

THE UNDERWRITING OF OIL AND GAS RISKS IN ANGLOPHONE WEST AFRICA



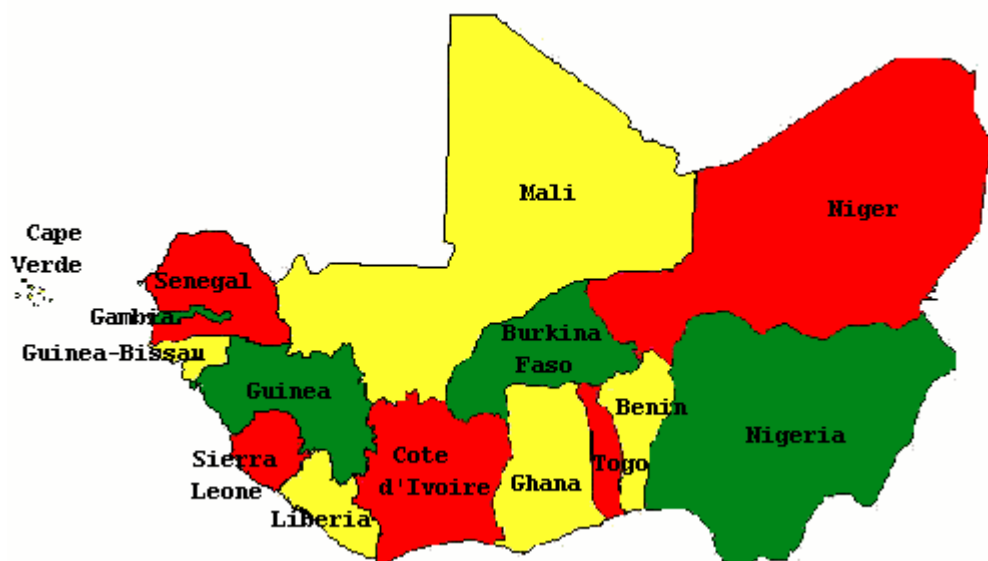
Like the birth of an overdue baby, Sierra Leone awaits the discovery of oil. It has become a topical issue with high hopes and expectations expressed. Would the find bring about the much desired prosperity? For a government that is eager to jump-start economic development, in a country just coming out of war, the huge revenue expected from oil sales cannot be simply ignored.

There were also fears expressed. Would there be sufficient reserves for the find to be commercially viable? Or would it be a still birth? Would the discovery overwhelm and damage the very fabric of society and the economy?

Then came the news on September 16, 2009 confirming that oil had been discovered offshore Sierra Leone. It was an ecstatic moment, and the news was all over the media. The question on every lip was: How could the find be of personal benefit? Insurers also sought to know how they could benefit from the find.

This paper highlights the development of oil and gas in Sierra Leone, as well as the other English-speaking West African countries and goes on to identify the appropriate insurances for the various risk exposures in developing an oil field. It then discusses how Oil and Gas business is underwritten in the region.

Oil and Gas Development in Anglo West Africa



The five English-speaking West African countries have in recent years been awash with exploration activities. This is largely attributed to the fact that Western Oil companies are being increasingly shut out of the world's richest oil provinces like the Middle East and Russia. Moreover, rising oil prices and the US government policy to reduce dependence on oil imports from the Middle East, have further accelerated exploration activities in this region. How then has the search for oil and gas developed in the individual countries?

In Sierra Leone, the oil discovery was made by Anardaco Petroleum Corporation of the United States and its partners, Repsol of Spain, Woodside of Australia and Tullow of the United Kingdom. The oil was discovered at the Venus Exploration well in block SL6/07 off the shores of Sierra Leone. Venus is the first deep water test at the Sierra Leonean – Liberian border and the discovery confirms the existence of an active petroleum system in the basin. However, the exploring consortium plans to drill more wells in the area to determine whether it is a commercial field.

In Liberia, the information got from the Venus B-1 well was seen as very positive for oil exploration efforts in the Liberian basin. Several companies had been licensed by the Liberian Government and were already engaged in oil exploration off Liberian shores. By mid-2008, three companies – H. K. Tong Tai International, Mittal Investment SARL and Anardaco were reported to be bidding for blocks. There are strong indications that based on geological information, Liberia could also discover oil since its offshore has the same kind of rocks and environmental structures found beneath the sea in the other West African countries with oil.

As regards The Gambia, the government on September 29, 2006 issued two licences to Buried Hill Energy, a Canadian company for the exploration and production of oil and gas in the offshore areas. The licences for two offshore blocks, namely A1 and A4 were signed with the expectation that more investors would be attracted to the petroleum sector in The Gambia.

For Ghana, it has been the policy of every government since independence to explore the country's hydrocarbon deposit. However, offshore exploration gained momentum in the 1970s. Phillips made discoveries in some fields in 1978 and 1980 and though there was significant gas, the operator decided to relinquish the fields in 1982 because they were not deemed commercially viable. By the end of the nineties, an estimated hundred exploration wells had been drilled in Ghana. Other companies that had exploration activities include

NUEVO 1998, D Hunt Oil 1999, Fusion Oil & Gas from Australia in 1999, Santa Fe 2000. Unfortunately, all the wells drilled by them yielded no viable commercial discoveries.

In 2007, Tullow and its partners made the Jubilee field oil find offshore Ghana. The discovery, which could start production this year, shows promise in reserves of as much as 1.8 billion barrels.

The Ghana National Petroleum Corporation (GNPC) was established in 1983 to promote exploration and production activities. Petroleum operations in Ghana are governed by the Petroleum law of 1984 which empowers the GNPC to operate in all open acreage of the country on its own or in association with foreign partners.

The basic contract between the State, GNPC and private companies is the Production Sharing Agreement.

In the case of Nigeria, the first Oil Mineral Act was issued in 1914 and it vested the administration and control of oil affairs in the colonial government. However, after several exploration activities, oil was finally discovered in commercial quantity in the Oloibiri Oilfield in 1956.

With a production capacity of about 3 million bpd, Nigeria easily stood as the largest producer of Oil in Africa and the 10th largest in the world. The capacity which ought to have grown with the recent developments in new fields has actually fallen to just over 2 million bpd following militant activities in the Niger Delta.

In order to effectively manage the sector, the Government, in 1977, created the Nigerian National Petroleum Corporation (NNPC). The Corporation was set up primarily to oversee the regulation of the Nigerian Oil industry, with secondary responsibilities for upstream and downstream development. In 1988, the NNPC was divided into 12 subsidiaries to facilitate a more efficient management of the oil industry. The eventual passage of the Petroleum

Industry Bill and unbundling of the NNPC would bring about very interesting times in the Oil and Gas sector.

Most of the country's major oil and natural gas projects (95%) are funded through Joint Ventures (JVs) with the NNPC as the major shareholder. Foreign companies operating in JVs with the NNPC include SPDC, ExxonMobil, Chevron, ConocoPhillips, Total, Agip and Addax Petroleum. The remaining funding arrangements comprise production sharing contracts (PSCs), which are mostly confined to Nigeria's deep offshore development programme.

INSURANCES REQUIRED IN THE DEVELOPMENT OF AN OIL FIELD

As can be deduced from the foregoing, Oil and Gas Operators and their contractors are present in every Anglo West African country. Whereas they are involved in all phases in the development of oil fields in Nigeria, their involvement in most of the other countries is simply limited to the exploration phase. It would be appreciated that the appropriate insurances required are dependent on the phase in which the operator and his contractors are playing.

Even before the exploration phase, the oil company is expected to obtain a lease on a lease block for drilling. The terms of the lease will generally require that a certain minimum research of drilling operations is to be conducted and that the block is to be left in the same state as it was prior to exploration. The operator would therefore require a Public Liability insurance policy to cover his obligations as contained in the lease and any land permits. Also, other normal insurances like Employers' Liability, Motor and Property have to be covered in the local market.

In the exploration phase, the oil company will obtain bids from contractors to conduct either seismic survey/exploration drilling. Once seismic surveys have determined the optimum place for drilling, a drilling contractor will be engaged and a contract drawn up. Most contracts between the oil companies and the

drilling contractors are on a “day rate” basis. The contractor could however be employed on a “turnkey” basis. Under the turnkey basis of contract, the driller is responsible for the operators’ extra expenses insurance until hand-over, as any control problems fall to the contract’s expense and such costs would come out of the fixed price. Otherwise, the operator is responsible for not only certain items used by the contractor, but he also requires insurances for Marine Third Party, Seepage and Pollution, Removal of Debris and Employers’ Liability. The contractors, on the other hand, would require insurances on rigs and equipment and/or vessels, P&I on vessels, Employer’s Liability on own employees and Pollution liability.

The development phase is undertaken only if the discovery of oil is proven to be commercially viable. The stage will require the construction of appropriate facilities to produce or partly produce and to export the oil or gas to the point of sale or consumption of the “unrefined” product. The Operator will normally obtain a principal controlled Construction All Risk insurance, even where many contractors are involved, in order to minimize insurance cost on these massive values.

An oil field can go into production once a well has been connected into existing production facility (onshore) or an offshore platform has been installed with the export facilities completed.

A typical operator would require insurances to cover all his real and/or personal property or those in his trust, care, custody and control or for which he may be contractually liable as would be listed in a schedule of values.

The operator would also require operator’s extra expense insurance to cover cost of control of well, extended re-drilling, clean-up and containment, seepage pollution and contamination, underground control of well, making wells safe, evacuation expenses, joint venture contingent liability, deliberate well firing and removal of wreck and/or debris.

The operator is also likely to require General Third Party Liability to cover his operations for any death, bodily injury, personal injury, disease, loss of or damage to and/or loss of use of third party property, including products liability.

Increasingly, covers sought often include: Loss of Production revenue, War, Sabotage and Terrorism, Privacy and Kidnap & Ransom.

Whilst the Operator could, during the operating phase, cover the above exposures under one policy, coverage for Construction insurance usually requires specialized wordings to cater for the unique features of Construction offshore. Moreover, because of the complexity of modern construction projects, it has now become the practice for a single policy to be purchased covering all co-venturers and to provide full cover to the contractors for their work on the project, but not for plant and equipment owned by the contractors.

UNDERWRITING OF OIL & GAS BUSINESS

The required capacity to underwrite Oil and Gas business is almost exclusively provided by the subscription market. This is particularly true in the upstream sector where the subscription market – mainly London, Europe and New York – control over 90% of placements. A look at the sums insured of some of the recently covered Construction and Operational risks in the region will give an idea of the capacity required to underwrite these risks.

	TOTAL SUM INSURED
	US\$
NNPC CIP	39,532,044,179.00
MOBIL OPERATIONAL	5,047,067,218.00
SHELL OPERATIONAL	9,643,210,615.00
NIGERIA LNG	9,469,375,515.00
TOTAL AKPO	4,053,000,000.00
TOTAL USAN	5,924,443,532.00
SHELL BONGA	4,366,476,745.00

CHEVRON AGBAMI	4,700,000,000.00
TOTAL OML 58	2,097,736,322.77
TULLOW JUBILEE FIELD	1,178,411,291.00

As can be seen from the above, these risks are easily in excess of \$1 billion. Thus Loss Limits and Maximum Probable Loss are often employed to underwrite same risks. For a class of business where reinsurance treaties are not easy to come by, most insurers rely solely on their shareholders' fund to write a net line. Yet, apart from Nigeria, where the minimum capital required to transact non-life business is about US\$20m, all other countries in the region have at the most 5% of that figure, as shown below.

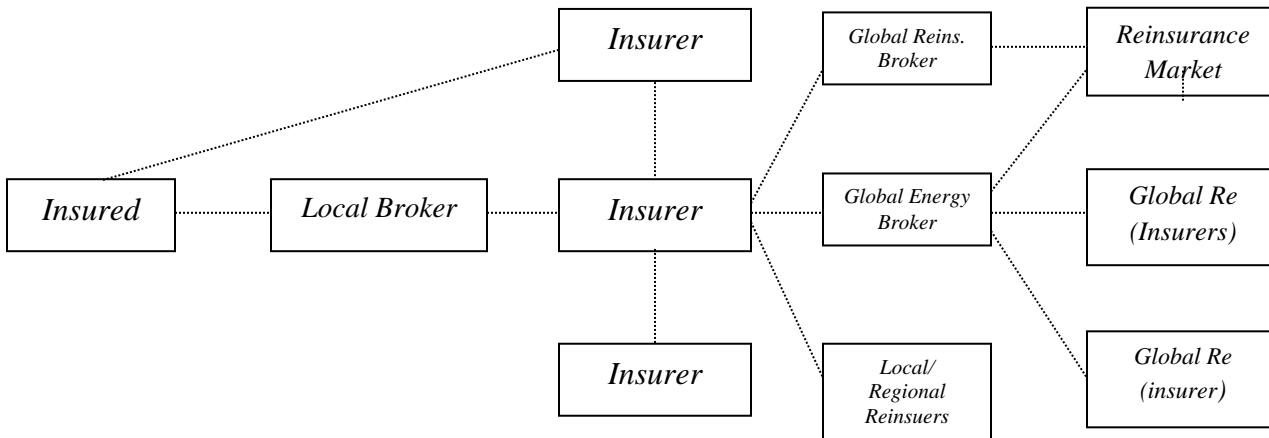
Region	Country	Minimum Capital Required for Non-Life Insurers in local currency	Non-Life Minimum Capital Required in US\$	Minimum Capital Required for Life Insurers in local currency	Life Minimum Capital Required in US\$
Anglophone West Africa	Nigeria	NGN 3,000,000,000	20,066,900.00	NGN 2,000,000,000	13,377,900.00
	Ghana		1,000,000.00		1,000,000.00
	The Gambia	GMD 15,000,000	561,800.00	GMD 15,000,000	561,800.00
	Liberia		300,000.00		200,000.00
	Sierra Leone	SLL 600,000,000*	155,200.00	SLL 150,000,000	38,800.00

ROE based on Financial Times of London, 31st December 2009

** SLL 150,000,000 per class*

It is therefore common to place such risks with a panel of insurers and in order to ensure that adequate coverage is purchased, placements are often extended to reinsurers/professional reinsurers.

Placement Diagram



Typically, the insured places his business directly with an insurer, who leads a consortium of insurers and who, through a Global reinsurance/energy broker, negotiates the contract with a Lloyds syndicate or Energy Underwriter that provides terms and conditions. The panel of insurers takes a share of the risk (including share for the local reinsurers) and the balance is placed in the international market. A local/regional reinsurer may however be able to receive shares from the international market provided the security criteria of the international brokers are met. Africa Re, for instance, not only receives business from nearly all the major brokers in the world, but also provides terms for some of these African oil and gas risks that are followed by underwriters in the international market.

Apart from reinsurers, Captives and Reinsurance Pools play a significant role to fill the capacity gap in the underwriting of Oil and Gas risks.

Virtually all the Oil majors have their own captive insurance companies. Exxon-Mobil, Total, Shell and Chevron have Ancon Insurance Company, Omnium Insurance and Reinsurance Company (OIRC), Solen Versicherungen AG (SVAG) and Heddington Insurance Limited (HUK) respectively. A pure

captive is a company formed to insure only risks of its parent company as is often the case in the oil industry. Some of these oil companies also subscribe to a joint captive insurance company, mainly to cater for instances where insurance cannot be reasonably obtained from the commercial insurance markets.

Pools are a group of insurers that have come together to subscribe a capacity for the underwriting of a particular risk. Businesses received by a Pool, are shared to all its members according to their subscribed capacity. For instance, an Oil Pool would require all members to cede to the Pool a proportion of their oil and gas business, up to the Pool's capacity. The entire business received by the Pool shall then be offered on original terms basis to members, subject to any reinsurance protection. Pools are usually formed for risks with high values, that are of hazardous nature and for which underwriting skills are limited. Nuclear, Aviation, Pharmaceutical and Oil & Gas risks, are suitable classes for Pools. A good example is the African Oil and Energy Pool, which was formed in 1989 by the African Insurance Organization (AIO) and has been very successful.

PERSPECTIVES

The insurance sector in Anglophone West Africa is well positioned to offer its services to the Oil and Gas industry. In spite of their generally low capital base and competency, there is an ever increasing eagerness of local underwriters to underwrite oil and gas risks.

In Nigeria, the increased capital base of insurers since 2007 coupled with the implementation of the Nigerian Content Directive has resulted in the placement of more oil and gas business with local insurers. As would be expected, the knowledge base of the industry has grown following the frequent training and exposure to international brokers and underwriters. Insurance companies have set up Oil and Gas desks to bid for the insurances of major oil risks, even though they are not yet in a position to quote on these risks. The bid

process has, however, exposed participating insurers on the panel (and worse still for those not on the panel) to writing risks at less than the pure risk rate, as the leader of the consortium often demands extra commissions even where a fee has been paid to him by the Operator. Yet should a claim occur, the participating insurers would still have to pay the same amount as an international insurer writing the same share, whereas they received a smaller amount of premium for the risk. One may be compelled to ask the question: which market are we trying to develop?

In Ghana, a National Insurance Companies Consortium was formed to manage the Oil and Gas portfolio. The SIC Insurance Company Limited was appointed the leader of the Consortium. The consortium is open to all members of the Ghana Insurers Association underwriting non-life business. With the formation of the consortium, all insurances would be placed locally and reinsured to international markets. The reinsurance commissions received are set aside to cater for all the expenses of handling the business, training of the market on Oil and Gas business and building reserves to facilitate higher market retention. There is therefore no eagerness by insurers to get the business at all cost. However, the growth in market knowledge of the business may be at a slow pace since the participating insurers in the consortium would not have the personal drive to urgently acquire the relevant knowledge and underwriting skill. It is also wondered if this could be an enduring arrangement or whether establishing a Pool would not be a better option.

As the other countries in the region are still at the exploration stage in developing their Oil and Gas fields, their insurance sectors are yet to formulate a market response. In fact, some of the insurances arranged by the operators are not even seen in these markets. Yet, there is a need for harmonious working relationship between the international operators and the local insurance market. It should be appreciated that sustainable market growth can only be assured with the growing of local capacity alongside expertise. For a baby to grow, he must be taught and taught well. He must learn to live and

work with others. Most importantly, the baby must learn by himself what is safe and what is dangerous.

In the underwriting of Oil and Gas risks, a fundamental fact to note is that underwriters must not equate higher retention with higher profit. It is hoped that the experience of insurers from oil producing countries would serve as a guide in formulating an appropriate response to the birth of this enigmatic baby.

Thank you.