RSIS Commentary is a platform to provide timely and, where appropriate, policy-relevant commentary and analysis of topical issues and contemporary developments. The views of the authors are their own and do not represent the official position of the S. Rajaratnam School of International Studies, NTU. These commentaries may be reproduced electronically or in print with prior permission from RSIS and due recognition to the author(s) and RSIS. Please email: <a href="RSISPublications@ntu.edu.sg">RSISPublications@ntu.edu.sg</a> for feedback to the Editor RSIS Commentary, Yang Razali Kassim.

# The South China Sea Disputes: The Energy Dimensions

By Frank Umbach

#### **Synopsis**

The regional oil and gas reserves in the South China Sea have become economically and geopolitically less important due to oversupply in the global oil and gas markets, new diversification options and low oil and gas prices. Beijing's deepwater projects in the South China Sea are not exclusively or primarily driven by commercial factors.

#### Commentary

IN LIGHT of previous forecasts of "peak-oil" assumptions and the resulting worldwide increase in resource competition, the presumed large offshore oil and gas fields in the South China Sea had sometimes been labelled as the "new Persian Gulf". But according to the US Energy Information Administration (EIA) and its estimate for 2013, the presumed 11 billion barrels of oil (comparable with Mexico's) and 190 trillion cubic feet (tcf) of gas (comparable with Europe's without Russia) under the South China Sea appear much more marginal.

However, many Chinese estimates, such as the one by the state-owned oil company China National Offshore Oil Corporation (CNOOC), assume that the South China Sea deposits are much larger (at 125 bn barrels of oil and 500 tcf) – up to one third of China's total oil and gas resources. As perceptions often matter more than facts, the situation is complicated by other factors.

### Other Drivers at Play

There are three other factors that come into play.

Firstly, the South China Sea may indeed hold much more additional (up to now undiscovered) oil resources in underexplored areas. The US Geological Survey (USGS) has estimated additional resources between 5-22 bn barrels of oil and 70-290 tcf of natural gas.

Secondly, only exploration and drilling projects can ultimately answer the question how much of those resources can be exploited in a commercially profitable way. Thirdly, this question is dependent on available technologies, and the political as well as industrial interest to implement those drilling projects. This depends on worldwide oil and gas prices, which determine the commercial viability of those projects.

# **Joint Development Projects?**

The ruling of the Permanent Court of Arbitration (PCA) in The Hague on 12 July 2016 rejected China's "historical" maritime claims in the South China Sea. What this implies is that the territorial and resource disputes in the South China Sea might offer new hopes of the long-discussed perspective of joint development of oil and gas reserves in the South China Sea.

It can build upon the example of Malaysia and Thailand, which signed an agreement for hydrocarbon projects in disputed waters in 1979 for joint exploration projects in an overlapping area designated as the "Joint Development Area (JDA)". In principle, Beijing has expressed its willingness to support joint oil and gas projects with its neighbours. But it has often linked its support with the precondition that its partners and neighbouring countries need to first recognise China's sovereignty and territorial claims in the disputed areas.

But as long as Beijing does not recognise the international law for the South China Sea and become much more pragmatic in regard to its territorial claims, the prospect for joint development projects will remain unclear.

# **Ignoring Economic Fundamentals for Commercial Projects**

Over the last decade, given the technological capabilities of their national oil and gas companies, all claimant parties in the South China have become more interested not only to expand their oil and gas projects in shallow waters (<200m under the sea), but increasingly also those in deepwater (>200-300m). But "ultra-deepwater" (>1,500m) oil and gas drilling projects are, at present, commercially hardly profitable given the low global oil prices.

As a result, international energy companies had reduced worldwide their maritime exploration projects. In June 2016, CNOOC announced that it could postpone the development of its first independent deepwater gas discovery until after 2020 due to "current market conditions" and lower gas demand in the government's 13th Five-Year Plan (2016-2020). It had already shelved plans to develop its offshore gas field Lingshui 17-2 using a floating LNG-terminal (FLNG) project near Hainan Island with certified reserves of more than 100 billion cubic metres (bcm) of gas -- one of China's largest offshore gas fields.

But while these projects have been postponed for some years, China has not changed its energy resource strategy by really giving up its deepwater energy projects in the South China Sea. From 2014-2030, CNOOC has still earmarked around 70% of new offshore equipment for deepwater projects.

In December 2015, China had 57 deepwater production facilities and support vessels -- including seven platforms that can operate waters deeper than 3,000 metres. The newly developed seventh-generation rigs of deep-water semi-submersible drilling platforms can operate at a water depth of 3,600m and drill wells 15,000m in deepwater.

#### **Creeping Occupation**

Many observers of China's South China Sea policies have assumed that the energy dimensions have fuelled the regional maritime disputes due to China's strategy of pursuing energy independence by reducing the rise of vulnerable maritime oil and LNG imports. While this is so, they have often overlooked that China's oil and gas exploration projects are also supported as another instrument to bolster its "creeping occupation" of reefs in the South China Sea to bolster its maritime territorial claims.

The CNOOC Chairman Wang Yilin, for instance, has justified the "mission" of its first deepwater oil rig 981 on 8 August 2012 not just on commercial reasons. The commissioning of the oil rig was described as a "mobile national territory" to help "ensure our country's energy security, advance maritime-power strategy and safeguard our nation's maritime sovereignty".

In July 2016, Chinese state media reported the launch of a series of offshore nuclear power platforms to promote the development of heavy oil reserves in the Bohai Bay and to support development in remote deepwater zones of the South China Sea, such as deepsea production bases with control centres and living space for workers.

In February 2017, China announced it would build its first long-term national underwater-observation platform in key waters of the South China Sea, but refused to give the exact location and offered no further details. A month later, China launched its "largest and deepest-operating" offshore oil exploration platform "Bluewhale" for drilling >3,600m underwater, designed specifically for the deepwater oil reserves in the South China Sea.

Frank Umbach PhD is Research Director at the European Centre for Energy and Resource Security (EUCERS), King's College, London (<a href="www.eucers.eu">www.eucers.eu</a>) and Senior Associate at the Centre for European Security Strategies (CESS GmbH), Munich (<a href="www.cess-net.eu">www.cess-net.eu</a>). He was previously also a Co-Chair of CSCAP-Europe. He contributed this to RSIS Commentary.