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Seizing opportunities:
A new era for national oil companies

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Seizing opportunities: A new era for national oil companies

For national oil companies (NOCs), these are truly the best of times. Oil prices climbed in recent years from around US\$20 to over US\$100 per barrel, expanding revenues tremendously for oil producing and exporting NOCs. Simultaneously, importing NOCs are enjoying a growing customer base. The tightening of spare capacity in oil supply and associated increases in crude prices herald a new era for NOCs. Companies in exporting countries are stewards of their nations' crude oil and natural gas reserves, while importing NOCs are primary channels for securing supply in the international markets. In many countries, substantially increased hydrocarbon cash flows have put energy firmly center stage in government policy formulation and NOCs are often a primary conduit for policy execution. On the other hand, recent years have been challenging for importing NOCs as they try to manage price volatility and for both importing and exporting NOCs as they strive to secure and grow their supplies to satisfy ever-increasing global demand.

Based on extensive work with the oil sector across the world, Deloitte member firms have identified six key challenges, and hence opportunities to secure competitive advantage, that are high on the agendas of many NOC executives. These include:

- Risk management, reporting, and governance
- Talent development and retention
- Relationships with international oil companies (IOCs)
- Financial management and international tax planning
- Supervision of remote operations
- Climate change and the environment.

This management brief frames these challenges and invites a dialogue on how NOCs can best adapt to this new era—a period characterized by managing significant changes across multiple dimensions; experiencing international expansion, greater price volatility, innovative extraction and downstream technologies; and attracting a new generation of qualified talent to staff the oil companies of the future. The Oil & Gas teams at Deloitte member firms will release a series of informative whitepapers focused on identifying leading business practices and examining the ways in which NOCs are addressing these key challenges.

Risk management, reporting, and governance

The past few decades in the oil and gas industry have been characterized by periods of turmoil and major risk-related events, whether man-made or natural. The new environment requires NOCs to reach beyond their traditional roles of producing and refining crude oil, or procuring these vital materials on the global markets. For many NOCs in countries that have to import much of their oil and gas, such as China, this involves the development of a foreign investment strategy designed to secure sources of oil on a global basis. For NOCs in countries that are significant oil and gas exporters, the medium- and long-term security of demand is high on their list of concerns, especially in countries that do not produce the most desirable grades of petroleum. The potential reduction of demand resulting from the growth in alternative fuels and stiffer measures to promote energy efficiency and conservation could also lead to a reduced call on exports and international trade. This could risk the “stranding” of investment in incremental productive capacity. To address these concerns, oil companies in both consuming and exporting countries are engaged in dialogues with their respective governments on many issues, including:

- The extent of security of commodity supply and demand
- Globalization challenges and international expansion/collaboration
- Physical security of assets and infrastructure in the supply chain
- Operating in remote or hostile environments.

This new environment has opened NOCs to greater strategic, political, and legal risks than in the past. Deloitte member firm experience with NOCs indicates that many NOC executives do not feel they have a good understanding of business risk in today's environment. As discussed in this paper, NOCs are now facing new challenges that require a more comprehensive approach to risk than in the past.

Figure 1: Risk type taxonomy

Readily quantifiable risk types	Difficult-to-quantify risk types
Market/price risk	Strategic/franchise risk
Credit/default risk	Operational risk
Modeling/valuation risk	Staffing/organization risk
Financing/financial risk	Regulatory risk
Operations risk	Political risk
Volumetric risk	Technological risk
Business continuity risk	Legal risk
Financial reporting risk	
Environmental risk	

Source: Adapted from CCRO. Introduction and Executive Summaries of CCRO Recommendations. 2002.

The increase in stress levels on the oil markets have resulted in a growing dissatisfaction with traditional risk management approaches and a desire to improve the reliability with which new opportunities can be evaluated and results anticipated. Much interest has been directed toward developing more comprehensive and sophisticated approaches to risk management, and enterprise risk management has been garnering increased attention from company executives. Many companies have evolved their capabilities to identifying their risks and proactively managing their finance and insurable risks. However, while many companies see the benefits of developing a comprehensive risk management framework, few companies feel they are able to intelligently manage their full spectrum of risks; to adequately assess and address risk from all perspectives; to break through the organizational barriers that obscure a view of the entirety of risks facing a company; and to systematically anticipate and prepare an integrated response to potentially significant risks.

For most of the publicly traded IOCs in the post-Sarbanes-Oxley business world, it is no longer enough for companies merely to acknowledge their business risks. They must also report these risks to their shareholders and address the need for strong internal controls. The U.S. Sarbanes-Oxley Act of 2002 demands review of internal controls and articulates the responsibilities of the senior most executives in the approval of a company's financial statements.

As an increasing number of NOCs begin to access capital markets, they too are considering adopting non-local accounting standards, such as International Accounting Standards or U.S. Generally Accepted Accounting Principles, to support their securities filings and to support access to the more liquid global financial markets. New reporting regulations are making risk disclosures more rigorous and turning a best practice into a requirement. Further, markets are shifting as new financial centers, such as Dubai, Hong Kong, Singapore, and Shanghai, seek to attract new business away from more established centers, such as New York, London, and Frankfurt. New reporting requirements will likely come with these changes.

Corporate governance has traditionally been a thorny issue for many NOCs. As they become increasingly global players, it will be critical for NOCs to remain mindful of the local issues in the foreign countries in which they are invested that impact their workforce and resources. Environmental, health and safety, labor, and trade issues are important to the citizens and states where NOCs operate and should be considered in investment decisions. NOCs will likely come under more scrutiny from a variety of sources, from global media to non-governmental organizations. Increasingly, these and other stakeholders will demand clear reporting and corporate social responsibility. NOCs can expect to be held responsible for their actions in both domestic and foreign operations and, as agents of governments, they will need to be especially vigilant about the ways their actions influence public sentiment.

Additionally, as NOCs seek more debt or even equity capital through public markets, they will have to critically examine where and how they access it. NOCs may have to revisit their structures and corporate governance to adapt to a new world of global operations and capital markets. With access to these capital markets comes corporate governance responsibilities that require NOCs to be more accountable and transparent to all shareholders, not just their home countries or state ministries. Among the more crucial implications will be the need to address potential conflicts among the states' interests, the public investors' interests, and those of the company.

Talent development and retention

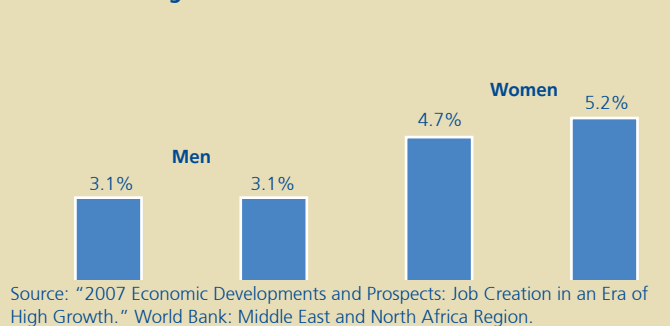
The need to retain talent is becoming an acute issue for many companies, especially in the upstream sector in North America and much of Europe.¹ Over recent decades, the U.S. oil industry alone has eliminated over 1 million jobs through consolidation and attrition.² To make matters worse, the industry's remaining workforce is aging. A good portion of the oil and gas workforce is 45 and older while the majority of employees working for a typical technology-focused company are under 40. Replenishing the talent pool has been difficult; Generation Y seems wary of this allegedly finite-life industry and they are all too aware of the sector's periodic environmental shortcomings. This is not just a problem in the United States according to a recent *Economist* survey, which claims that talent has become the world's most sought after commodity.³

The industry's shallow talent pool might motivate competition between NOCs and IOCs when looking for new technologies that augment their existing operations. At the same time, this dynamic has the potential to inspire collaboration or partnerships between entities trying to tap into the same talent resources. In 2002, Algeria's NOC partnered with other organizations to access the technical expertise necessary to improve their delivery options for exporting liquified natural gas (LNG) to Europe.⁴ More recently, NOCs in Russia, India, Libya, and China have all entered into collaborative arrangements with a range of IOCs. However, these ventures might come under significant strain in the coming years as the availability of technical expertise declines due to the retiring ranks of qualified talent in many parts of the industry.

A shrinking talent pool from which NOCs typically draw expatriate employees to help staff their foreign ventures has the potential to slow their progress as global players. Additionally, the need to develop workforces in their foreign ventures can result in challenges in the integration of multiple cultures. In some cases, to succeed, NOCs may need to adapt their internal cultures to accommodate the multiple nationalities and generations that simultaneously make up the workforce. To be competitive in the global market, NOCs will need to answer the following questions:

- How will NOCs compete in the global market for, arguably, the scarcest commodity of all, talent?
- Will NOCs push for their workforce to adapt to home-country cultures, or will they become more inclusive?
- Will NOCs continue to rely on expatriate labor for their technical and unskilled base, or will they increase the localization of jobs, especially in the highly technical areas?

Figure 2: Labor force growth by gender, in the Middle East/ North Africa region



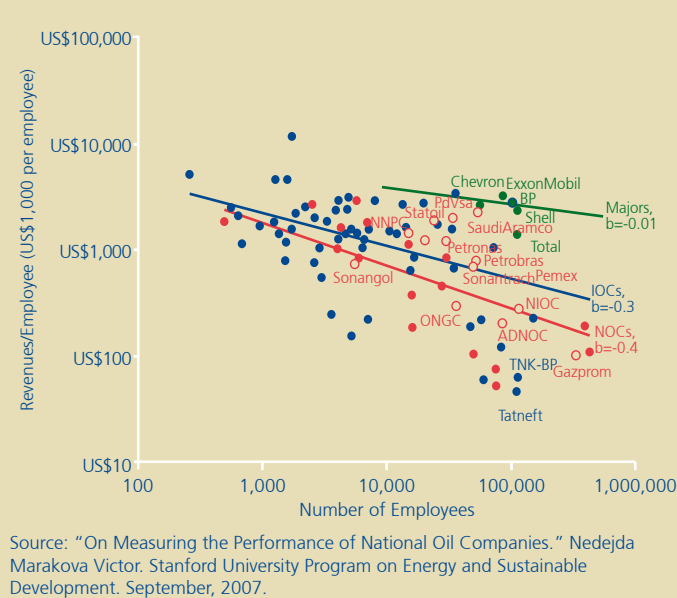
Relationships with IOCs

NOCs today are expressing a strong interest in expanding their business pursuits across national borders. In turn, global expansion requires NOCs to look at the way they manage relationships with IOCs. IOCs remain attractive as venture partners because they can bring critical expertise and international experience that may not be as readily available within some NOCs. As oil production becomes more complex, NOCs are keen to use their IOC relationships to build institutional knowledge in a host of key technical proficiencies including complex geology, corrosion reduction, extraction from poorer quality areas, and artificial lift technologies. This sentiment is best summed up in a comment made by a Middle East professional:⁵

“NOCs and IOCs need each other. The NOCs offer access to reserves, while IOCs offer access to capital, expertise (the latest enhanced oil recovery techniques, for example), and management skills—these are key things missing in NOCs. We have too much bureaucracy, which brings bad management delays; all these things disappear with an IOC. For example, if we order spare parts, the request goes from committee to committee. The IOC just gets it. And research. Our country doesn’t have research centers, except the one inaugurated by our NOC.”
—a senior executive at a Middle East NOC.

Generally, IOCs also bring stronger process and management skills, as well as distribution channels into key global markets. Tapping into the IOCs for technologies, expertise, and market access, may require NOCs to effectively manage alliances, acquisitions, and integration programs.

Figure 3: Revenue employee versus number of employees, 2004

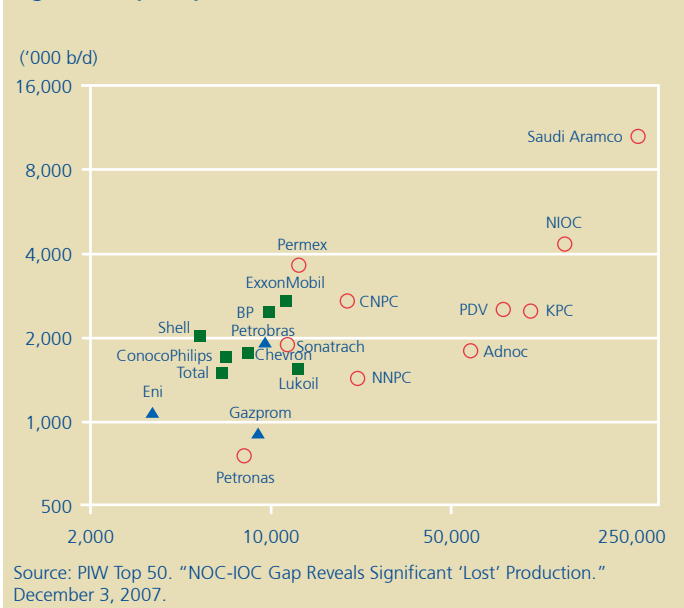


NOCs traditionally favor long-term relationships, but their focus is shifting toward project-based, short-term deals. Supply-hungry NOCs are beginning to change the currency of competition by making local deals with broader strategic value. For example, China National Petroleum Corporation has committed to local economic development in Kazakhstan through investments in power stations, railway lines, and chemical plants.⁶

Another emerging trend is that NOCs in countries such as Saudi Arabia, Venezuela, and Russia, endowed with significant hydrocarbon resources, appear to be asserting greater bargaining power over IOCs.

Recently, two Western IOCs ceded control of massive gas projects in Siberia to Russian NOCs. For quite different reasons, NOCs from populous and rapidly growing countries, like China and India, which have insufficient domestic hydrocarbon resources but growing energy appetites, are proving to be tougher negotiators in their relationships with IOCs. They are keen to invest in access to these expanding markets.

Figure 4: Liquids production versus reserves



Financial management and international tax planning

The financial strategies of NOCs have been challenged in different ways by the rise and volatility of oil prices over the last five years. Rising oil prices helped OPEC countries increase their gross domestic product from US\$856 billion in 2000 to US\$1.7 trillion in 2006.⁷

As cash continues to flow freely into OPEC NOCs, many have accelerated their capital spending programs and are focused on developing strategies that could help secure a competitive return on their various investments, both upstream and downstream, and at home and abroad.

Cash deployment practices vary widely across NOCs. Between 2007 and 2013, Middle East countries expect to invest some US\$94 billion in their oil and gas upstream sectors, mainly to expand oil production capacity.⁸ A further US\$240 billion of investment is planned for their midstream and downstream oil and gas operations and petrochemicals.⁹

In contrast to the established exporting NOCs, which expect to finance investment from their own cash flows, importing NOCs may need to access significant additional capital to finance working capital and to invest in production and distribution infrastructure to meet growing demand. Several NOCs have raised capital through a variety of public market channels, from floating bond issues to selling equity. For many years, Petroleos de Venezuela S.A., Venezuela’s NOC, issued bonds through the U.S. debt capital markets, though none are currently outstanding. Further, PetroChina Company Limited, the core unit of state-owned China National Petroleum Corporation, recently won approval for an initial public offering of shares on the domestic market that could raise more than US\$7 billion.¹⁰ Different capitalization strategies and markets for capital expose NOCs to different levels of scrutiny and compliance costs.

Both exporting and importing NOCs live in a new world of financial volatility. Oil prices may not appear more volatile in percentage terms, but the price swings of 10 percent at US\$100 per barrel are much greater in absolute terms than they were when oil costs hovered around US\$20 per barrel. This can have a significant impact on cash inflows and outlays. The absolute impact of price volatility at different price points makes cash flow management and prediction more difficult. NOCs are likely to consider more sophisticated cash and risk management strategies in the face of this volatility.

In the next era for NOCs, leaders will have to critically review their financial and treasury management operations and invest in developing the capabilities to generate greater returns on cash; finance future growth; and manage volatility. Treasury operations often represent a major area for improvement. Many NOCs do not routinely close their books after financial reporting dates within timeframes common among large IOCs.

As national oil companies globalize and become more complex, they encounter numerous opportunities for organizational and financial growth. International tax planning becomes a crucial facet of financial planning. In the past, many NOCs had purely domestic operations and were 100 percent state owned. Tax compliance was routine and tax optimization was regarded as unnecessary: ultimately, taxes and dividends ended up in the hands of the government so there was very little reason to expend resources on planning. This situation has changed however. Many more NOCs operate outside their home jurisdiction and some have minority shareholders who certainly do care about the size of the dividends they receive and the company's effective tax rate. The heightened and widespread awareness of the complexities and demands of corporate tax compliance is pushing many companies, including NOCs, to tighten their practices to avoid errors or oversights that can result in penalties and seriously harm corporate reputations. One facet of this process is the increasing use of specialized internal and external resources to plan and manage taxes.

NOCs should organize themselves to take advantage of international tax planning opportunities, double tax treaties, and consider the taxation rates in the various countries in which they operate. Poor tax planning can result in excessive and uncompetitive tax charges that divert resources which could have been used to grow the business. On the other hand, careful tax planning can save money for companies and their shareholders and establish an infrastructure that can enable continued tax efficiency in their growth plans.

Supervision of remote operations

Any companies engaging in international operations, and NOCs are no exception, face particular challenges in gaining and maintaining the trust and cooperation of their stakeholders. This is common for many natural resources businesses, and perhaps most of all for those state-owned businesses investing outside their own countries. Accordingly, standards required for long-term successful involvement by NOCs in international ventures are very high. Issues such as environment, health, safety, and labor practices are important to citizens and states outside the NOCs' home countries, often more so than in domestic operations. NOCs' actions will likely come under scrutiny from global media and non-governmental organizations and activist groups not often faced at home. In particular, these groups look for consistency of action between NOCs' domestic endeavors and their overseas operations. NOCs, no less than IOCs, are expected to maintain high standards of corporate citizenship and demonstrate care for the environment, safety of workers, and commitment to communities. Those NOCs that have extensive overseas operations are already adapting to this stakeholder-aware environment. PetroChina Company Limited, Kuwait Petroleum Corporation, and Oil & Natural Gas

Corporation of India, among others, have released public information demonstrating their commitments to environmental, safety and health, and community involvement policies.

In the recent supply squeeze, much attention has turned to the medium and longer term competition for access to hydrocarbon resources to replace declining output from mature basins outside OPEC. This is a primary challenge for larger IOCs and indeed for the NOCs that dominate the oil and gas supply chains in a number of major energy importing countries, such as China and India. In this context, many NOCs are experiencing an increased degree of empowerment in the global marketplace, relative to even the largest IOCs.

Within "developed" markets of the Organization for Economic Co-operation and Development (OECD) countries and many of the emerging economies, the primary concern of recent years has been for long-term confidence about "security of supply."¹¹ For many countries, NOC-to-NOC cooperation has become increasingly attractive as exporting NOCs look conversely for "security of demand." But within OECD countries, the markets, at least for oil if not for natural gas, are largely open and liberalized, with IOCs typically controlling the supply and distribution infrastructure. NOCs seeking to secure access to demand in such markets need to be able to establish and exercise political influence that cannot always come through national governments. For example, an OECD government alone cannot force a community to accept an LNG gasification plant or terminal in its vicinity, but may require investors to meet, negotiate, and convince local government officials and constituents to issue necessary permits and licenses. This will require a better understanding of various issues facing national, regional, and local governments, which means that a NOC will need to view itself as a global corporation, much in the same way that the largest IOCs have been doing for many decades.

Climate change and the environment

Climate change and environmental concerns have taken center stage in many countries. As more NOCs broaden their investment horizons and operations internationally, they will need to be seen as good stewards of the environment, both in their domestic operations and in their overseas investments. While IOCs have made significant strides over the past decades to align their environmental practices with the demands of the consumer markets, they must continue to make progress in this area if they are to remain in the good graces of the public eye. And IOCs are very aware of consumer sentiment and how quickly it can change, even though governmental regulation often drives their efforts in this respect. Likewise, in today's global media environment, NOCs cannot ignore their environmental practices at home as this could have repercussions in securing international markets and in seeking international investments.

Saudi Arabia, the world's largest oil exporter, recently signaled that it would help support action on global warming through research on cutting CO₂ emissions in the oil and gas industry.

"I believe the petroleum industry should actively engage in policy debate on climate change as well as play an active role in developing and implementing carbon management technologies to meet future challenges. National oil companies—like Saudi Aramco—can make meaningful contributions to those efforts."

—Abdullah Ju'mah, President and CEO, Saudi Aramco, as quoted by Reuters News Service, May 23, 2006.¹²

Looking ahead

Over the last 50 years, an era of abundant oil and gas supply capacity has been dominated by the IOCs, especially by those known as the “supermajors;” this despite the various resource nationalizations of the 1960s and 1970s. The successful rise for NOCs in this next era is likely to be predicated on their responses to new challenges, including those of corporate governance and transparency, financial risk management and international tax planning, climate change, and talent development and retention. Based on current trends, the next quarter century promises to see a shift in market power to NOCs as the global supply and demand equation remains tight and high prices are prolonged.

These challenges should motivate NOCs to ask themselves how their companies will evolve. As NOCs internationalize their portfolios of assets and operations, driving vertical integration in the supply chains, and attracting capital from global markets, will they eventually become much more like today’s largest IOCs?

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