National Oil Company / International Oil Company

Cooperation in Oil and Gas Activities
Content

- Global Industry Dynamics and Production Capacity Requirements
- IOC/NOC Cooperation – The Nigerian Historical Perspective
- New Challenges Defining Future NOC/IOC Cooperation
- Framework For NOC/IOC Cooperation – The Nigerian Experience
- Concluding Remarks
Recent observations in global markets suggest a sustained shift in oil and gas prices to levels unprecedented in previous years.
Unrelenting demand, particularly in Asia is likely to sustain the high prices. Significant production capacity growth is imperative if more moderate prices are to be realized.
OPEC countries dominate the world’s remaining crude reserves, most of which are managed by NOCs. NOCs will therefore play a major role in meeting future capacity requirement. However, meeting this will require cooperation with IOCs.
Global Industry Dynamics and Production Capacity Requirements

IOC/NOC Cooperation – The Nigerian Historical Perspective

New Challenges Defining Future NOC/IOC Cooperation

Framework For NOC/IOC Cooperation – The Nigerian Experience

Concluding Remarks
Nigeria has seen a steady growth in oil reserves. This has also translated into a steady growth in production capacity.
Specifically by the end of 2006 alone, over 500,000b/d will be added to global crude oil capacity from Nigeria.
Similarly for gas, Nigeria’s capacity is set for growth to meet an unprecedented demand growth both from export and domestic markets.
The observed growth in oil, gas reserves and production growth is anchored mainly on historical cooperation between the NNPC and IOCs through 3 formal structures – JV, PSC, SC. This cooperation has been enabled by a few key factors, notably a stable and adaptable commercial environment.

- **Stable and Enduring Agreements**
- **Flexibility and Adaptability**
  - Quick resolution of difficult issues – MOU etc.
- **Attractive fiscal and responsive regime**
- **Attractive PSC contracts**
Content

- Global Industry Dynamics and Production Capacity Requirements
- IOC/NOC Cooperation – The Nigerian Historical Perspective
- New Challenges Defining Future NOC/IOC Cooperation
- Framework For NOC/IOC Cooperation – The Nigerian Experience
- Concluding Remarks
THE NIGERIAN EXPERIENCE

4 New Challenges

1. Increasing focus in addressing economic empowerment and growth of host community to mitigate against disruptions

2. Increasing demand by the Nigerian people for visible contribution from the oil and gas sector to national economic growth

3. Increasing technological challenges associated with finding new oil / gas, particularly in difficult terrains e.g. deepwater, including the challenge of developing the requisite skills and capabilities to support the required capacities

4. Huge funding challenge associated with rapid capacity development

Going forward, 4 new challenges confront the NNPC and IOCs in Nigeria. These challenges call for a revisit on the anchors of cooperation. A more strategic approach to the cooperation will be required to overcome some of the challenges
### NEW CHALLENGES

**Niger Delta Challenge**

#### Root Causes
- Socio-economic Conditions
  - Unemployment
  - Limited / inadequate infrastructure
  - Low literacy level
  - Hostile terrain
- Perceived and actual marginalisation
- Poor Governance
- Social Disintegration
- Competition for oil company attention and benefits
- Lack of acceptable framework for adjudication in claims
- Availability of small Arms and Ammunitions

#### Manifestations
- Riots, protests
- Property destruction
- Militia assaults
- Oil theft
- Small Arms
- Money laundering
- Some occasional unprovoked attacks on members of the security forces and hostage taking of oil workers
- Oil spills with criminal intent
- Military engagement
- Production deferment
In Nigeria the oil sector contribution to GDP is disproportionately small when compared with its contribution to earnings.
Increasingly focus is shifting to deepwater. Over 7bn bbls and 19TCF of gas have been discovered recently which will underpin future production growth. However, technology and robust skills and capabilities will be required by NNPC to realise the full potential of the Nigerian deepwater.
Over $60bn is required by 2008 to deliver Nigeria’s capacity aspiration. This level of investment requires innovative and structurally more complex arrangements beyond traditional JV cash call.

### NEW CHALLENGES
The Investment Level Challenge

- **Over $60bn investment is required by 2008**
- **Govt. equity share is high, but there are challenges**
  - Costs are rising
  - With increasing PSCs, govt. earns less
- **Current levels of funding by the govt. of NNPC equity may not match-up to the required investment level**

<table>
<thead>
<tr>
<th>2005-2008 Investment Level</th>
<th>Oil</th>
<th>Natural Gas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Onshore</td>
<td>Upstream</td>
</tr>
<tr>
<td></td>
<td>$6.4 bn</td>
<td>$12.4 bn</td>
</tr>
<tr>
<td></td>
<td>Offshore</td>
<td>Downstream</td>
</tr>
<tr>
<td></td>
<td>$28 bn</td>
<td>$20.3 bn</td>
</tr>
<tr>
<td></td>
<td>Total Oil</td>
<td>Total Gas</td>
</tr>
<tr>
<td></td>
<td>$34.4 bn</td>
<td>$32.7 bn</td>
</tr>
</tbody>
</table>
Content

- Global Industry Dynamics and Production Capacity Requirements
- IOC/NOC Cooperation – The Nigerian Historical Perspective
- New Challenges Defining Future NOC/IOC Cooperation
- Framework For NOC/IOC Cooperation – The Nigerian Experience
- Concluding Remarks
**Derivation Fund and Revenue**
- 13% derivation introduced at the re-emergence of democracy in 1999
- Significant increase in the revenue earnings of the oil producing states compared to non-oil producing states

**Environmental House Cleaning - Legislative Measures**
- Establishment of the Federal Environmental Protection Agency (FEPA) in 1988 to control rate and quality of effluent discharge
- Establishment of the Ministry of Environment

**Establishment of the Niger Delta Development Commission by the ACT of 2002**
- Focus on human development projects in the area of education, skills etc. with potential for impacting conflict resolution
- Provision of critical infrastructure

**Establishment of Gulf of Guinea Energy Security Strategy**
- Ensure security of energy supply whilst promoting sustainable development of the region in a climate of peace
- Cooperating with foreign governments in the areas of sustainable development, small arms control and maritime security and money laundering
Federal Government interventions span 9 areas: Employment generation; Transportation; Education; Health; Telecommunications; Environment; Agriculture; Power and Water Resources.

Development projects to be executed by Federal Government include:
- Creation of 20,000 new jobs for indigenes in various sector of the economy (Army, Navy, Air Force, Police, Federal Civil Service, Teaching and Oil Sector of the economy)
- N230 billion for dualisation of East-West Road. Project execution to start in May 2006
- River Niger to be dredged
- NNPC to build 12 floating mega stations
- Rural electrification for 396 communities
- Take-off of a Federal Polytechnic in Bayelsa by September 2006
- Collaboration with GSM providers to extend coverage to major towns and communities
- Empowerment of the National Spill Detection and Response Agency to eliminate water pollution

These bold initiatives have already generated very positive response from all stakeholders.
Despite the constraints facing the operations, the Niger Delta situation is very much under control.

Efforts of the Security Agencies include but not limited to the following:

- The Joint Task Force (JTF), “Operation Restore Hope” has been in the region since August 2003 to restore law and order.
- Security Agencies have effectively curtailed the operations of illegal bunkerers/crude oil theft and to date, a number of vessels/barges have been arrested.
- Although “Operation Restore Hope” has enhanced the security situation of the area, there are a lot more to be achieved in checking the criminal activities of the militia.
- Disarmament, demobilisation, re-integration.
State Governments
- Coordinating the efforts and resources of the various stakeholders (e.g. NNPC and JV Partners, NDDC, Governments of the USA and UK, Donor Agencies) so as to integrate them with on-going development activities of the State Government

NGOs and Donor Organisations (European Commission, World Bank, USAID, UNDP, IFAD, DFID etc).
- Intervention include:
  - Strengthening rule of law, fight against corruption and improve management
  - Supporting poverty reduction, HIV/AIDS, etc.
  - National capacity building in conflict analysis and resolution

NNPC and IOCs
- Industry-wide community projects now shifted towards Sustainable Development with increased focus on Economic Empowerment
- The Niger Delta region is strategically positioned to take advantage of the development of large scale Bio-fuel projects being initiated by NNPC. The Bio-fuel project will ensure rural development and increased direct and indirect jobs creating increased household income annually

Need to accelerate and sustain current developmental efforts of the Oil and Gas industry
The National Content Agenda provides a framework for NNPC and IOCs to facilitate the development of an economic environment which can flourish and sustain continued capacity growth.

- **Objective – Domiciliation of Spend**
  - Enable linkage with economy
  - Impact economy of Niger Delta
  - Enable sustainable oil activity

- **Anchors – 3 Key Areas of Spend**
  - Procurement, Fabrication, Engineering & Construction

- **Critically dependent on cooperation between NNPC and IOCs to succeed**
16 detailed guidelines have been issued to the industry by NNPC. Cooperation guided by these guidelines will help deliver the intent.
Increasing evidence of success across all IOC JVs. The fabrication tonnage in-country has increased steadily since 2003 across Shell, Chevron and XOM projects. Similarly, the Engineering ManHrs in-country continues to increase steadily from less than 500,000 to almost 4m by 2009.
Unlocking the vast potential in the deepwater fields requires cooperation that enables effective transfer of technology from IOCs to NOCs in 4 key areas as above. Underlying the technology transfer are critical skills and capabilities which also have to be developed.
Various approaches exist to enable the delivery of transfer of technology and skills. In NNPC, the transfer of operatorship of some fields from IOCs to NOCs provides a platform for direct technology and skills transfer.
Advanced technologies such as floating LNG’s are being evaluated through collaboration between NNPC and Statoil to unlock significant gas reserves deepwater which otherwise would have been stranded.

- NNPC and Statoil are evaluating the floating LNG concept for deepwater Nigeria.
- Concept (if successful) would unlock over 4 TCF of gas reserves in one of the largest gas fields deepwater Nigeria.
- Study in feasibility phase and ongoing.

FRAMEWORK FOR STRATEGIC NOC/IOC CO-OPERATION
Technology, Skills And Other Capacity Transfer
Unlocking Deepwater Reserves - Floating LNG Concepts
Further cooperation between NNPC and the IOCs is ongoing in the area of the Nigerian gas masterplan development. Through this cooperation, concepts in the masterplan through which boundaries between JVs and IOCs are transcended for the greater benefit of all are being realized.
Adhoc mechanisms for securing alternative funding have been explored through cooperation between IOCs and NNPC. Through knowledge sharing, there’s been a continued improvement in finance terms and ease of access to these funds.
However, NNPC is now working with IOCs to develop even more structured ways of funding. Currently NNPC and IOCs are evaluating some proposals for a structured long term approach to funding the sector.
Content

- Global Industry Dynamics and Production Capacity Requirements
- IOC/NOC Cooperation – The Nigerian Historical Perspective
- New Challenges Defining Future NOC/IOC Cooperation
- Framework For NOC/IOC Cooperation – The Nigerian Experience
- Concluding Remarks
CONCLUDING REMARKS

- Increasing concentration of reserves and production potential in NOCs, dwindling reserves and production capacity in IOCs
- Increasing dependence on complex sources for oil and gas in the NOC portfolio, imply need for IOC leading edge technologies
- Cooperation between IOCs and NOCs now have to be strategic rather than adhoc, if sustained capacity growth in the industry is to be realized

Key levers of strategic cooperation include

1. securing the economic environment that enables sustained capacity growth
2. partnering to develop and transfer critical technologies that open up stranded resources
3. partnering to strategically reduce costs as well as access funding
CONCLUDING REMARKS

Strategic NOC – IOC cooperation is a continuing journey for us in Nigeria. Significant learning lies ahead!!

Work in Progress