The Gas Exploration Licenses are seeking a new direction – Getting on the right track – (By Gina Cohen) 9th July, 2017

The additional postponement of the oil and gas licenses exploration tender, that the Ministry of Energy announced, leads to the conclusion that there is something problematic in the current approach and that under the current circumstances nothing is about to change ■ Why did our neighbors succeed in their tender, how does the timing influence mattes, is it all really political, and what nevertheless could still be done to change the picture and bring positive results

The tender for granting new exploration licenses has been postponed yet again, and this has to be a signal to us. Nothing is likely to happen by the 15th November to entice companies to bid.

The Minister of Energy is not at fault. The Ministry gets an "A" for having the courage of its conviction for holding the tender under very difficult circumstances and an "A" for the work, effort and professionalism put in the marketing process.

Despite the fact that some of the world's major companies have bid in the tenders held this year in Cyprus, Egypt and Lebanon, they decided to give Israel a wider berth.

Thus, at the end of the day we must draw a conclusion: there has been a total freeze in new exploration in Israel for the last years, and under the current circumstances nothing is about to change.

What we need is to adopt a new path, as postponing the tender and adopting a "more of the same approach" is unlikely to lead to different results.

What I will try to do below is give a couple "out of the box" ideas that will provide positive results by the end of this year and for the forthcoming years. The gas sector is waiting for a clear signal from the government that it means real business and fully intends to promote the Israeli gas exploration sector and the entire value chain that would derivate from successful discoveries of petroleum in Israeli waters.

In this article, I will thus analyze most of the pertinent reasons behind the ongoing postponements of the tender and conclude by providing ways to gain positive momentum in the sector.

1. **<u>Geological prospect for a discovery</u>**

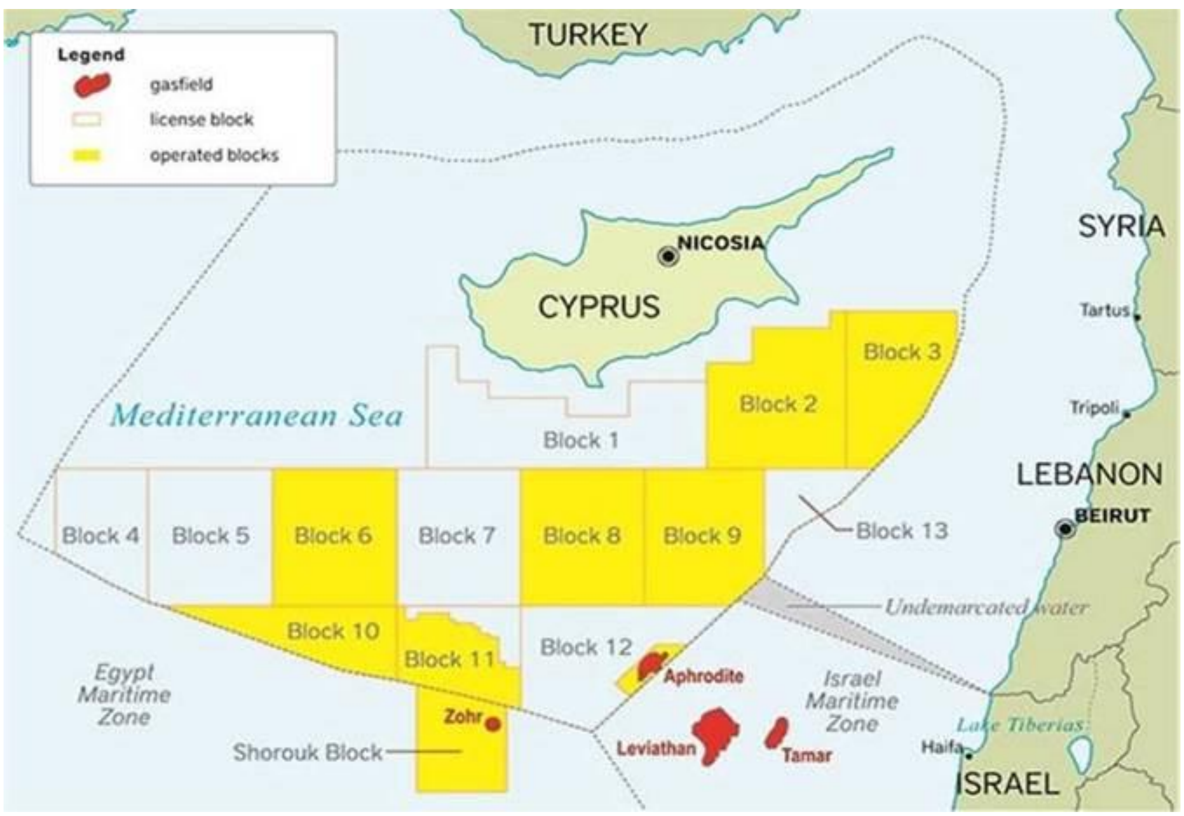
If everything else was perfect, but if the geological prospects were non-existent, holding a licensing tender would of course be futile.

On the geological level, Israel has proved to be a prolific region with significant proven gas discoveries. In addition, the Ministry hired the services of the French company Beicip-Franlab that concluded there was a potential to discover up to another 2,317 bcm of gas. This compares with the c-1,000 bcm discovered to date.

The Zohr discovery made offshore Egypt in August 2015, found in a previously unknown carbonate layer, has piqued the interest of oil companies around the world to undertake new exploration operations in the East Med. This indeed bodes well for more large discoveries to be made. However, Luca Bertelli, Head of Exploration of Eni, the operator of Zohr, stated in March that "most of the prospectivity akin to Zohr lies in Cyprus's EEZ" (i.e. not in Israel's).

The geological opportunities in Cyprus, Egypt and Lebanon present potentially easier prospects because Lebanon has not yet conducted any exploration, so their low-hanging fruit such as those to be discovered in their own Tamar and Leviathan sands are still to be discovered. The companies that have taken up licenses in Cyprus believe that the Zohr play extends well into the Cypriot blocks and have especially high expectations for Block 11 where drilling by Total and Eni is planned this year. This is despite the fact that Eni & Kogas failed to make a commercial discovery in 2014 in what was their most promising block 9.

Yet, Israel does have some interesting leads that have already been identified as well as the potential for a number of more fields and we need to be able to attract those companies that are best able to identify, develop and bring these to market.



2. Data Packages Offered in Tender Process

Besides the geological prospects, the data package provided to the bidders is of importance to the success of the licensing tender. If no data exists for a specific area, that is acceptable. However, what oil and gas companies abhor is knowing that data exists but they are unable to access it, causing them to be concerned that they are not on a level playing field (others may know more than they do) or that the host country is hiding something.

In this respect, I give credit to the Ministry of Energy for providing comprehensive bid packages containing pertinent information including extensive 2D seismic coverage of the licenses offered (excluding the North). The data was sold at the very reasonable price of $50,000.

True, this package could have been improved by having seismic companies conduct speculative 3D surveys (namely carry out surveys at their own expense, and sell the data to potential bidders). However, before investors conduct such surveys they would need to ascertain that they have at least 5-10 clients. Since, the majors were unlikely to bid in the tender for political reasons, and since most of the Israeli companies were excluded from the process, 3D surveys were not carried out.

3. Why was Lebanon, Egypt, Cyprus successful in their bids

Other issues differentiate Israel from these three other countries. They each have unique advantages, or have experienced positive changes of late, that Israel did not.

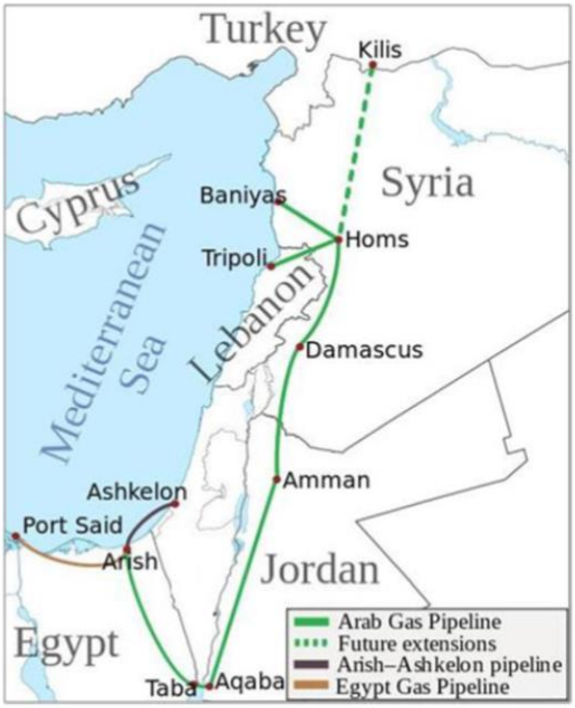
Egypt – Companies have a history and knowledge of operating in Egypt and many have maintained a base of operations in country. Thus, although they stopped most exploration operations because of the very low price offered by Egypt ($2.70 per MMBtu), once President A-Sisi's regime improved the terms offered to $4-$6, it was easy for the companies to pick up where they left-off five years ago. The fact that Egypt has greater demand for gas (c-60 bcm/yr and rising to 70 bcm by 2020) than what is currently produced (c-45-50 bcm/yr), provides one of the other most important factors required to attract companies: a market.

Egypt also has extensive available infrastructure which makes development and marketing so much cheaper.

Lebanon – In Lebanon a change has occurred where the rival parliamentary parties reached a compromise on a new electoral law, which paves the way for elections next year. This will enable them to prevent a recurrence of the political paralysis the country has suffered since 2014 and will enable them to move ahead with the ratification of two key oil and gas decrees that have so far been delayed.

In addition, if Lebanon does find gas, it has a ready market to sell into, as their power sector reportedly requires 140 bcm of gas over the next 20 years.

Regarding potential exports of gas from Lebanon, the Ministry is promoting the view that Lebanon holds friendly relations with Syria, Turkey, Cyprus, Egypt, Jordan and the EU, and that their future gas could easily reach Syria, Jordan and Egypt through the Arab Gas Pipeline (AGP), whilst Turkey can be reached by an extension of the AGP, or through a short offshore shallow water pipeline.



Cyprus – In Cyprus' favor is the fact that it is a European country and as such there would be no market restrictions on it to export gas, by either pipeline (except to Turkey) or as LNG. If large reserves are found, this could even warrant the construction of an LNG facility, potentially as a joint venture between existing operating companies in Cyprus such as Qatar Petroleum, ExxonMobil, Shell, Total, Noble and Eni. All this despite the fact that they were unsuccessful to attract bidders in their first licensing round in 2007 and Aphrodite that was discovered in 2011 has not yet been developed.

Israel: The reasons for holding the licensing round in Israel are clear: The Israeli sea was closed to new licensing first in 2002 and then again in 2012; the companies that had discovered gas were branded as a monopoly; Cyprus, Egypt and Lebanon had all moved ahead with their licensing rounds; the ongoing regulatory hurdles slowed down the sector – starting from Sheshinski and ending with the gas outline.

All this was combined with a number of studies from global entities such as BP, Bloomberg or the IEA predicting anything from a slow-down to the eventual demise of fossil fuel and its replacement by renewable energy, electric cars, energy efficiency and conservation.

This led to one conclusion: there was no point in keeping the gas in the ground and thus the Ministry was correct to hold the licensing tender.

4. <u>Geo-politics</u>

When I asked an overseas colleague of mine what was the number one reason for the tender not taking off, he responded with no hesitation: the political reasons. So, let's call a spade a spade: the major oil and gas companies with significant Middle East representation, namely nearly all of them, will not come to Israel, in view of the political difficulties. Companies such as ExxonMobil have major assets in Saudi Arabia as well as in Qatar and they don't want to complicate life for themselves.

The kind of companies that could certainly be attracted to the area, are mid-size companies that only want to make money, and really don't care about the politics. The problem they face in Israel is that the hydrocarbon potentially available is the more complex gas, all the blocks are offshore and the biggest reserves have probably already been discovered. The subsea structures that remain are possibly less well defined, require extensive resources, potentially beyond the financial reach of small or mid-size companies.

American mid-cap companies that would be the obvious candidates for working in Israel, and whom Minister Steinitz rightly addressed in his road-shows in the US, are now facing a different kind of America under Mr. Trump, as the President is re-opening and easing all energy related operations in the US. Thus, America is probably at this moment attracting the same kind of people that in different times would potentially have been keen to explore offshore Israel.

5. Terms and conditions

These include both the licensing terms, namely the requirements to receive a license, and the fiscal terms, namely the taxes that apply after gas is discovered and is to be sold.

The licensing terms demanded by the Ministry in the tender include onerous terms required to qualify as an operator. Although these are the norm around the world, I will nevertheless give some ideas of how this could potentially be done differently (see under 'what next').

The fiscal terms – These are onerous and not in line with the global times or the circumstances in Israel. Changes in legislation indeed occur frequently around the world, but such changes are not done arbitrarily, just because a discovery has been made, or because the state wants a bigger take. Rather they are implemented in circumstances such as when oil and gas prices increase, when windfall profits are expected to be made on new discoveries, or there is too much oil and gas.

To revert back to Lebanon, as an example, although they too had stringent licensing terms, they also included a "stabilization clause" and fiscal terms that can be bid on by the contenders (such as maximum state profit), so companies are able to bid based on terms they find acceptable.

One way to improve the situation in Israel would be to reduce the taxes on gas. This can be done both at source by reducing royalties and the Sheshinski tax on new discoveries and at the consumer level, ensuring low or even zero excise tax on CNG for industry and transportation.

6. Market

One of the vital elements before companies agree to spend money to explore in a gas prone area, is the need to have a market.

According to consultant Miki Korner, although taxes, prices and regulations are critical regarding companies taking an investment decision, nevertheless first and foremost the energy companies want to ensure they have a market for any gas they might discover. Oil is a global commodity and its main parameter is its price. Gas is much more a locally consumed product with 90% of gas around the world transmitted to consumers that can be reached via pipeline. Companies are therefore examining if there is a readily available market for them in Israel (or a credible ability to supply to neighboring countries) before they embark on a new drilling expedition here.

Israel - The answer regarding Israel is yes, there is a market, but the government needs to take a number of decisions and actions. Gas consumption in Israel currently amounts to only 1/3 of total energy consumption. Within a decade, this figure could increase to 60%, namely to 20 bcm/yr. For this to be realized though, the government must commit as soon as possible to reduce the use of coal, to bring in CNG, to develop new gas based industries (GTL, ammonia, methanol) and establish the pertinent infrastructure.

Regarding infrastructure, despite progress such as on the Eastern Line that was inaugurated last month, the system cannot transmit double today's volumes, until substantial more developments have been completed such as in the critical southern line and other branches. Insofar as the distribution lines, the government needs to focus its efforts in overcoming the hurdles placed by the municipalities and should preferably help fund the distribution lines in return for lower tariffs (as opposed to providing such funds to the consumers).

Exports – If an LNG liquefaction facility could be constructed in Israel, it would be much more difficult, even under normal circumstances, to sell the LNG then it would be for Cyprus, as a number of markets would be closed to us. Under the current global LNG market conditions, characterized by a glut of supplies, Israel would have a hard time competing on this front.

Insofar as exports by pipeline, most of the Ministry's efforts have been invested in the East Med Pipeline. This is an ambitious project that would connect the Israeli gas fields to Europe, via Cyprus, Crete and Greece, landing in Italy, in a 2,000 km offshore pipeline. If the Ministry is fully behind such a project and is promoting it as one of the major future export outlets for the new gas to be discovered, it should work with the relevant EU countries and the EC to bring the pre-constructing financing to conduct a study of the technical and commercial feasibility of this project.

Once the international companies see that these countries are actively pursuing a project and that the project is commercially viable, they are much more likely to show an interest in undertaking exploration.

7. Timing

Timing is everything, in many aspects of life, and certainly when one conducts such a licensing tender.

Thus, despite the clear-cut reasons for holding the tender as explained above, nothing has actually changed in Israel, except for the political desire to hold a tender, and this is a bit tenuous. Certain conditions need to occur for a successful outcome.

In fact, the timing is potentially as bad as it gets, because global O&G companies have dramatically cut their exploration budgets, the world gas market is glutted with supplies for the next few years and the price of oil is refusing to budge.

In terms of timing, since there was insufficient interest in the tender, the Ministry took the right decision to postpone it. However, when November comes, I would advise not to postpone the tender's due date again. There is little justification to pick it up again until market conditions improve. Instead, I would in the meantime prepare a plan B to be put in place for immediately after the tender closes. This plan B should be based on a two-phased approach (see below).

What next: "the Israeli way"

If my British colleague is correct that the main reason is politics, then we have to come to terms that it is unlikely that International Oil Companies (IOCs) will be banging on our door. This is even more so under the difficult and volatile conditions prevailing in today's local and global market.

We therefore have to recalculate our path and enable entities already active in Israel to bid for rights and regenerate the exploration activities in the oil and gas sector. Without further exploration for oil, the country will not achieve its goals to play a geopolitical role and any aspiration to initiate regional projects, such as the East Med pipeline will not mature.

The way to do this, is not to modify the Ministry's criteria for operators, but rather to split up the exploration work into two distinctive phases.

The first phase would be non-invasive 3D seismic and interpretation work (a no drilling reconnaissance contract). A number of experienced oil and gas entities, which include several Israeli based oil exploration entities, would be able with a budget of $15-25 million to carry out this initial stage.

The second phase would be the actual drilling, at which point an international operator could join in. Indeed, if an interesting drilling prospect was found and if a-priory the regulations encourage the development of commercial discoveries, the international companies would be more likely to allocate significant funds for drilling an exploration well.

This two phased approach enables to keep the tender alive and is a win-win situation. Of course there needs to be appropriate regulation in place linking the two stages, so that the reconnaissance contract can be converted into a petroleum operations contract at the conclusion of phase 1, and set clear terms for the process.

Some of the additional elements needed to make the Israeli tender more attractive include:

- The review of some of the clauses in the 2013 Government decision, such as some of the export restrictions or the requirement to connect all future fields to the Israeli market.
- Market is everything - increase gas consumption in the Israeli market, such as by giving clear government commitment to convert coal to gas in the power sector.

Conclusion

The operation of carrying out the licensing round was both a worthy exercise to do and it was carried out in the best manner feasible. The fact that it is falling short of its goals is unfortunate for all of us.

What is the main reason from the seven points mentioned above, and a few not mentioned, that we were unable to attract bidders? Any number is a winner. What I am quite certain about, is that the combination of all of the above means that putting it on life-support for another 4 months will not help. We thus need to look out of the box and come up with a new solution for the exploration phase whilst constantly focusing on how to bring the gas to market.

Other countries in the neighborhood such as Cyprus, Lebanon and Egypt have managed to attract contenders, because they each received certain positive signals, despite that fact that each country suffers from inherent complexities.

So what should we do? Well, I don't usually like re-inventing the wheel so we can either wait until circumstances change or maybe this time let's get on the right track and do it **"the Israeli way".**