Internal audit in the oil and gas industry

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Over the past 20 years' David Watton has experienced many significant changes to internal audit within the oil and gas industry. Here, he shares some of these experiences.

A brief introduction
The oil and natural gas industry comprises the processes of exploration and extraction (known as the upstream activities), refining and transporting (midstream) and marketing (downstream) of petroleum products.

The largest volume products of the industry are fuel for electricity generation and transportation, but oil and gas are also the raw materials for many other industries including pharmaceuticals, fertilizers and plastics. The world consumes some 86m barrels of oil and 3.3 trillion m^3 of natural gas per day[1], and the oil and gas industry is one of the world's largest in terms of dollar value.

The 'super-major' companies, such as ExxonMobil and BP, are the public face of the industry, but the vast majority of the world's reserves of oil and gas are held by state-controlled entities, such as Saudi Aramco and Kuwait Petroleum Corporation.

In addition to the large operating companies, there are a myriad of other organisations – small independent drillers and producers, design and construction contractors, equipment suppliers, service providers and specialist technical advisers – which comprise the industry as a whole.

The role of internal audit and type of work
The primary role of internal audit in the oil and gas industry is, unsurprisingly, no different from that of internal audit in any other sector – to review and assess independently the adequacy of the system of controls in place which identify and manage key business risks.

Many areas of work will be familiar to most internal auditors – financial controls, IT systems and projects, HSSE, and human resources, etc. There are also a number of other areas of focus for internal audit which merit specific mention:

- **Joint venture audits** – because of the risk profile and capital cost of oil and gas projects, it is common for these to be developed by a consortium of companies including, in many countries, a representative organisation of the host government. One entity (usually the largest stakeholder) will take the role of lead operator responsible for the development and day-to-day running of the enterprise, using funding provided by all the parties.

  Joint venture audits of the operator's financial records are performed (typically on an annual basis) by the non-operators, working as a combined audit team, to ensure compliance with the requirements of the joint venture agreement and to verify the accuracy and validity of the cost and revenue statements produced by the operator.

- **Parent company audits** – a variation on the above. In some instances, a standalone company is formed to run the operation, with key managerial positions staffed by secondees from the parent organisations. Again, an annual joint audit may be performed by auditors from the parent organisations. The main difference here is that the scope of the audit will not be restricted to purely financial matters, but can range across the whole organisation. As a result, it is not unusual to have an audit team or 10 or more persons, representing five different parent organisations and perhaps with technical specialists, working together for two or three weeks.

- **Project management audits** – developing large oil and gas resources requires major construction projects demanding huge capital expenditures. The largest projects may have a 30 or 40 year lifecycle and it can be a decade between initial expenditure (such as a licence acquisition) and first revenues. Exemplary project management controls throughout the lifecycle are a fundamental requirement for successful organisations, whether in the position of operating company or as a construction contractor or equipment supplier to the project. This is, therefore, a key area of focus for internal audit.

- **Commodity trading** – oil and gas companies obviously need to sell their production and this may be transacted on a long-term, short-term or spot basis (and often a mixture of all three). Many oil and gas companies also undertake energy trading activities and the internal audit team will need to review the front, middle and back-office controls of these operations.

The oil and gas industry is a global business, with the larger organisations having operation bases throughout the world. Internal auditors must, therefore, be prepared for lots of travel, not always to desirable locations with 5-star accommodation. The global nature of the industry also places a premium on the auditor's communication skills (not everyone will speak your language as their native tongue) and the need for awareness of cultural sensitivities, differences in the workplace and the attitude towards audit. Time management skills are also important if you want to catch your flight home.

The importance of good systems of control

The Deepwater Horizon disaster in the Gulf of Mexico, which killed 11 workers and caused America's largest oil spill, demonstrates horrifically what can result when systems of control break down.

There have been some other notably industry examples of failure in controls in the last decade, including the demise of Enron in 2001, which also caused the dissolution of the Arthur Andersen accounting firm and led to the Sarbanes-Oxley legislation, and the Shell hydrocarbon reserves overstatement in 2004, which resulted in a large fine and multi-million dollar compensation payments. The U.S. Foreign Corrupt Practices Act and, more recently, the UK Bribery Act also place a clear focus on the importance of controls, particularly in operations remote from the Head Office, as demonstrated in the Panalpina case which impacted a number of companies in the oil and gas industry.

It has been argued that each of these instances could have been avoided if the systems of control and the three lines of defence model had been operating effectively. Internal auditors have a key role to play in helping to ensure that such events do not recur.

Future prospects for work

Whatever your views on the climate change debate and the development of the renewable energy sector, our reliance on oil and natural gas will continue for decades to come. The industry faces many challenges ahead, including the technical, financial, environmental and political challenges of accessing an increasingly scarce resource base, but if you are interested in working in a dynamic business sector and have a desire to travel the world, the industry provides great career opportunities for the internal auditor.

[1] BP Statistical Review of World Energy 2013

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David has over 20 years' experience as an internal auditor in the oil and gas industry and has experienced at first hand the major developments and convergence that have taken place in internal auditing, corporate governance and risk management in this time. His current position as consultant auditor with a global oil and gas company has given him an international insight to the internal audit profession.

The author is writing in a personal capacity and the views expressed above do not necessarily reflect those held by ACCA or his employer.