is a permanent presence on the shores of the Mediterranean.

Discussion and Conclusion

Following is a table summarizing the main routes discussed above between the Red Sea and the Mediterranean, both existing and planned, including the initiators and the sources of financing:

Route	Initiator and sources of financing	Comments
Expanded Suez Canal	An Egyptian initiative that is self- financed and self-built. There is Chinese involvement in the projects alongside the canal (industrial parks and parallel rail lines).	Long-distance sea transport is more efficient, cheaper and cleaner in terms of ton per km than any other type of transport. The Canal will remain the main trade route between the Mediterranean and the Indian Ocean for the foreseeable future.
An Israeli rail line to Eilat	An Israeli initiative, apparently with Chinese involvement in financing and construction.	Development of the southern part of Israel. Develop regional trade and the Asia-Europe trade.
		Serious demographic and environmental consequences for the city of Eilat.
Haifa-Irbid rail connection	The Israeli portion will be implemented by Israel (and has almost been completed). The Jordanian part will have international financing probably involving Japan, the World Bank and Saudi Arabia (Gonen, 2018) ⁸	Economically efficient for Jordan and profitable for Israel. The political opposition in Jordan means that the project will remain on the drawing board and there is no actual planning to implement the project. It will provide connectivity to Saudi Arabia and the Gulf State countries.
Aqaba-Amman rail connection	A Jordanian initiative financed and supported by the Saudis and others.	
Iraq-Syria oil pipeline	An Iraqi-Syrian pipeline being built by Russia.	Political friction between Iraq and Syria and an unstable security environment (potential for sabotage) limit the feasibility of the project for the foreseeable future.

- 1. The growing presence of China in the Levant region as part of the Belt and Road Initiative: It appears that the involvement of China in trade and logistic infrastructure in the Levant region at this stage is focused primarily on the domain of seaports. Despite the discussions and the various media reports, it is reasonable to assume that there will not be any major Chinese investment in cross-border overland trade routes in the Levant at this stage. This is apparently due to concerns about political instability in the region. It is possible that China will be involved in logistic projects that do not cross borders (Evron, 2019).
- 2. The rise of Iran: The rise of Iran as a regional power has led to the creation of a regional alliance of Sunni countries together with Israel. This alliance was formally established with the signing of the Abraham Accords between Israel and the UAE in 2020. From the viewpoint of trade routes, it appears that the rise of Iran is pushing Saudi Arabia to diversify its trade routes and to transfer infrastructure to the seaports on the Red Sea in the west of the country, in an effort to circumvent the Strait of Hormuz. In addition, it appears that there are Iranian efforts to

⁸ Gonen, E. (2018). Interview with Japanese diplomat stationed in Israel.

establish a land connection between Iran and the Mediterranean, perhaps including a future naval base on the Mediterranean in one of Syria's ports. These efforts have met a determined military response from Israel.

- 3. The rehabilitation of Syria and Lebanon: There is deep Russian involvement in Syria, which includes a naval base and an air force base, as well as a long-term leasing of land at these locations by the Russians (for further details on the Russian presence, see Gilead, 2019). It appears that the Russians will try to collect "payment" for rescuing Bashar el Assad from the revolt against him that started in 2011 by means of, among others, economic compensation, such as royalties from infrastructure use and from energy assets in Syria. Pursuant to paragraph (a) above, it does not appear that any major Chinese investment will be made in Syria in the foreseeable future, since the country is under strong Russian influence and Syria represents a higher political risk profile than China is willing to deal with. Nonetheless, it is possible that there will be Chinese involvement in the financing of the rehabilitation of the port of Beirut following the explosion that destroyed large parts of it (on August 4th, 2020). This is the kind of investment that is in line with Chinese involvement in the region, as surveyed here.
- 4. The US has not been mentioned in this document and that is not without reason. It appears that the US and American companies are not active in logistic infrastructure in the Levant.
- 5. There appears to be a low potential for the implementation of cross-border projects in the current political situation in the Levant. Projects that are contained within the borders of a single country (such as the Suez Canal and EAPC) operate without any disruption and there is a high probability that such projects will be implemented in the future (such as connecting Eilat to the Israel rail system). However, the coalition of Sunni countries against Iran, which has been forced to include Israel, raises the chance of large projects involving trade routes in the Sunni-Israel space. This includes the connection of Saudi Arabia, the Persian Gulf states and Jordan to the network that also includes the port of Haifa, although these large-scale projects face political obstacles that arise from the continuing conflicts in the Middle East and the major security challenges involved.

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