WHAT ARE THE ENERGY PRIORITIES OF THE NEXT GOVERNMENT?

Theodore Tsakiris Assistant Professor for Geopolitics of Hydrocarbons, University of Nicosia

The discovery of gas reserves in Block 12 (December 2011) and the successful conclusion of the negotiations with ENI/Kogas and Total for the awarding of Blocks 2,3,9,10 and 11 (January-February 2013), constitute the two landmark developments of the last five years on Cyprus' road to becoming a major oil & gas exporter.

More importantly, the diplomatic alliances Cyprus is developing around its hydrocarbon concessions, along with Turkey's maximalistic intransigence, have made it difficult for Ankara to prevent major international oil companies from investing in Cyprus' Exclusive Economic Zone (EEZ).

Despite these successes the ride is going to be both long and bumpy. It would take at least until 2017/2018 before any gas from Aphrodite is used in Cyprus and another two years before it is exported from the future LNG liquefaction terminal in Vassilikos. Meanwhile, Turkey will not stop from utilizing its military might and its recently acquired top notch seismic exploration vessel *Barbaros Hayrettin Paşa* in order to stop ENI/Kogas and Total from carrying out their exploration programmes set for 2013-2016.

No one should be surprised if Ankara dispatches *Hayrettin* in Cyprus' EEZ and accompany the vessel with several warships in order to survey what it considers as Turkish and Turkish-Cypriot blocks. A repetition of the low-intensity crisis of September-November 2011 over Noble's drilling in Block 12 will only bring Turkey in direct confrontation with Italy and France who will defend the rights of ENI and Total.

Such a confrontation will only increase Turkey's isolation vis-à-vis the EU as Ankara is trying to defrost its accession negotiations. Cyprus will need to both consolidate and expand its alliances in order to successfully withstand Turkey's pressure. In this regard the participation of Russian companies in either the existing or future concessions consortia, should be systematically encouraged in coordination with Nicosia's European partners.

Cyprus would also need to maintain delicate balancing act between Israel and its Arab partners at a time when the ratification of the EEZ deal with Lebanon and the signing of the Common Unitization Agreement with Egypt are still pending. Moreover Nicosia would need to achieve this balance during a period when a growing number of influential Israeli government and corporate players are lobbying for an energy-based rapprochement with Turkey.

In the non-diplomatic front, the new government, apart from the awarding of the remaining four blocks (5,6,7,8) which were offered in May 2012, will expect with high anticipation the results of the second appraisal drilling on Aphrodite. The drilling was originally scheduled to begin in March 2013 but due to the unavailability of drilling rigs it has been moved back to June 2013.

Given the fact that Noble's exploration & production permit expires in October 2013 the US-Israeli consortium would need to start drilling in June 2013 at the latest in order to have the final results by September 2013.

The results are estimated to give Noble and the two subsidiaries of the Delek Group, a better understanding of the field's structure, locate the principal drilling targets for production and evaluate the final size of the reserves which according to Solon Kassinis, the new executive Vice President of KRETYK, may be as high as 10 tcf.

In December 2011 Noble estimated the field's potential between 5-8 tcf with a most likely reserves basis of 7 tcf. Although the government has said that Aphrodite's deposits are sufficient in order to make the Vasilikos LNG a "bankable" project, a 7 tfc reserves basis, may prove to be *only marginally sufficient* to finance a \$10 billion LNG terminal.

Moreover, if the Israeli government decides to veto the gasification of Leviathan gas in Vassilikos, then Noble and Delek will have to foot the bill for an Israeli based LNG terminal that is likely to be even more expensive than Vassilikos, since Leviathan is more than double the size of Aphrodite (17 tcf).

A 20%-30% increase in the size of Aphrodite's reserves will make the Vassilikos investment bankable regardless of any Israeli decisions. If Aphrodite's reserves prove to be below 7 tcf, then a second discovery may prove necessary in order, to securely finance the Cypriot LNG terminal.

Finally, another major decision the government would have to take is whether to initiate LNG imports by Cyprus before gas from the Aphrodite field is available in 2017/2018. DEFA has issued a tender in order to secure an agreement that would allow it to import 850 million cubic meters (mn c/m) per year for the 2015-2018 period. The tender was completed in early February and the decision is expected within March 2013.

These imports can either take the form of CNG (Compressed Natural Gas) or LNG through the construction of an offshore regasification buoy. Since the buoy can also be utilized as a storage depot after Aphrodite's gas

reaches Cyprus in 2018/2019, the LNG buoy would not loose its usefulness.

An offshore regasification bouy is not a novel technology. Israel constructed its buoy offshore Hadera in a matter of months and is utilizing it –since 24 January 2013- in order to cover up 1/3 of its demand until gas from Tamar starts to flow into its pipeline system in April. As in the case of Cyprus the gas will be used for the generation of electricity by IEC (Israeli Electricity Co.).

The cost for constructing the buoy may be limited, around \$100-150 million, but the cost of the LNG, due to the fact that it would have to be regasified en route, may be as much as four times more expensive than the gas produced from Aphrodite, currently estimated at approximately \$5/mbtu (million british thermal units).

Since the cost of imported gasoil and fuel oil for Cyprus is around \$17-18/mbtu, DEFA and AHK would need to secure a far better price than the one IEC is paying BP and Excelerate for its LNG imports, namely \$20/mbtu. The same price criterion will have to rule over any CNG offer. Otherwise the investment may not prove to be viable in the longer-term and the immediate reduction of the electricity cost for the end-consumer may not be as prompt as the government would wish for.