



# Wanted: more expats

**Ram Goyal, Hassan Shehabi and S Kugan** review the challenge of finding the right engineering workforce in the oil and gas sector

THE credit crunch may have slowed down the clamour for skilled engineers from the global oil and gas sector temporarily – but oil executives are certain that the shortage of experienced engineers that has dogged the sector for so long is here to stay.

The rising oil price, which despite the battered economy remains well above its long-term average, has driven a rush to invest in oil and gas developments around the world. Unfortunately this has coincided with a marked dearth of skilled and professionally-qualified and experienced manpower worldwide. The crisis in recruitment and retention has caught many companies by surprise, international oil companies (IOCs) and national oil companies (NOCs) alike.

To tackle it, companies not only have to encourage more school-leavers to enter the engineering disciplines, but they will have to focus on international recruitment to plug gaps in the short term.

It is interesting to note that IOCs and NOCs are driven by quite different human resource policies. IOCs are primarily multi-national in character since their business activities and assets are spread all over the world. Most have long-standing policies of hiring locals where cost-effective, and deploying key managers and decision-makers worldwide to manage investments and get the most out of the assets on the ground.

NOCs on the other hand had to heed calls to employ an increasing proportion

of nationals in their workforce ("*Saudi-isation*" and "*Bahraini-isation*" etc were and are strategic corporate priorities). This makes it very difficult to fire a national employee; expatriates are only taken on when severe skills shortages make it impossible to find locals to fill certain job categories. In addition, many NOCs are finding they can no longer rely on their good reputation and workforce loyalty to automatically deliver the brightest recruits through their doors; many of these instead follow the lure of areas such as finance, the stock market, international taxation, insurance, law, and private entrepreneurship.

## supply and demand cycles

While many industry sectors see a boom-and-bust cycle of recruitment, in line with the peaks and troughs in the business and the overall economy, the oil industry has suffered a very long decline in jobs. Since the peak of the early 1970s, over 1m oil jobs in the US have been lost, estimates consultancy agency McKinsey. The number of oil refineries has dropped from 280 to 150 in that period.

This drop in job opportunities has been accompanied by a sustained loss of interest in engineering among school-leavers in the West. Many engineering departments would have faced closure as a result had they not thrown open their doors to foreign students, mainly from the Asian sub-continent.

Demand for engineers on the other hand increased tremendously in the boom years of 2007 and early 2008. A recent report in the *Middle-Eastern Economic Digest* (MEED) estimates that in 2007, Saudi Aramco and Sabic alone doubled their annual intake of engineers from 10,000 to 20,000. Many projects faced escalating manpower costs as companies struggled to attract and retain sufficient qualified engineers.

In the long term, this drastic shortage cannot be overcome through expatriate resources alone. NOCs have to create the right environment to promote engineering and technical careers to school-leavers. NOCs need to invest in local community outreach and overhaul their approach to public relations. In particular, oil companies may be missing out on some of the brightest engineering graduates because they historically only attract a small share of female engineers.

The oil industry has a duty to educate the public that modern refineries and worksites are environmentally friendly and clean places to work in, and that all modern protective equipment is lightweight and comfortable to wear.

## skills inventory

To retain their indigenous managers and technical experts over the long term, NOCs need to identify the desired skills and competencies amongst their workforce, so that they can actively



develop and reward people with these characteristics. Companies also need to realise that workforces have become more mobile and that this trend continues, and put in place measures to minimise the disruption this causes.

#### performance measurement

To improve staff retention, NOCs need to pay more attention to training and re-training their existing workforce, and they need to adopt performance-based rewards – this can only be done through a suitable skills inventory.

This is not to imply that NOCs have not invested a great deal of resources

depends upon the establishment of a comprehensive inventorying of individual and group skills and competencies.

#### indigenous workforce

Amongst NOCs, the “100% nationalised workforce” might be a politically correct objective, but it does not correspond to the ground reality of the 21<sup>st</sup> century, where skilled workers are on the move worldwide. Even the natural barriers of language, culture and socio-political conditions are increasingly being breached. A presence of a small percentage of expatriates in the NOCs

prospective graduate employees while these are still at university.

#### western expatriates

Most Middle Eastern countries have flourishing expatriate communities. For example, Saudi Arabia hosts an estimated 1–1.5m expatriates each from Bangladesh, India, and Pakistan, and around 900,000 workers from the Philippines. Together, these communities account for over half of Saudi Arabia’s expatriate population. On top of this come migrants from nearby and neighbouring countries, especially Yemen and Egypt. Western expatriates number around 100,000, including about 40,000 from the US and 30,000 from the UK.

For most of the NOCs, the English-language trained pool of expatriates is the only option for recruitment outside the local talent pool. Even in the face of dwindling supplies, the western expatriate can provide good value for money. However, they were, at least until recently, the subject of fierce competition: In addition to a tremendous rise in demand in their home countries, western expatriates were wanted in new regions, too, such as Russia, oil-rich former Russian states, China, Africa, Pacific Rim, and even India. This factor, along with some real and imaginary personal security concerns and the limitations on spouses who may wish to continue pursuing their own careers (not always an option in the Middle East), has in the past made it difficult for the NOCs’ HR departments to attract the requisite number of western expatriates with the necessary technical or managerial skills.

NOCs have to ensure they offer attractive salaries to beat the competition. Like it or not, the whole Middle East is seen as a dangerous place in many Western countries. Without a significant financial benefit to working in what they perceive as a dangerous area, Western expats will have little interest. We believe that an experienced engineer will likely look for a premium of 30–40% on what they would earn at home to be an expatriate in this part of the world.

Once you have their attention with an attractive salary, companies should stress further advantages. Depending on the country and company, these could include extended holidays, short commuting times of 10–15 minutes, a 16:00 end to the working day (leaving plenty of time for family, social activities and sports), reduced

in personnel training in the past: most NOCs have dedicated training and development departments as well as training coordinators assigned to each client departments. Bahrain, Dubai, Abu Dhabi, Kuala Lumpur and Singapore have become major hubs for technical training, seminars and conferences.

However, while there’s no shortage of training on offer, there’s not always a good fit between what’s needed and what’s provided. In some cases, training and the chance to attend a conference is seen as a management favour rather than a need-based decision – which can turn a learning opportunity into a trivial, wasteful activity.

The primary cause is lack of a robustly-designed and rigidly adhered to performance-based evaluation system that would lead to a practicable and achievable individual development plan job-enrichment and/or re-deployment options. A performance-based evaluation and rewards system

is expected to continue; and is in fact creating a healthy competitive environment. The IOCs deliberately seek this diversity in their workforce – in this instance the NOCs should follow that lead.

The call for indigenisation of workforce is not merely a political decision – it’s also economically sound. Saudi Arabia’s expatriates moved some 585.4b Saudi riyals (\$156b) out of the country between 1993 and 2002 – a not insignificant portion of the country’s GDP.

The shortage of indigenous workforce available for the oil and gas industry has a number of causes, including complacency on the part of NOCs, who hadn’t foreseen the problem and relied on their name to be enough to attract recruits; competition from other industries, such as banking and insurance; IOC competitors tapping into the same talent pool; and companies failing to market themselves to





income tax and excellent weather for part of the year. One may also point out that countries in the Gulf Cooperation Council (GCC) tend to be modern, growing countries with more and more Western activities, which are much safer than they may be perceived from the outside.

On the negative side, it's worth noting that the houses assigned in the townships are generally smaller than what expats may be used to; that some of the townships are no longer the cream of residential housing developments available; that the number of Western expatriates is decreasing overall, as is the number of young expatriates with families. Another factor against working in the Middle East can be travel distances to people's home countries, and the harsh desert climate present for part of the year.

The NOCs, especially those in the GCC countries, must launch serious awareness campaigns aimed at the headhunters and the potential Western expatriates to highlight the fact that many places in this part of the world, for example Dubai and Bahrain, are fast becoming very desirable options from the standpoint of a Western lifestyle

(climate, housing, standard of living, amenities, entertainment, sports, schooling, domestic help and servants, low crime rate etc). Construction of luxury villas and plush apartment complexes is at its peak. These are aimed at not only the currently working high-income professionals, but also to lure rich expatriate retirees to make a home-from-home in this part of the world.

#### eastern expatriates

Outside the West, India is the primary country that currently has a pool of English-speaking technical and managerial professionals that is large enough to supply the immediate need of the NOCs. But global interest means that this pool of technical and engineering manpower resources is also drying up rapidly, which in turn presents India's own oil and gas sector with some challenges

Recruiting from India has been a mixed bag for many.

Middle Eastern companies recruiting from India have found with some frustration that many Indian professionals consider a stint in the Middle East as a useful launchpad to move to pastures greener (UK,

Australia, Canada), which can leave NOCs with an inadequate return on investment – you hire the person, you train them to become useful, and then they immediately migrate to the UK, and you're left to go through the cycle again! While this cannot always be avoided, and it's equally true that the top cadres of Indian professionals are directly lured away to the US and Europe, Middle Eastern NOCs can improve the success and effectiveness of recruiting from India by using a fast-track process (contact us for specific tips on how to recruit from India).

While the economic downturn has provided some respite from the overriding shortage of science and engineering staff in the oil and gas industry, the underlying issues remain, and must be addressed. In the long run, measures to attract more school-leavers into the profession and stemming the brain drain into other industries will be successful, but in the short term, companies will have to step up their recruitment of expatriate staff from Asia as well as the West.

It is in their own interest that they do this in the most efficient, effective way possible. **tce**



**Ram Goyal** ([ram\\_k\\_goyal@bapco.net](mailto:ram_k_goyal@bapco.net)) is advisor on risk management at Bapco; **Hassan Shehabi** is senior human resources officer; **S Kugan** is Hazop coordinator



## Chemical Engineering and Analytical Science at Manchester

### Bringing together science, engineering and biotechnology

For excellent career prospects, choose a postgraduate qualification from one of the largest and most diverse University schools in its discipline, and one of the highest ranking Chemical Engineering departments in the 2008 Research Assessment Exercise. Study with academic staff at the forefront of their fields, and benefit from close collaboration with industrial companies and other academic disciplines. Employers know our graduates are top class and many students are offered jobs before they finish their course.

#### Taught courses

MSc, Diploma and Certificate courses in the areas of advanced process design, the environment and sustainable technology, analytical and separation science, biotechnology and advanced chemical engineering. Study in a way which suits your lifestyle – choose from full-time, part-time or distance learning.

#### Research programmes

Fully-funded research projects, including tax-free maintenance payments in excess of £13,000/annum, are available for suitably qualified UK students. Research projects are available in all areas of research: Chemical Engineering, Analytical Science, Biocatalysis, Colloids, crystals, interfaces and materials, Instrumentation, Multi-scale Modelling, Process Integration, Systems Biology, The Environment and Sustainable Technology.

Applications are invited from students with a first degree in Chemical Engineering, other branches of Engineering, Physics, Chemistry or Mathematics.

For further information please visit: [www.ceas.manchester.ac.uk/postgraduate/](http://www.ceas.manchester.ac.uk/postgraduate/) or email [sandra.kershaw@manchester.ac.uk](mailto:sandra.kershaw@manchester.ac.uk)