

Emerging threats to upcoming oil and gas industry off the eastern coast of Africa

Introduction

Recent oil and gas discoveries off Africa's eastern seaboard present new opportunities and challenges for countries and companies seeking to exploit the potential hydrocarbon resources. East Africa's offshore exploration currently spans from Somalia to Mozambique, providing a new lucrative dimension to the political and security environment in the region. Offshore oil and gas discoveries off Africa's east coast are relatively new, and the future threat environment has largely been untested. As offshore oil and gas exploration increases in the region, a fresh look at the current and emerging threats and its potential impact on commercial operations must be considered. This paper will explore how offshore oil and gas discoveries could shape the future security paradigm off the African east coast. The paper will focus on three main threat areas: Somali pirates, on land and the experience of offshore oil and gas operations in West Africa.

Somali Piracy and the current eastern Africa offshore environment

The vast Indian Ocean and Africa's eastern littoral states present a complex and challenging threat environment. Since 2006, the prominent threat to commercial activities off the east Africa coast has been Somali piracy. Hijackings, ransom demands and pirates' catchment area grew significantly between 2008 and 2011. At its height Somali piracy incidents extended over an area of approximately 2.5 million square nautical miles, comprising the Gulf of Aden, the Somali Basin, the Arabian Sea and the stretch of Indian Ocean from East Africa to the Indian coast and as far south as Madagascar.

Its adverse impact on important trade routes across the Indian Ocean and Gulf of Aden became of such concern that, in 2008, international counter-piracy measures were initiated. Such interventions included mobilising international naval patrols in the Gulf of Aden and Indian Ocean,¹ establishing information-sharing centres, the development of best management practices (BMP4) guidelines,² the employment of embarked armed security on board vessels and international support for improvements to the legal systems to prosecute suspected pirates. The international fight against Somali piracy has seen impressive results. For example, no vessel with armed security onboard has been successfully hijacked in the region to date.³ No commercial vessel has been hijacked in the Indian Ocean for over 16 months/ since May 2013. Pirate attacks in the region have fallen to their lowest level since 2006, with only eight armed assaults so far in 2013. There has been a reduction not only in the number of successful attacks, but also in the number of

¹ Key components of international naval action are EU Naval Force's (EU NAVFOR) Operation Atalanta, NATO's Operation Ocean Shield and the US-led Combined Task Force 151.

² BMP4 (2011) *BMP4: Best Management Practices for Protection against Somalia Based Piracy* (Edinburgh, Scotland: Witherby Publishing Group) http://www.mschoa.org/docs/public-documents/bmp4-low-res_sept_5_2011.pdf (Accessed 19 August 2013)

³ There is no evidence yet that pirates have escalated their weaponry, mode of attack, or aggression, in response to embarked armed security. Findings of the 'Human Cost of Maritime Piracy 2012' showed that while there was a decline in the number of attacks by 37% in 2012, the rate of successful attacks where seafarers were taken hostage increased from 14% in 2011 to 41% in 2012. This data shows that the success rate of pirate attacks increased at the same time as the total number of attacks where the vessel was fired upon dropped. Pirates may be focusing their attacks on more vulnerable vessels, for example, those with no evidence of armed security, which has possibly led to the improved success rate of attacks.

attempted attacks and suspicious approaches reported. This suggests that piracy is becoming a less appealing business. Embarked armed security is increasingly being seen an effective deterrent to piracy. It is such offshore interventions that have been credited for the dramatic falls in Somali piracy since 2012 rather than land-based factors.

The cost of offshore counter-piracy efforts has been considerable to both international missions and commercial shipping companies. A World Bank report of the international and regional costs of Somali piracy estimated that, because of its scale, geographic scope, and violence, piracy costs the global economy roughly US\$18 billion a year in increased trade costs.⁴ While the mandates of NATO and European Union counter-piracy naval patrols have been extended until 2014,⁵ there is talk of countries cutting their national contributions to these patrols due to the fall in piracy incidents. Based on the piracy data alone it is understandable why some stakeholders may believe that such operations are no longer required. On closer examination, however, it is evident that the components that led to the exponential growth in piracy off Somalia are still in existence.

The piracy threat has not been extinguished, but rather that it may be contained. While there may be fewer pirate action groups (PAGs) taking to sea, the pirate business model and gangs are still active. In spite of highly publicised claims of the removal of pirate land bases, piracy networks continue to operate with little interference from the government, and outside the jurisdiction of AMISOM (AU forces in Somalia). Pirate anchorages are distributed along the central Somalia, and Puntland's north east and northern shoreline and often operate with the complicity of local administrations, political figures, clan elders, militias and local communities. Piracy networks continue to operate from their land bases in Somalia engaging in alternative criminal enterprises. There is evidence that pirate gangs have evolved the piracy model to protection schemes for international fisheries conducting illegal fishing in Somalia waters. It is also believed that Somali 'security guards' are providing armed protection onboard vessels engaged in smuggling and illegal regional trade. Ironically, Somali piracy appears to have come full circle, with some pirate gangs now becoming the enablers of illegal fishing off the Somalia coast as opposed to the original justification for piracy that was based on the need to defend Somalia's waters against illegal international fishing. The presence and growing influence of al-Shabaab in north-central and in Puntland has raised concerns that pirate gangs may build collaborative relationships with the militant group to generate revenue through the hijack of vessels. There may be a connection to al-Shabaab, especially in anchorages such as Haradheere and possibly Hobyo, which have been controlled by the group in the past. There is also evidence that land based abductions from Kenya may be attributed to al-Shabaab.

⁴ World Bank (2013) *The Pirates of Somalia: Ending the Threat, Rebuilding a Nation* (Washington DC, USA: World Bank) <http://siteresources.worldbank.org/INTAFRICA/Resources/pirates-of-somalia-main-report-web.pdf> (Accessed 19 August 2013)

⁵ NATO's Operation Ocean Shield and the EU's Operation Atalanta have been extended to 2014, but it is not yet clear what, if any, international presence will be maintained in the Indian Ocean after this time.

It is unclear what, if any, international counter-piracy presence there will be after 2014. The threat of Somali piracy has not been eliminated. There remain concerns that there could be a resurgence of Somali piracy should there be a reduction in counter-piracy maritime efforts. Somali pirates have proven themselves to be able to adapt in light of security challenges and new business opportunities. Piracy may undergo a transformation and begin to impact on the oil and gas sector as exploration and offshore drilling operations increase along the east coast of Africa. The operational profiles of survey vessels and drill rigs are vulnerable due to the slow speed for seismic runs, limited manoeuvrability with seismic arrays or static with drill rigs, and the numerous support vessels required. It is possible that pirate groups will turn their attention to these operations and adapt their TTP's to a similar model as their West Africa counterparts.

Potential land-based spoilers

As global demand for energy increases, the threat posed to on land transit for personnel and assets and operations while at port or anchorages within a country has high potential to affect O&G company operations and influence company investments and pricing. While political and governance environments in most eastern Africa littoral countries have functioning state institutions and a rule of law, in contrast to the transition situation in Somalia, several eastern seaboard countries contend with domestic conflicts, secessionist movements and political transition. These potential land based spoilers pose a threat to offshore oil and gas operations. Political instability and a lack of law and order pose potential risks to on land transit points for personnel and assets. The threat from terrorism and influence of transnational terrorist groups also present the possibility of militants turning their attention to strategic resources to generate global attention and cause economic damage.

The main land based threats to offshore oil and gas companies relate to political transition, civil unrest, secessionist movements and transnational terrorist networks. Secessionist movements in Kenya and Tanzania for example, have complained that oil and gas licences are being issued by central government for their advantage, while local communities fail to benefit from the resource exploitation. For example, UAMSHO in Tanzania is demanding that Zanzibar and the Isles have authority over the issuance of licences and any revenues generated. This could lead to O&G companies and their personnel being targeted as governments attempt to navigate such political dynamics relating to lucrative natural resources.

Some eastern Africa littoral countries have experienced Westerners being targeted for kidnap for ransom. O&G personnel may be viewed as potentially high value targets that could generate substantial ransom payments. Plans to develop new refining capacity in Lamu Port, will place O&G assets in close proximity to the Somali border and in an area of the country that has seen attacks and kidnap for ransom against

Western tourists. It is therefore critical to consider the non-state actors present in countries, their motivation and capacity, as well as any previous incidents of kidnap for ransom of international staff.

There is an increasing appeal of energy infrastructure to terrorist groups.⁶ The benefits for ideologically-motivated militant groups that come with attacking the energy sector have risen considerably due to the worldwide media attention, economic turbulence and short-term supply disruptions. With the presence of such a strategic resource emerging in off eastern Africa, terrorist groups may realise that they do not need to carry out attacks in Europe and the US to generate global attention and cause economic damage. Militant groups operating in the region may see the value in energy company attacks. There have already been attacks on land-based energy sector projects in Sudan and Ethiopia in eastern Africa. The security alert issued by US and UK governments during Ramadan in Yemen also identified ports as potential targets for terrorist groups. Al-Shabaab has publicly made threats against resource extraction companies in Somalia, and they may turn their attention to offshore O&G exploration interests.

Having said this, many eastern Africa littoral states keen to build investment and their economies understand the importance of ensuring the success of offshore oil and gas operations. Consideration of the potential land-based spoilers is a crucial aspect in developing a supportive security environment to offshore oil and gas companies.

Piracy in the Gulf of Guinea and its impact on O&G operations

The Gulf of Guinea is home to several important oil producing nations⁷ and accounts for about 10% of the world's crude oil exports.⁸ Maritime security off West Africa and safe access to ports is critical for global energy production. Piracy off West Africa is placing increasing strain on oil and gas business interests. In 2012, there were more piracy attacks in West African waters than off Somalia.⁹

Pirate activity in the Gulf of Guinea mainly originates from Nigeria-based pirate gangs, who tend to be well organised and have significant local backing. Hijackings of tankers for theft of refined petroleum products, robbery of crew and ship property, and kidnap for ransom are the most common types of incidents. The waters off Nigeria, Benin and Togo have the highest incidents of piracy-related incidents.¹⁰ Pirates and armed kidnap for ransom groups continue to target tugs and supply vessels supporting oil exploration and drilling off the Niger Delta, but are also increasingly targeting merchant vessels, such as tankers and cargo

⁶ Giroux, J (2009) 'Targeting Energy Infrastructure: Examining the Threat in North Africa and Broader Implications' *Circunstancia Energy* 2009 8(18) (www.ortegaygasset.edu/fog/ver/813/circunstancia/ano-vii--n--18--enero-2009/estados-de-la-cuestion/targeting-energy-infrastructure--examining-the-threat-in-north-africa-and-broader-implications) Accessed 5/2/2013.

⁷ Nigeria and Angola are among the world's 10 biggest crude oil exporters

⁸ It is estimated that 40 per cent of Europe's oil imports, and close to 30 per cent of the United States' imports of petroleum products, must travel through the Gulf of Guinea each year, and security concerns could affect Nigeria's and Angola's exports of crude oil.

⁹ Kaija Hurlburt et al, 'The Human Cost of Maritime Piracy 2012', Oceans Beyond Piracy, June 2013, <http://oceansbeyondpiracy.org/sites/default/files/hcop2012forweb.pdf>

¹⁰ US Department of Transportation Maritime Administration Advisory # 2013-05 Date Issued Jul 23 2013

ships, transiting and operating in the region, with reports that pirates have used mother ships and have been reported up to 150 nautical miles from the West Africa coast. There is usually a high-level of violence used against crew as the motivation of attacks tends to be theft of cargo rather than less common kidnapping, with little concern for the welfare of crew.¹¹

Attacks of chemical and product tankers carrying refined petroleum products typically occur when vessels are moored or carrying out ship to ship transfers at sea, when they are at greater risk of being identified and boarded.¹² Cargo is then transferred to the hijackers' smaller vessels and put it for sale on the local black market. Such attacks indicate that pirate groups often have knowledge of ships' locations and the nature of their cargo, as well as the ability to operate these specialised vessels.

Key security considerations to offshore O&G operations off east Africa's coast

Somali pirates, land-based threats and the Gulf of Guinea experience present a complex security environment for offshore oil and gas operations off east Africa. There are some caveats to drawing parallels with Gulf of Guinea piracy and its impact on oil and gas exploration to eastern Africa maritime security risks. However valuable lessons can be learned to help understand the emerging security paradigm and shape responses to potential threats to eastern Africa's offshore oil and gas exploration.

Private security

Privately contracted armed guards are not permitted to operate in the territorial waters of the Gulf of Guinea countries. However armed support is provided through national armed police or military. While the use of private armed security has been authorised by several flag-states for their vessels transiting the East Africa region, and is widely regarded as an effective deterrent to attacks on vessels, it is unclear how countries will address armed security provision in their respective exclusive economic zones (EEZs). In addition countries will need to consider if their respective naval capacity is capable of servicing the offshore exploration contracts. Armed security guards on static or slow moving vessels may not also have the same apparent deterrent effect as on vessels motoring through the region. The use of armed security in the Gulf of Guinea has not corresponded to a reduction in the use of violence in attacks. The wellbeing of crew tends not to be a priority as the main focus is on theft of cargo. Should pirates off east Africa adopt the same model of operation as their West African counterparts, then embarked armed security or military escorts should not be seen as a panacea for maritime security of oil and gas operations, but rather one key element to addressing the complex security challenges. Private security companies operating in a non-armed capacity are able to offer important security services, through the development of bespoke security plans, undertake

¹¹ Of the 58 incidents of attempted and successful piracy/armed robbery in the Gulf of Guinea that were reported to the International Maritime Bureau (IMB) in 2012, 37 involved the use of firearms.7 ('Piracy falls in 2012, but seas off East and West Africa remain dangerous, says IMB', International Maritime Bureau, 16 January 2013, <http://www.icc-ccs.org.uk/news/836-piracy-falls-in-2012-but-seas-off-east-and-west-africa-remain-dangerous-says-imb>)

¹² Anyimadu, Adjoa (2013) 'Maritime Security in the Gulf of Guinea: Lessons Learned from the Indian Ocean' *Chatham House Africa* 2013/02

risk assessments of areas such as port facilities, and allocation of ship security officers to advise on security protocols and undertake hardening activities. Non-armed security advisors could provide an essential role in the protection of offshore O&G operations, particularly in advisory roles with host nation armed forces, ensuring adherence to the Voluntary Principles of Security and Human Rights (VPSHR) and the implementation and adaptation of other Best Management Practices (BMP4).

Jurisdiction issues

Apprehending and prosecution of suspected pirates is also problematic as many countries refused to permit other country navies from entering their EEZs, and there is no clear legal mechanism for prosecution on land. This is similar to the early experiences to apprehend pirates off Somalia, where pirates captured by naval forces were released because of a lack of jurisdiction willing to prosecute them.¹³ Subsequently pirate transfer agreements have been introduced with the Seychelles, Mauritius, Kenya and Tanzania signing agreements. In addition, a trilateral memorandum of understanding between South Africa, Mozambique and Tanzania agreeing to joint naval operations has also been established. The existing cooperation should help eastern littoral states prepare for the possible cross-border partnerships to address maritime security concerns for oil and gas exploration in their waters.

Best Management Practices

While the Best Management Practices (BMP4) guidelines have been well received and a majority of commercial vessels transiting through the region implement them, they were designed as protection measures for vessels transiting the region, rather than those supporting vessels working in eastern African waters. Self-protection measures face more difficulty as oil exploration and drilling vessels tend to be slow moving or static and commercial vessels make stops at ports along the coast. Therefore it will not be as simple as applying the BMP4 to commercial offshore activity. Security advisors will have to consider which BMP can be adapted to suit offshore activity and develop individual security plans and operating procedures in light of the operational profile for the protection of offshore O&G activities in the Indian Ocean.

Reporting mechanisms

The International Maritime Bureau estimates that only one third of attempted attacks in the Gulf of Guinea are reported.¹⁴ The reasons for non-reporting include the belief that investigations will delay continued business, be time-consuming and unlikely to result in any prosecution.¹⁵ While there may be some element of under-reporting, the pirate reporting systems and information sharing in the Indian Ocean has shown impressive maritime cooperation between international bodies and eastern littoral countries and navies.

¹³ According to evidence given at the UK Parliament Foreign Affairs Committee, in 2011 approximately 'nine out of ten piracy suspects detained by forces engaged in multinational operations are released without trial', <http://www.publications.parliament.uk/pa/cm201012/cmselect/cmfa/1318/131802.htm>.

¹⁴ Anyimadu, Adjoa (2013) 'Maritime Security in the Gulf of Guinea: Lessons Learned from the Indian Ocean' *Chatham House Africa* 2013/02

¹⁵ Anyimadu, Adjoa (2013) 'Maritime Security in the Gulf of Guinea: Lessons Learned from the Indian Ocean' *Chatham House Africa* 2013/02

However further efforts need to be made with local fishermen as there is poor reporting and data collection on attacks on fishing vessels, which could result in misleading information on Somali pirate attacks.

Engagement of community stakeholders

Countries with offshore oil and gas and contracted companies will need to consider issues of insecurity at national level. It is important to engage local coastal communities in developing a secure maritime environment and raising awareness of how offshore insecurity adversely affects their livelihoods as well as large international oil companies.

Conclusion

While some eastern Africa littoral states did not recognise the implications of Somali piracy to the economy and security of the region, offshore oil and gas discoveries have triggered states to step up provisions to ensure the protection and effective exploitation of their natural resources. There is also growing recognition that a secure maritime environment can bring increased prosperity to a country. How eastern Africa littoral countries address these threats and enable a supportive security environment will form an intrinsic part in the development and success of offshore oil and gas in the region.