Attachment 4 - Deepwater Oil Production Operated & Non Operated (based on May GDPI Data).
## BPA Deepwater Project Performance

<table>
<thead>
<tr>
<th>Project</th>
<th>Budget</th>
<th>Schedule</th>
<th>Reserves</th>
<th>Prodn. Uptime %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foinaven</td>
<td>+100%</td>
<td>20 month delay</td>
<td>+30%</td>
<td>81</td>
</tr>
<tr>
<td>Schichallion</td>
<td>+30%</td>
<td>Ontime</td>
<td>-20%</td>
<td>71</td>
</tr>
<tr>
<td>Troika</td>
<td>+35%</td>
<td>12 months delay to full production</td>
<td></td>
<td>95</td>
</tr>
<tr>
<td>Marlin</td>
<td>+45%</td>
<td>10 months delay</td>
<td>-25%</td>
<td>Prodn Closed in</td>
</tr>
</tbody>
</table>
Alternative Non Operated Models

Strategies

1. "Let the Operator Operate"
   - Hands off, eyes off
   - Passive 'silent investor' role
   - High level review at key milestones only
   - Strategies & plans developed in isolation by operator

2. "Let's be friends and help educate the operator"
   - Shell's normal mode of operation
   - Limited dedicated funding or resources
   - Little or no Project team representation
   - No linking or reporting of global performance and issues
   - Friendly Control by Management Committee
   - Review & endorsement of plans only through formal JOA rules of engagement

Attachment 6 - Alternative Non Operated Models.
Alternative Non Operated Models

Strategies

3. Make the operator operate
   Active Stewardship to full intervention
      - Exxon normal mode of operation
      - Focus on contractual control
      - Secure key positions in the Project team
      - Demand significant products using JOA or tactics
      - Dedicated Shell funded team
      - Use “Non Approval” of funds as a lever

4. Coveted Operatorship
   - Seek ways to show Operator incompetence
   - Independent Government discussions
   - Albacon Leste example

Attachment 6 -- Alternative Non Operated Models, continued.
### Preferred Shell Non Operated Model

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOA</td>
<td>Tight JOA, including provisions for influence/control</td>
</tr>
<tr>
<td></td>
<td>Include Shell positions (liaison, technical, leadership)</td>
</tr>
<tr>
<td></td>
<td>specific data needs and key deliverables at each stage</td>
</tr>
<tr>
<td></td>
<td>Shared project review process</td>
</tr>
<tr>
<td>Project Reviews</td>
<td>Understand Operators review fund approval process</td>
</tr>
<tr>
<td></td>
<td>Shared review processes (e.g., align VAR &amp; BPA CVP)</td>
</tr>
<tr>
<td></td>
<td>Use very experienced Shell staff</td>
</tr>
<tr>
<td>Exploration</td>
<td>Dedicated Subsurface Team (all key skills)</td>
</tr>
<tr>
<td>Appraisal</td>
<td>Provision for evolving Integrated team (all key skills)</td>
</tr>
<tr>
<td></td>
<td>Overall Workshop, Peer review, VAR and milestone plan</td>
</tr>
<tr>
<td>Concept Selection</td>
<td>Provision for dedicated Integrated team (all key skills)</td>
</tr>
<tr>
<td></td>
<td>Shell Liaison position in the Operators team</td>
</tr>
<tr>
<td>Project Definition</td>
<td>Leadership and/or key skill position(s) on the project</td>
</tr>
<tr>
<td>Development Execution</td>
<td>Leadership and/or key skill position(s) on the project</td>
</tr>
</tbody>
</table>

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---

Attachment 7 – Preferred Shell Non Operated Model.
### Roles and Responsibilities for Non-Operated Ventures

| Asset Team | In Country, stakeholder relationships  
| SDS Technical Team | Dedicated Team with Team Leader  
| | Core Skills Full Time  
| | Shadow Work in Key risk/technical areas  
| | Integrated Subsurface & surface Skills  
| | CTRs agreed with Asset team  
| Shell Representation on the Operator Team | Senior Liaison Engineer Position  
| | Shell staff in key positions  
| | Performance & Intelligence Info'  
| Non Operated Venture Networks | Key staff from Asset team, SDS, RBA  
| | Performance & Info' Shara  
| | Intelligence and tactical alignment  
| | Leverage learnings  

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Attachment 8 – Roles and Responsibilities for Non-Operated Ventures.
Attachment 9 – BPA Capabilities Based on Block 18 and Holstein Experience.
Attachment 10 Alternative Non Operator Models

In previous non Operated ventures, Shell has typically employed a rather passive approach described variously as “Let the Operator Operate”, “Let’s be friends and educate the Operator” through to “Active Stewardship”. These will be illustrated with examples. (See attachment 9)

“Let the Operator operate” was the initial mandate for our early involvement in the BP-operated West of Shetlands project Foinaven, with Shell an almost silent investor, contributing little (other than finance) and also extracting very little knowledge or learning from the venture. By way of example in the pre-FID phase of Foinaven, Shell had only 4 dedicated staff: a NOV manager, an experienced geologist and facilities engineer, and a Commercial/Joint Venture manager. This team was supported, by discipline skills from a matrix organization within Shell Expro on an ad hoc basis. A fundamental belief and confidence in the capability of the operator drove this approach. However, there was also a desire not to subject BP to the demands of a rigorous challenge process, which had been a time-consuming feature of Shell Expro’s joint venture with Esso in the North Sea.

When it became clear that BP’s capabilities had been seriously overestimated and the WofS projects ran into difficulties, Shell adopted an increasingly proactive role, as it transitioned through various different non-operator models. Initially the nonconfrontational “Let’s be friends and educate the operator” model was employed. The initial emphasis was on partnership, sharing our knowledge and trying to educate the operator with the objective that all parties gain. Whilst this approach helps reduce value erosion, it provides little additional benefit in terms of learning and actually enables our competitors to learn from us. We are also unlikely to receive any recognition or PR value/visibility for our contribution.

Ultimately, Shell moved to “Active stewardship” and “Full intervention” models on the Schichallion project, identifying key focus areas for its own activities and with a much higher degree of intervention. This is closer to the approach proposed above but a higher level of manpower, involvement, and contractual control are also being advocated for future NOV’s.
## Attachment 11 Shell Skills Required for Active Stewardship of Non-Operated Ventures

### Indicative Dedicated Shell Team Resources

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Shell Team</th>
<th>Shell Secondees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploration</td>
<td>Dedicated Subsurface team 3-4 staff</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Team leader</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Geology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Geophysics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Petrophysics (part time)</td>
<td></td>
</tr>
<tr>
<td>Concept screening/Feasibility Studies (to VAR 2)</td>
<td>Integrated team</td>
<td>Liaison position</td>
</tr>
<tr>
<td></td>
<td>Team Leader</td>
<td>Selected leadership &amp; skills roles role</td>
</tr>
<tr>
<td></td>
<td>Subsurface Coordin.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Geology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Geophysics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reservoir Eng</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drilling p/t</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Petrophysics (p/t)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Production tech (p/t)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Surface Coordin</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Development Planning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Structures (p/t)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Facs. (p/t)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subsea (p/t)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Economics (p/t)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ops input (p/t)</td>
<td></td>
</tr>
<tr>
<td>Systems Selection To VAR 3......</td>
<td>Integrated team</td>
<td>Liaison position</td>
</tr>
<tr>
<td></td>
<td>Team Leader</td>
<td>Selected leadership &amp; skills roles role</td>
</tr>
<tr>
<td></td>
<td>Subsurface Coordin</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Geology (p/t)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Geophysics (p/t)</td>
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</tr>
<tr>
<td></td>
<td>Reservoir Eng</td>
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</tr>
<tr>
<td></td>
<td>Drilling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Petrophysics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Production tech</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Surface Coordin &amp; Development Plan (p/t)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Structures</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Facs. (p/t)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subsea</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Economics (p/t)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ops input (p/t)</td>
<td></td>
</tr>
</tbody>
</table>
Attachment 11

Shell Skills Required for Active Stewardship of Non-Operated Ventures

Indicative Dedicated Shell Team Resources, continued.

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Shell Team</th>
<th>Shell Secondees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conceptual Design to FID (to VAR 4)</td>
<td>Integrated team</td>
<td>Liaison position Selected leadership &amp; skills roles role</td>
</tr>
<tr>
<td></td>
<td>Team Leader</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subsurface Coordin</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Geology (p/t)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Geophysics (p/t)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reservoir Eng.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drilling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Petrophysics (p/t)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Production tech</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Surface Coordin</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Structures (p/t)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Facs (p/t)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subsea</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Economics (p/t)</td>
<td></td>
</tr>
</tbody>
</table>

| Development Execution  | Integrated team                | Liaison position Selected leadership & skills roles role |
|                        | Team Leader                     |                                                          |
|                        | Subsurface Coordin               |                                                          |
|                        | Geology                          |                                                          |
|                        | Geophysics                       |                                                          |
|                        | Reservoir Eng.                  |                                                          |
|                        | Drilling p/t                     |                                                          |
|                        | Petrophysics (p/t)              |                                                          |
|                        | Production tech (p/t)            |                                                          |
|                        | Surface Coordin                 |                                                          |
|                        | Structures (p/t)                |                                                          |
|                        | Facs (p/t)                       |                                                          |
|                        | Subsea (p/t)                     |                                                          |
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NOTE

Subject: Angola Block 34

Block 34 is the last unlicensed block in the ultra-deepwater (UDW) area of the highly prospective Lower Congo Basin offshore Angola. A proposal to submit a bid for a 30% share in Block 34 was presented to CMD on 10th May. Signature was deferred because the invitation to bid was not forthcoming. In the expectation of receiving this invitation in September, the proposal is brought forward again.

Current position in Angola

Shell holds 50% equity in Block 18 (BP operator) in the Lower Congo Basin and 10% in Block 21 (BHP operator) in the Kwanza Basin. The first three exploration wells in Block 18 (Plutonio, Plutonio and Galio) discovered oil reserves of 520 Mmbbls (100%). We expect to book 300MMbbls (Shell share) of Block 18 reserves in 2000.

The fourth exploration well, Paladio-1 is nearing completion and looks very encouraging (140MMbbls, with possible upside). Two further wells will be drilled in 2000. In total we expect to increase proven reserves to 900 MMbbls (100%), sufficient to move into the development phase in 2001. First oil is expected in 2005.

Proposed strategy for Angola

Shell Angola's strategy is to grow a material business that would produce 500MMbbls equity crude over the next decade, and to regain operator status. Increased confidence in the viability of a commercial development in Block 18 forms the basis of this strategy. To improve the materiality of the business in the longer term, however, a successful bid for equity in adjacent Block 34 is essential. Block 34 is adjacent to Block 18 and will create a corridor to the ultra-ultra deepwater region (bid round expected in 2001). The attractiveness of the latter has increased due to its similarities with BP's recent Crazy Horse discovery in the Gulf of Mexico. The technical validity of the evaluation has been reviewed by Shell Deepwater Services (SDS) as part of their Lower Congo Basin Regional Framework Study.

The Block 34 opportunity

Sonangol has been promising to license the block for the past year, but the invitation to bid has been postponed month by month. When invited, it is proposed to submit a bid for 30% equity. Other partners will include Sonangol (20% Operator) and Norsk Hydro (30%).

The economics, robust at PSV14 but marginal at PSV10, support paying a signature bonus of up to $425MM for 100%. Shell Development Angola B.V. intends to make an initial bid of $335MM in signature bonus for 100% interest, but ask for flexibility to negotiate this bonus up to a maximum of $425MM. It is essential to obtain a discount of $30MM on the actual payable amount, in recognition of earlier agreements between Shell and Sonangol. Therefore, SDAN seek approval to pay up to $97.5MM signature bonus in cash in order to acquire 30% equity in Block 34 (30% of 425, minus 30 = 97.5).

The bid will be on the explicit condition that Shell plays a key role in the development and operations phases through SDS. It will propose discussions on our technical involvement, through which Shell will act as the de-facto operator and Sonangol can satisfy its aspiration to become a credible deepwater player. This will serve to safeguard the considerable investment in water depths that require frontier technologies. If Sonangol's final offer to Shell would deviate substantially from this expectation, the venture loses attractiveness and should not pursue it further.

Estimated rewards for this Block are 2 billion bbls MSV UR. The perceived value of the block (30%), without signature bonus and assuming Sonangol is carried during the exploration and
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appraisal phases and that three successful wells prove up 600MMbbls, is $500MM NPV7 @ PSV14. The unrisked VPR_{ext,ext} is 0.40.

The opportunity for entering Block 34 was not foreseen in the 2000 EP-Business Plan. This proposal will therefore require supplementary funds of $180.2MM to cover the signature bonus and Shell’s share of expenditure required to complete the work commitments of the initial four year exploration phase (purchase of 5000km² 3D seismic and four wells).

**Issues and Reputation Management**

There is increased scrutiny of the activities of oil majors in Angola by NGOs and a need for increased transparency and social responsibility. The Attachment to the GBP covers Shell’s position on the issues, risks and reputation management in Angola. An action plan has been developed and the bid will contain both mandatory and discretionary contributions to social development projects paid for out of the funds being requested. The discretionary programme of up to $1MM/annum (benchmarking against other majors) will be under Shell control. The end use of this fund and an NGO partner will be identified through a process of transparent stakeholder consultation.

Endorsement of Shell’s bid for Block 34 as per the attached Group Budget Proposal is requested.

EP, 30th August 2000

---

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Treatment Requested
MEMORANDUM TO THE BOARD OF SHELL PETROLEUM N.V.
GROUP BUDGET PROPOSAL
ANGOLA: BLOCK 34

Project Title
ANGOLA BLOCK 34: Acquisition of Ultra-Deepwater Acreage

Business Committee
EP
Ref. No.

Company Name
Shell Development Angola B.V.

Equity Interest
100%

Other Shareholders
N/A

Key factors
Concession
Block 34, Deepwater Angola

Partners (likely)
Sonangol (Operator) : 20%
Norsk Hydro : 30%
Braspetro : 20%
Shell : 30%

Start date
1 May 2000

Expectation of reserves
820 MMBbls @ 0 cut-off (100%)

Expiry date
30 April 2004

Financing

<table>
<thead>
<tr>
<th>Financing Available</th>
<th>Amount US$ mln</th>
<th>2000 Angola Expe</th>
<th>Amount US$ mln</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPNV Existing Loan Facility</td>
<td>160.5</td>
<td>Budget Status (included mandated)</td>
<td>85.5</td>
</tr>
<tr>
<td>Additional Loan Required</td>
<td>180.2</td>
<td>2000 budget L.E.</td>
<td>79.9</td>
</tr>
<tr>
<td>Total Loan Facility with This Proposal</td>
<td>340.7</td>
<td>This Proposal</td>
<td>111.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total Expectation</td>
<td>191.6</td>
</tr>
</tbody>
</table>

Project Description

It is proposed that Shell Development Angola B.V. (SDAN) negotiate with Sonangol to acquire a 30% share in the highly sought after Block 34, the only ultra-deepwater (UDW) block not licensed.

SDAN intend to make a competitive bid by offering $335MM in signature bonus for 100% interest (as per compulsory requirement), but ask for flexibility to negotiate this bonus up to a maximum of $425MM if the initial bid is not successful. It is essential that Shell obtain a discount of up to $30MM on the actual payable amount, in recognition of earlier agreements between Shell and Sonangol. To have this flexibility, therefore, SDAN seek approval to pay up to $97.5MM signature bonus in cash in order to acquire 30% equity in Block 34 (425*0.3 – 30 = 97.5). The bid is conditional on SDAN becoming de facto operator, especially in the development and early production phases.

To acquire 30% interest, a total additional loan facility of up to $180.2MM over the exploration period is sought to cover, not only the bonus, but also seismic data acquisition ($5000 sqkm) and 4 commitment wells. In 2000, $111.7MM will be required ($97.5MM for the bonus and $14.2MM for the seismic, overheads and Shell 100% costs).

The perceived value of Block 34 (30% equity), without signature bonus and assuming Sonangol are carried only during the exploration/appraisal phase, is $224MM EPV7@PSV14, RT2000 with a risked VLR@fFV of 0.41 (VLRave of 0.59). Three successful wells can prove up to 600 million barrels Shell share and raise the value of 30% equity in Block 34 to $500MM NPV7@PSV14 with unrisked VLR@fFV of 0.40.

Shell Development Angola B.V.

LON0570305

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Treatment Requested
1. RELATIONSHIP OF PROPOSAL TO COMPANY OBJECTIVES

Deepwater Angola has emerged as a world-class oil province in which some 7 billion barrels of oil have been discovered. It is estimated that 5 to 25 billion barrels could be discovered in Angola in the coming years. This proposal represents an opportunity to invest in a highly attractive exploration block close to proven oil in the prolific Lower Congo Basin and is consistent with SDAN's business strategy of focused growth.

The Block 18 Joint Venture has achieved a 100% exploration success rate after 3 wells (Platina, Plutonio and Galio) in Block 18 (Shell 50% equity, BP Operator) in Tertiary turbidites giving reserves in the order of 520MMbbls (100%), a significant part of which are planned to be booked in 2000. The three additional wells intended to be drilled this year could increase the reserves to 900MMbbls (450MMbbls Shell share) with significant potential for upside, and lead to a large FPSO development with first oil in early 2005 and further developments. The first of these, Paladio-1, is nearing completion, and early results look very encouraging.

By developing Block 18, Shell will already have a profitable business in Angola. However, to materially improve the business in the longer term, it will be necessary to pursue other growth opportunities, the most important of which is to acquire material equity (30%) in the adjacent Block 34. Sonangol has indicated that bids from selected companies will be invited shortly, but following a series of postponements, this is now expected in September 2000.

2. THE PROPOSAL

Approval is sought for SDAN to negotiate with Sonangol to acquire a 30% share in Block 34. The bid will be conditional on SDAN becoming de facto operator in the development and early production phases.

SDAN seek approval to pay up to $97.5MM signature bonus in cash in order to acquire 30% equity in Block 34. In addition, the bid will contain a proposal to continue the Joint Study undertaken in 1999 by SDAN and Sonangol, with a second phase targeted on Ultra-Ultra Deep Water (UUDW) outboard of Blocks 31 to 34. It is SDAN's intention to use the UUDW Joint Study, not only to support Shell's bid, but also as a means to obtain pre-emptive rights for future UUDW bid rounds in Angola. The proposed bid is in line with the previous signature bonuses paid in Blocks 31 to 33, as well as with Sonangol's advice to the industry that a signature bonus in the order of $300MM (100%) is expected. It is essential that Shell obtains a discount of up to $30 MM to the actual payable amount, in recognition of earlier agreements between Shell and Sonangol.

To cover the signature bonus and Shell Angola’s share (30% plus carry of Sonangol’s 20%) of the expenditure required to complete the commitments of the initial four year Exploration Phase (4 wells plus purchase of 50000sqkm seismic), funding of $180.2MM is required ($19.5MM of which is contingent on success, Shell Financial Share 37.5% MOD, including Sonangol carry). The proposed spend also includes $64MM in 2001 for the UUDW Joint Study which will be carried out in Houston by Shell Deepwater Services (SDS) together with Sonangol.

Block 34 - Phasing of Spend (US$ MM, MOD) during Exploration Phase

Shell Development Angola B.V.

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingency</td>
<td>0.0</td>
<td>4.9</td>
<td>2.9</td>
<td>4.9</td>
<td>0.0</td>
<td>19.5</td>
</tr>
</tbody>
</table>
| Notes: | Success case incl. testing, building development team, Appraisal + $64MM for IS with Sonangol in 2001

LON00570306
This acquisition will strengthen the value of Shell’s portfolio from a current position of $347.524MM EMV@PSV4. RT 2000 to $371-1024MM EMV@PSV4, RT 2000, excluding the signature bonus and assuming Sonangol are carried during the exploration/appraisal phase (or at least $474-927MM if the maximum signature bonus is included, see section 3 for a thorough discussion on economics and finance).

A decision not to place a bid for Block 34, the most prospective unleased block in the Lower Congo Basin, will significantly diminish SDAN’s chances to build a material business in Angola.

2.1 BACKGROUND

The 2000 Business Plan base case assumed divestment and very limited funding for activity in 2000 or beyond. The present proposal to acquire 30% equity in Block 34 is in line with a revised strategy of “focused growth”.

2.1.1 Prospectivity/Reserves

2D seismic data has shown that Block 34 contains structures in the Miocene and Oligocene turbidite reservoirs of the Malemba Group, in water depths of 1500m to 2000m, very similar to those in the highly successful Block 17 which contains Total/FinaElf’s Girassol and Dalia fields.

Block 34 is adjacent to Block 17 with a potential exceeding 3 billion barrels, and Block 18 (Shell 50%) with a potential of around 1.3 billion barrels. A recent study of Block 34 carried out by SDAN based on Shell and industry’s learning offshore West Africa indicated that the prospectivity is limited to the northern half of the block where the main post-salt false source rock is oil mature. Some 2 billion barrels of oil Mean Success Volumes (MSV UR volumes), distributed in one main lead, C1 (>1.5 billion barrels MSV UR), >2.5 billion barrels HSV UR) and 5-6 satellites, are currently estimated for the Block (Figure 2). C1 comprises a cluster of 17 leads, each in the order of 50 to 320 MMbbls MSV UR, distributed over a 20x10km area. The current POS of the C1 lead is 55% at zero cut-off and the risked expected volume is estimated at about 820MMbbls. The high POS of this lead is based on the amplitude calibration in Block 18 and discoveries on similar plays in Blocks 17 and 18.

2.1.2 PSA Terms

As the PSA terms for Block 34 have not yet been released, the model PSA for UDW Block 31 has been used in the current economic calculations. Should Sonangol also request to be carried through the development phase, SDAN will seek to negotiate the PSA terms to maintain value and the benefit of the upside case.

2.2 SIGNATURE BONUS

A sensitivity analysis has shown that the level of signature bonus in Block 34 is strongly dependent on the oil price and CAPEX.

Using the criteria $\frac{\text{VIR}_{\text{full cycle}} = \{\text{EMV (no bonus) - Bonus}\}}{(\text{PV}_{\text{capex}} + \text{Bonus})} > 0.2$, the economics of Block 34 support a signature bonus of no more than $385MM (PSV14) for 100% assuming Sonangol are carried during the exploration/appraisal phase. However, when using the competitors screening criteria $\$15/bbl$ (Total Fina Elf) and $\$16/bbl$ (Exxon), a signature bonus of up to $505MM and $618MM, respectively, should be considered for 100%.

Shell’s current cost levels (CAPEX) are 10% less than the Bonga development in Nigeria and represent an entirely reasonable estimate based on Bonga and Block 18 learning. Assuming our Shell Development Angola B.V.
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competitors are not in a position to realise such 10% savings, their signature bonus calculations at
$15/bbl and $16/bbl would respectively be $407mln and $529MM. We are confident that an
additional 10% decrease in CAPEX (Bonga – 20%) is achievable. This would support a signature
bonus of $475MM (100%).

Based on the above considerations, the expected fierce competition from the industry (using
higher screening values than Shell), and considering it is Shell’s best chance to build a material
business in Angola, SDAN seek approval to acquire 30% equity in this block by paying up to
$97.5mln, which equates to a bid of $425mln for 100%. $425mln is in the middle of the range of
all the foregoing signature bonus calculations. It is SDAN’s intention, however, to place a
competitive bid of $335mln for 100%, which would require a lower cash payment of $70.5mln
for 30%. If not a winning bid, this will most likely bring SDAN to the negotiation table with
Sonangol.

2.3 ALTERNATIVES CONSIDERED

2.3.1 Asset Divestment

Following the capital allocation process in 1999, against the background of a low oil price world,
the affordability of Angola was questioned and options were reviewed for asset divestment.
Because Sonangol does not have equity in any of the offshore blocks in which major discoveries
have been made (Block 15, 17 and 18), asset divestment is a difficult option, due to Sonangol’s
likely pre-emption of any deal without cash payment. The expected net loss for Shell if an exit
strategy is adopted will be in the range of $200-$300MM.

2.3.2 Maintain Present Situation

Failure to secure an interest in Block 34, if the level of bonus becomes unsupportable due to the
degree of competition or operatorship cannot be obtained, would leave Shell with Block 18 as its
prime asset with little opportunity for growth. Shell would then proceed with the development of
Block 18 to avoid major erosion of value. In the minimum (base) case scenario, assuming that
only the Greater Plutoio cluster containing 765 MMbbls recoverable reserves (of which about
410 MMbbls already discovered), will be developed in the block and leaving some 400 MMbbls
recoverable reserves undeveloped, Shell’s EM7%PSV14 is $335MM and VİRdet,prev = 0.36. In
the upside case scenario, assuming 1100MMbbls reserves (100% volumes), Shell’s
EM7%PSV14 is $524MM and VİRdet,prev = 0.44.

2.3.3 Focused Growth – Next Step

Following a regional framework study being undertaken by SDS and the proposed UUDW Joint
Study with Sonangol (pending a successful bid in Block 34) to identify the most prospective
unlicensed areas and obtain pre-emptive rights, eventual entry into the UUDW could be
considered when licenses are offered, preferably as operator. However, a portfolio of Block 18
and the UUDW, without a stake in the UUDW trend (i.e. Block 34), is not preferred.

2.3.4 Alternative bid composition

To avoid the high up front signature bonus payment, it could be proposed to Sonangol to spread
the payment over the four-year period of the first exploration phase. This is unlikely to meet with
success, due to the competitive nature of the bid and the Government’s desire for short-term
revenue. However, if the opportunity arises, this will be pursued.

2.3.5 Reduced Equity

Should Shell be offered 10% equity in Block 34 without signature bonus, in recognition of earlier
agreements between Shell and Sonangol, it is intended to accept this.
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3. PROFITABILITY

3.1 Block 34 value:

The current value of 30% of Block 34 is $224MM EMV7@PSV14 assuming a single cluster development in the block (Base Case) and PSA terms similar to Block 31. In the case that three strategic exploration wells are successful (Discovery Case - Upside), the value of 30% Block 34 increases to $500MM NPV@PSV14.

Table 3.2a: 30% Block 34 value - Shell share - no Signature Bonus

<table>
<thead>
<tr>
<th>Case</th>
<th>Expected Volume (MMstb)</th>
<th>EMV 7%</th>
<th>RT 01/01/00</th>
<th>VIR, 365</th>
<th>CAPEX</th>
<th>EXPEX</th>
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</thead>
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<tr>
<td>1</td>
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<td>4</td>
<td>500</td>
<td>-6</td>
<td>0.41</td>
<td>694</td>
</tr>
<tr>
<td>2</td>
<td>600</td>
<td>797</td>
<td>500</td>
<td>-52</td>
<td>0.40</td>
<td>1674</td>
</tr>
</tbody>
</table>

Assumes that Sonangol is carried during the Exploration/Appraisal Phase, no bonus and 10% reduction in CAPEX relative to Bonga development for similar volumes based on Bonga and Block 18 learning.

1. Base Case assumes 80MMstb risked reserves in lead C1 and single cluster development.
2. Discovery Case (Upside): if three strategic wells are 100% successful they can prove up to 2 billion barrels MSV (100%) developable in two separate clusters of 1000MMstb each! *MSV volumes, NPV7 and unrisked VIR!

With the signature bonus carried in the economic calculation, the Base Case value of 30% Block 34 is between $127MM and $157MM EMV7@PSV 14, pending the amount of cash payable in signature bonus, expected between $97.5MM and $70.5MM Shell share. In the Discovery Case (Upside), the NPV7 at PSV14 is between $402MM and $432MM.

4. RISKS, OPPORTUNITIES AND EXPOSURE

Sonangol has little experience as a deepwater operator and is expected to rely heavily on the technical expertise of its advisors. This lack of experience is a risk that could significantly impact development costs, tendering procedures, production efficiency and HSE performance. Hence, it is a condition of the bid that Shell can exercise its extensive deepwater development expertise. The aim would be to ensure that Sonangol has access to all the skills and technology necessary to successfully develop Block 34 and that Sonangol has trained staff and support systems in place to operate successfully from first oil.

Further collaboration with Sonangol will be proposed in the form of an Ultra-ultra Deepwater (UUDW) Joint Study, which could help to open up new opportunities for Shell in future UUDW licensing, rounds.

5. ENVIRONMENTAL AND SOCIO-POLITICAL CONSIDERATIONS

On the socio-political side, in November 1999 the pressure group Global Witness released a report entitled "A Crude Awakening" which drew attention to the Human Rights record of the Angolan Government and alleged mismanagement of the nation’s oil wealth. Foreign oil companies were accused of complicity and urged to demand more transparency in the management of the "oil account". The major operators, Exxon, Elf, BP Amoco and Chevron were named, while Shell, due to its limited interests in Angola, avoided mention. The situation is being monitored and it is not being assumed that Shell will escape attention in the future, particularly if its interests expand. Early engagement with stakeholders such as Amnesty International, Human Rights Watch and the UK FCO has taken place and a note on the Issues and Reputation Management in Angola prepared (Attachment 4).

No exceptional environmental issues are foreseen.

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6. MANPOWER AVAILABILITY

Assuming Sonangol accept the proposed role for Shell in the development phase, SDS would provide the manpower. This could fit a window when staff are being released from the Bonga development team. In the exploration phase, it is the intention to maximize the leverage of SDS and to closely monitor the operator’s activities to protect shareholder’s interests. The SDAN organisation (including support teams) will need to be strengthened to cope with the additional load of monitoring and de facto operating in Block 34, as well as monitoring Blocks 18 and 21.

7. FINANCING/ GUARANTEES

It is proposed to review use of a separate Angola BV entity to bid for, and if successful, hold Block 34, to realise potential fiscal opportunities. In either case, it is proposed that funds will be provided by Shell Petroleum N.V. or an affiliate up to an amount of $180.2MM to cover Shell’s share of the exploration programme.

8. CORPORATE ACTION

This proposal is being submitted for consideration by the Board of Shell Petroleum N.V. and if considered sound, for approval of funds to Shell Development Angola or another affiliate Company of Shell Petroleum N.V. by way of share capital and/or loans and/or guarantees to enable the latter company to fund the signature bonus and likely exploration programme required to obtain a 30% share in Block 34 on such terms and conditions as any one or two persons, as the case may be, authorized to represent the Company by virtue of Article 10 of the Company’s Articles of Association may agree, up to any amount in aggregate not exceeding $180.2MM.

Submitted by: 

MODPW

Approved by:

Principal Director, Shell Petroleum N.V.

The Hague 30.8.00

The Hague 4.9.00

Figures:

Figure 1 Angola Block 34 Location Map
Figure 2 Economics & Finance – Present Situation
Figure 3 Economics & Finance – Situation after acquisition of 30% in Block 34

Attachments

Attachment 1 Block 34 Proposed Bidding Strategy
Attachment 2 Present Situation – Economics
Attachment 3 Possible Situation after Acquisition of 30% Equity in Block 34
Attachment 4 Note on Issues and Reputation Management in Angola

Shell Development Angola B.V.

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Block 34 - Proposed Bidding Strategy

Sonangol has advised industry that a signature bonus of at least $300MM for 100% is expected, in line with the signature bonuses paid for Blocks 31 to 33.

It is SDAN's intention to place a competitive bid by offering $335MM, slightly more than 10% of the advised signature bonus. It is expected that Shell will obtain a discount of up to $30MM to the actual payable amount, in recognition of earlier agreements between Shell and Sonangol. This discount currently has a ZERO value to Shell and it will be lost if SDAN decides not to participate in the bid round.

The currently proposed signature bonus of $335MM for 100% share is not only competitive, but it also maintains Shell's actual pay in cash ($235MM for 100%) below the $241MM signature bonus ceiling at PSV14, $VIR_{rel,sys}<0.2$.

\[(335MM \times 0.3 - 30)/0.3 = 235MM\] Shell's signature bonus in cash for 100% ($70.5MM for 30%)

The $97.5MM requested in this GBP will allow SDAN to retain flexibility in increasing Shell's bid in the negotiations with Sonangol up to $425MM if the original bid is not successful, understanding that Shell's actual pay in cash will be up to $325MM for 100% (or $97.5MM for 30%).

\[\text{Variation Sensitivity Factor %}\]
Attachment 2

Present Situation – Economics

The current value of SDAN assets is between $347MM (Minimum - Base Case), assuming only a single cluster development in Block 18, and $524MM RT2000 EMV7@PSV14 (Upside Case) assuming that either an additional cluster will be developed in the block or the upside is present in the initial cluster. Base Case scenario assumes 763MMbbls reserves, about 410 MMbbls already discovered (100% volumes), while the Upside Case assumes 1100MMbbls reserves, about 523 MMbbls already discovered (100% volumes).

Table 2.3.2a: Base Case - One cluster Development Only in Block 18 – Shell share

| Block 18 | 382 | 519 | 338 | -67 | 0.36 | 1161 | 93 |
| Block 21 | 12  | 21  | 9   | -15 | 0.18 | 42   | 15 |
| TOTAL   | 394 | 540 | 347 | -82 | 0.35 | 1203 | 108 |

Base Case Block 18 assumes 763MMbbls reserves – about 410 MMbbls already discovered (100% volumes).

Table 2.3.2b: Upside Case - Block 18 Asset value – Shell share

| Block 18 | 355 | 703 | 515 | 52  | 0.46 | 1430 | 110 |
| Block 21 | 12  | 21  | 9   | -15 | 0.18 | 42   | 15 |
| TOTAL   | 367 | 724 | 524 | 37  | 0.44 | 1472 | 125 |

Upside Case Block 18 assumes 1100MMbbls reserves – about 523 MMbbls already discovered (100% volumes). All development costs are benchmarked against Bonga Development, unless specified otherwise.

In the minimum – Base Case scenario (Table 2.3.2a) Shell oil production entitlements in 2005 could be 90,000 bbl/d. Production volumes are estimated to peak during 2006-2010 at 110,000 bbl/d Shell share. Cash flow in 2004 is still expected to be $464MM negative, but positive from the next year onwards. NIAT is also positive for the first time in 2005, and climbs to $230 MM ($280MM Upside Case) between 2006-2011 with a 22% ROACE over the first 10 years of production (or 15% ROACE over the project field life of 15 years, Figure 4).
Attachment 3

### Possible Situation after acquisition of 30% equity in Block 34 - Economics

#### Table 3.2a: Possible Shell Angola asset value - Shell share - no Signature Bonus

<table>
<thead>
<tr>
<th>Case</th>
<th>Volume (MMbbls)</th>
<th>EMV at 7x $/bbl</th>
<th>P&amp;L at 7x $/bbl</th>
<th>P&amp;L at 9x $/bbl</th>
<th>EMV at 9x $/bbl</th>
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<td>(1514)</td>
<td>(-13)</td>
<td>(0.43)</td>
<td>(3172)</td>
</tr>
</tbody>
</table>

Assumes that Sonangol is carried only during the Exploration/Appraisal Phase.
1. Current situation: Base Case: 50% Block 18 + 10% Block 21; assumes 750MMbbls in Blk 18, 1200MMbbls in Blk 21 (100% volumes).
2. Possible situation: Base Case: 50% Block 18 + 30% Block 34 + 10% Block 21 (20% Carry Sonangol); assumes no upside present.
3. Possible situation: Upside Case 1 (same equity as above); assumes upside present only in Block 34.
4. Possible situation: Upside Case 2 (same equity as above): assumes upside present in both Blocks 18 and 34.
5. Discovery Case: assumes upside present in Block 18 and three successful strategic wells that can prove up to 2 billion barrels MSV developable in two separate clusters of 1000MMbbls each! In brackets MSV volumes and NPV1 not EMV2!

#### Table 3.2b: Possible Shell Angola asset value – with $97.5MM Signature Bonus Shell share

<table>
<thead>
<tr>
<th>Case</th>
<th>Volume (MMbbls)</th>
<th>EMV at 7x $/bbl</th>
<th>P&amp;L at 7x $/bbl</th>
<th>P&amp;L at 9x $/bbl</th>
<th>EMV at 9x $/bbl</th>
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<td>(1416)</td>
<td>(-111)</td>
<td>(0.38)</td>
<td>(3172)</td>
</tr>
</tbody>
</table>

Assumes that Sonangol is carried only during the Exploration/Appraisal Phase.
1. Current situation: Base Case: 50% Block 18 + 10% Block 31; assumes 750MMbbls in Blk 18, 1200MMbbls in Blk 21 (100% volumes).
2. Possible situation: Base Case: 50% Block 18 + 30% Block 34 + 10% Block 21 (20% Carry Sonangol); assumes no upside present.
3. Possible situation: Upside Case 1 (same equity as above); assumes upside present only in Block 34.
4. Possible situation: Upside Case 2 (same equity as above); assumes upside present in both Blocks 18 and 34.
5. Discovery Case: assumes upside present in Block 18 and three successful strategic wells that can prove up to 2 billion barrels MSV developable in two separate clusters of 1000MMbbls each! In brackets MSV volumes and NPV1 not EMV2!

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Attachment 4

Note to CMD
Issues and Reputation Management in Angola

1) Business Background

A GBP was submitted to CMD on 10th May 2000, seeking approval to bid for a 30% interest in Angola ultra-deepwater Block 34 in the Lower Congo Basin, conditional on Shell becoming de facto operator in the development phase. This would require an exposure to Shell in the order of $150 million, including signature bonus. Other partners in the venture will include Sonangol (Operator), Norsk Hydro (30% and Technical Advisor) and one or more companies still to be chosen by Sonangol. Bids are likely to be invited in July with awards expected in Q4 2000.

Internationally perceived mismanagement of the country's oil wealth combined with the Government's human rights record, most recently documented in the Global Witness report "A Crude Awakening", has prompted much unsolicited negative press for the international majors operating in Angola. Success in acquiring a leading role in Block 34, is expected to focus NGO and media attention on Shell.

The objective of this note, prepared as an addendum to the GBP, is to summarise the perceived risks and outline a plan of action to mitigate these risks and to preserve Shell's reputation under increased public scrutiny.

2) Stakeholders and Approaches

2.1 "Taking the Pulse"
A team of staff from EP, ID and P2X was formed to consider the risks and potential actions which the company might take. An issue identification process was undertaken, which included meetings with selected external organisations. The objective was to "take the pulse", and gain a snapshot of the key issues and sensitivities regarding Angola from a broad spread of interested parties. Meetings have been held with a number of NGOs (including Amnesty International, Human Rights Watch and Médecins sans Frontières), business organisations (including the UK and US Angola Forums), and the UK and Netherlands Foreign Offices. In the event that a successful bid looks likely, this engagement process will be extended to include other NGOs (particularly those with practical development experience in Angola), the World Bank/IFC Group, the IMF and a number of UN organisations (including UNDP and the UNCHR).

2.2 "The Public Challenge"
The first and perhaps most significant point to register from this review is that, despite the protracted nature of the conflict and the chronic state of social dislocation in the country, constructive and pragmatic engagement, rather than isolationism or economic boycott, is considered the only alternative if the country is not to descend into further anarchy. The corollary to "constructive engagement", however, is that oil revenue is seen as "the only game in town". There is a broad-based expectation, particularly within the economic development and NGO community, that the current bidding round (Block 34), represents a unique window of opportunity to profile, and address, several critical issues. These are discussed below. Inherent in meeting this opportunity, however, is the implicit threat - risk - that if these issues are not addressed in a constructive and transparent manner, the oil majors will become a target for international campaign activity.

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3) The Issues

3.1 Joint Venture Partners
Sonangol may decide to award 10% equity to a company that Shell feels is inappropriate as a partner in Block 34. This practice was employed in the recent UDW round for Blocks 31, 32 and 33 as a means of debt repayment to companies suspected of supplying arms to the Government (Prodev, Falcos and Heritage). In addition, oil revenue and signature bonuses may have been diverted to elite groups within Angolan society, including arms traders. This practice is roundly condemned by NGOs.

If such an outcome was to occur with the award of Block 34, several international NGOs, including Human Rights Watch, have advised Shell that they would run an international "name and shame" campaign.

To minimise the risk, we intend to state an "up front" requirement for transparency in the PSC and amongst the partners, pointing out that our shareholders and society at large demand a climate of good governance and accountability.

It is hoped that this approach, which we understand was employed by BP-Amoco to avoid undesirable partners in their operated UDW Block 31, will successfully deter Sonangol from introducing unwelcome partners. If it does not, then we will need to consider our position, since the NGOs (and most likely the media) will argue that entering into such a relationship is in conflict with our business principles.

3.2 Transparency
The IMF and others have criticised the lack of transparency and accountability within the Angolan economy. Specifically, they have drawn attention to significant unexplained differences between the published statistics of the Bank of Angola and conservative estimates of the Government's receipts from oil.

On 3rd April this year, the International Monetary Fund (IMF) and the World Bank finalised an Oil Monitoring Programme (OMP) to monitor oil revenues from July to December 2000 as part of an IMF Staff Monitoring Programme (SMP). The SMP sets out ambitious targets that the government must achieve by December 2000 in order to qualify for lending by the IMF, and the NGOs are understandably concerned about the impact that such a programme might have on ordinary Angolans. To illustrate the point, the recent 1,000% rise in fuel prices, an important economic correction on the one hand, has inflated water distribution and retail costs.

However, although the Angolan Government has not yet agreed to details of the OMP being released publicly, NGOs have given a cautious welcome to this initiative but remain concerned that the government will assume responsibility for the OMP beyond December 2000.

The NGOs have called for oil companies operating in Angola to co-operate fully with the OMP and provide the necessary information. Some go further and, despite the government forbidding such practice, suggest that the oil companies in Angola publish annual audited accounts so that tax payments, signature bonuses, and other payments to the Government are in the public domain. The more strident NGOs call for oil companies to insist on various measures to be undertaken by the Government as a precondition for future investment.
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The call for full transparency is echoed by others, including Peter Hain, the UK Foreign and Commonwealth Minister of State. He has said in a public statement:

"There should be full transparency. The oil companies who work in Angola should be open with the international community so that it is clear that these revenues are not siphoned off but are invested in the country."

Our approach will be:
- to engage with the Angolan Government and other stakeholders, inside and outside Angola, on the need for transparency
- to co-operate fully with the IMF OMP and its successors
- to produce an annual audited report on the discretionary social investments made by Shell Angola (see section 3.4 below)

3.3 Human Rights
Angola’s current human rights ‘status’ raises concerns both from a ‘structural’ socio-economic perspective and in terms of direct abuse (child soldiers, land mine casualties, the targeting of civilian populations by military forces, distortions created by government corruption and lack of transparency, etc.). For a large part of the urban and rural populations (total ~ 13 million), meeting basic human needs – and therefore satisfying basic human rights - are severely constrained by the ongoing civil war, the high proportion of displaced persons, and the related dysfunctional nature of the economy and inadequate social infrastructure such as primary health care.

The issue for oil majors is principally a reputation concern: the accusation of being complicit in the continued abuse of human rights, whether structural or direct. The expectation of Shell and other oil majors in addressing the Angolan human rights issue is twofold:
- to contribute to addressing short term humanitarian and social concerns through appropriate social investment programmes, and
- to contribute to addressing the structural and systemic challenges facing Angola through, for example, their convening powers and strategic planning competencies.

3.4 Socio-economic Challenges
All foreign operators must contribute to a Social Development Fund (SDF). Public doubts exist about the transparency, effectiveness, and short-term focus of this mechanism. However, since contributing to the SDF is mandatory, three actions are proposed to address these concerns and manage the reputation risks:

Short/medium term
- Encourage Sonangol to strengthen the transparency and effectiveness of the SDFs – and be seen to be doing this through regular dialogue with key external stakeholders. This could be achieved through the IMF process, and also through partnership with competent development agencies such as UNDP.
- To establish a discretionary social investment programme of up to $1 million annually (benchmarked against other majors) under Shell control. BP-Amoco’s contribution is around this level. The end-use of the fund and partners will be identified through an appropriate level of transparent stakeholder consultation. The contribution to this programme would rise in the event of a commercial discovery
- Conversely, an exit strategy will be developed in the event of Block 34 proving non-commercial or if we wish to withdraw for other reasons.
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Medium/Long term
- Many stakeholders complain about the lack of long term vision within the country. To address this, the Group could facilitate a scenarios exercise, along the lines of the "Montfleur" Scenarios conducted in South Africa or the Vision 2010 process in Nigeria, bringing together key national and international stakeholders to identify their preferred future and the steps required to reach it.

3.5 Environment
The oil industry in Angola has a poor reputation for environmental management with a high level of associated gas flaring, high oil spill frequency and high oil content in produced water to sea and oil based mud cuttings discharged to sea. With detailed legislation for the offshore industry in draft status for several years, there has been limited enforcement of generally accepted environmental standards.

Our strategy to implement the Group Minimum Environmental Standards and Expectations will require that:
- gas will be conserved or used,
- water will be treated to international standard or better and
- no oil based mud cuttings will be discharged to sea.

Consistently good environmental performance can only be guaranteed if sufficient operational control can be exercised to uphold the required standards.

3.6 Health
Poor health status of the population and limited health infrastructure is a critical issue in sub-Saharan Africa, including Angola, which may have a direct impact on the project and any economic or social development plans. The recently issued principles and guidelines on Strategic Health Management (OGP report No. 6.88/307) are fully in line with Shell's policies and provide a basis for incorporating workplace and community health considerations systematically into project planning and management. Early Health Impact Assessment is required in order to identify the issues and to develop a sustainable health improvement plan jointly with all relevant stakeholders.

4) Media Management

Careful media management will be required during the bidding and subsequent award process to create a positive view of the Group's involvement in Angola and avoid negative publicity. Agreed holding statements, fact sheets and Qs and As are in place, and will be revised as events unfold.

Our strategy will be:
- to continue the dialogue with key stakeholders so that they are aware of our position and, hopefully, will comment positively to the media (or, at least, comment from an informed perspective)
- to provide focused media training for spokespersons
- to provide in-depth briefings for a select number of key journalists immediately following a successful bid outcome
- to ensure that potentially vulnerable OUs are well briefed ahead of time so that they can engage local stakeholders and work with Group Media Relations to manage local media interest.
5) Summary

A successful bid for Block 34 will satisfy Shell’s aspirations to grow the business in Angola. However, the resulting increased exposure will require careful attention to the management of the main issues highlighted in early dialogue with a cross section of prominent stakeholders. It is the objective to gain entry to the block under terms and conditions that adhere to Shell’s basic conditions and business principles and that an “evergreen” plan of action is in place to engage the key stakeholders and manage the Group’s reputation.

Strategic Contracts Between Shell Deepwater Services and OU’s/NVO’s

Summary

Strategic Contracts between Shell Deepwater Services (SDW) and the OU’s and NVO’s will define the relationship that is to exist between SDW and the Asset Holders. They will describe what services SDW will provide the Asset Holder, as well as the SDW funding model, and make clear any proposed exceptions to the principle that SDW will be the sole supplier of all technical services related to Shell’s deepwater E&P ventures. Most of the contracts will be finalised during the month of August 1999, after which CTR’s will be established to define the deliverables, timetable and costs of the services to be provided. The Strategic Contract is a tri-partite agreement between SDW, the OU/NVO and the relevant RBD.

The present status of these Strategic Contracts is given below. “Exceptions” are identified for discussion with and steer from the Excom. Particular exceptions regarding SNEPCO and SPES are scheduled for discussion with the relevant RBD on Monday, 9/8/99, and the totality will be reviewed with the Deepwater Council on 10/8/99. Updates will be presented at the Excom meeting.

The generic structure of the Strategic Contract is presented in Appendix 1. Appendices 2, 3 and 4 are examples of Strategic Contracts for Trinidad, as an example of an NVO, Brazil, as an example of a venture with significant near term growth potential, and our latest proposal to SNEPCO as an example of a Strategic Contract with a mature OU. Appendix 5 is the “Rules of Engagement” developed with EPG and BDC for governing the relationships.

Status of Strategic Contracts

For the purposes of summarising the status of the Strategic Contracts, it is helpful to subdivide the OU’s and NVO’s into four groups, namely:

- NVO’s and small OU’s
- OU’s without deepwater production
- OU’s with deepwater production
- OU’s with a large shelf producing program relative to the deepwater

In addition, discussions are underway with Shell Canada and Woodside.

With the exception of Expro and Norske Shell, with whom we are just beginning discussions, the Strategic Contracts can be summarised as follows.

There is in general, a high degree of acceptance of Shell Deepwater as the technical service provider for deepwater ventures. There are some issues that need to be resolved:

Development Planning and Execution:
With the exception of Malampaya, there is complete acceptance of SDW as the sole provider of development planning and development execution services.

Well Delivery:
For well delivery, the only agreed exception is that SEPCO will continue to manage the Gulf of Mexico rigs and drilling. The current state of discussions with SPEX and SNEPCO is that they
wish to maintain responsibility for managing and supervising well delivery. SNEPCO’s position is that SDW would only provide functional management for well delivery while SPEX, acknowledging the value of global knowledge sharing and initiatives, accepts a mandate to incorporate SDW technical advice, albeit under local SPEX management. All other OU’s and NVO’s accept that SDW will provide all deepwater well delivery services.

Evaluation:

SDW and SEPCO have operationalised the split of Gulf of Mexico exploration activities between that related to infrastructure corridors (SEPCO responsibility) and frontiers (SDW responsibility). SDW recommends endorsement of additional exceptions for Shell Egypt, Indonesia, BSP and SSB/SSPC as described below. For SPEX, their position is that they retain responsibility for evaluation of deepwater carbonate plays, a position with which we disagree, and with SNEPCO, we have not been able to agree the scope of exploration work to be provided by SDW. We have agreed that SDW would provide all evaluation services for new licenses, however for the existing licenses SNEPCO desires to retain significant exploration responsibilities with SDW’s primary responsibilities being regional evaluation and knowledge management.

The table below describes in some detail the status of Strategic Contracts with each of the OU’s and NVO’s.

<table>
<thead>
<tr>
<th>NVO’s and small OU’s</th>
<th>Status</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Early</td>
<td>Mature</td>
</tr>
<tr>
<td>Shell Angola</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Shell Brazil</td>
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<tr>
<td>Shell Congo</td>
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<tr>
<td>Cote d’Ivoire</td>
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<tr>
<td>Shell Gabon</td>
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<tr>
<td>Morocco</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Oman (deepwater)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trinidad Shell</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OU’s with no DW production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shell Egypt</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>SNEPCO</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Full service provision by SDW

Full service provision by SDW

Anticipate full service provision by SDW

Full service provision by SDW

Anticipate full service provision by SDW

Full service provision by SDW

Full service provision by SDW

Full service provision by SDW

Full service provision by SDW

Full service provision by SDW

Full service provision by SDW. Evaluation staff to be located in Cairo until the first PSC milestone. We endorse this exception and will have processes in place to ensure lateral learning and best practice sharing.

Full service provision by SDW. SDW evaluation staff (1) to be located in Jakarta through mid 2000, consistent with schedule for farm out activity. We endorse this.

Full agreement on Development Execution (Bonga), regional evaluation and evaluation of new licenses. SDW has proposed that SNEPCO retain exploration responsibility for initial prospect identification and mapping on existing licenses, consistent with their stated need to maintain local staff in Lagos. All other exploration, plus all drilling and development planning activities would be the responsibility of SDW. SNEPCO has responded that they wish to retain responsibility for most of the evaluation work on existing licenses, using SDW for functional advice and peak shaving. We are continuing to discuss this with SNEPCO and the RBD in an effort to resolve.
<table>
<thead>
<tr>
<th>SPEX</th>
<th>Full agreement that SPEX maintains responsibility for development execution at Malampaya with SDW providing project management and technical services for umbilicals. For future developments, they accept the full range of services, except for evaluation work in carbonate plays. For all drilling activities, including Malampaya, SPEX wishes to retain all execution responsibility and will commit to take on board all defensible technical advice from SDW. SDW maintains that we should have responsibility for all deepwater exploration, regardless of reservoir type, and that for well delivery, it is the responsibility of SDW to manage and execute the drilling program with an accountability to the Asset Manager (GM) to deliver an overall product at an agreed price. We are continuing to discuss this with SPEX and the RBD in an effort to resolve.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OU's with DW production</td>
<td>Expro</td>
</tr>
<tr>
<td>Norske Shell</td>
<td>Discussions to date have been limited to concept screening studies for Ormen Lange. Discussions will continue.</td>
</tr>
<tr>
<td>SEPCO</td>
<td>Full service provision by SDW for Development Planning and Development Execution is the current norm. SEPCO is fully responsible for managing DW rigs in the Gulf of Mexico. Exploration has been partitioned between SEPCO and SDW, SEPCO is responsible for exploration activities related to existing and planned infrastructure, SDW is responsible for exploration in other areas (Frontiers) and all core competency work.</td>
</tr>
<tr>
<td>OU's with significant shelf program</td>
<td>Brunei</td>
</tr>
<tr>
<td>Malaysia (SSB/SSPC)</td>
<td>Same as BSP (Brunei).</td>
</tr>
<tr>
<td>Others</td>
<td>Shell Canada</td>
</tr>
<tr>
<td>Woodside</td>
<td>Early discussions suggest the possibility to supply DW services under the existing Service Agreement. Further discussions are planned</td>
</tr>
</tbody>
</table>

T. N. Warren  
EPT  
11 August 1999
Appendix 1 - Structure of the Strategic Contract

The contract is divided into three sections, with sub-elements, which will detail the relationship, service provision and operational elements of the agreement, as described below.

Relationship

Critical Local Conditions/PSC Terms: Any significant local conditions or PSC terms which will impact the SDW relationship.

SDW Relationship to the OU/NVO: Defines the accountability for technical service provision (SDW), asset management (OU/NVO) and governance (RBD).

Services and Funding Model: Describes those services to be provided and any exceptions to the principle of SDW as the sole technical service provider for deepwater ventures. Also described is the SDW funding model.

Agreed Process: After the Asset Holder’s budget has been endorsed by the RBD, the CTR’s will be agreed.

Service Provision

Technical Organisation and Key Milestones: Significant operational milestones and an overview of the technical organisation within SDW responsible for the agreed scope of work.

Technical Staff: Staff resources within SDW to deliver the agreed scope of work, including international, regional and seconded staff.

Operational Elements

Knowledge Transfer: Provision for linking the individual deepwater venture with global learnings, as well as mechanisms for transfer of knowledge to the OU.

Operational Readiness: Mechanisms for insuring that OU’s possess the necessary operational skills and competencies when completed projects are handed over from SDW.

Fully discussed and agreed by: A record of who in SDW, the OU/NVO and RBD have agreed to this contract.
Appendix 2 – Draft Strategic Contract with Trinidad Shell

SHELL DEEPWATER – TRINIDAD SHELL

Strategic Contract - I

Critical Local Conditions/PSC Terms:

Trinidad Shell is required to maintain an office in Trinidad, however there are no restrictions on where technical work is performed.

SDW Relationship to Trinidad Shell:

Shell Deepwater (SDW) is accountable to Trinidad Shell for all technical work (process, quality, peer review, link to global knowledge) according to the agreed CTR’s. SDW will provide requested technical support to business and planning processes, as well as provision of technical advice to Trinidad Shell when required. SDW will act as “Project Execution Manager” for the agreed scope of work.

Trinidad Shell is responsible for all “Asset Management” decisions, business representation, local hiring, local content and relationships, local infrastructure and managing the relationships with and aspirations of Co-Venturers. SDW will provide technical support as requested to enable Trinidad Shell to fulfill these responsibilities.

Governance remains with the existing RBD/OU structure.

All services are provided under the terms and conditions of the existing Services Agreement between SIEP BV and Trinidad Shell. Where appropriate, SIEP BV will subcontract work to the Deepwater business unit of SIEP Inc.

Services and Funding Model:

Shell Deepwater will provide the full range of technical services from exploration through development execution.

Evaluation services will be provided through the Emerging Basins Evaluation Team to be located in Houston, which will do all necessary technical work for prospect maturation and evaluation according to a schedule agreed with Trinidad Shell. The SDW Well Delivery Unit (WDU) will be fully responsible for all services required to drill wells. WDU services provided are well design, well execution, and associated contracting, procurement and logistics services.

Shell Deepwater will work on a demand based system, with project cost accumulated and charged to the customer under a CTR, which define the deliverables, timetable and costs. Charges will be based on time writing and the SDW tariff schedule. The CTR will also cover costs for work done by other SIEP groups (eg. SEPTAR) as well as third parties (outside SIEP).

Agreed Process:

At the conclusion of the Annual Budget Planning Cycle, as endorsed by the RBD, Trinidad Shell will meet with Shell Deepwater to establish the CTR's and other service issues for the upcoming years. To facilitate this, it is expected that Shell Deepwater would have actively participated, as appropriate, in RBD challenge workshops and forums preceding finalisation of the global annual program.

Draft Strategic Contract 08/06/99
SHELL DEEPWATER – TRINIDAD SHELL

Strategic Contract - II

Technical Organisation and Key Milestones:
The first exploration well is expected to spud around 1 October 1999 and Ministry approval must be obtained in August 1999. It is expected that Trinidad Shell staff will remain in Rijswijk until after spud to avoid drilling delays. Pending resolution of rig schedule issues, it’s possible that a second exploration well will be drilled immediately after completion of the first well, which could impact the planned transition of work to Houston. The total commitment is three wells before February of 2002.

It is anticipated that evaluation and regional assessment will be required at least through Q1 2000. Post drilling, staff will be available as required to revisit AVO calibration, overpressure model, charge model and sequence stratigraphy. SDW staff will also be responsible for knowledge management and data archiving.

Prospect evaluation will be the responsibility of the Emerging Basins Evaluation Team. While geologists and seismologists in this team will work as part of the evaluation cluster, staff continuity in individual ventures is an important factor in allocating resources. This team will also draw specialist skills (e.g., geochemistry, paleontology) from the SDW Core Competency teams as required.

The WDU Team will be sourced from SDW and will be located in Houston and Trinidad as appropriate.

The Global Development Planning Team will continue to support Trinidad Shell, and resources from the Development Execution Teams in Houston and New Orleans will be made available as needed.

Technical Staff:
The Emerging Basins Team will have a dedicated Team Leader who will be appointed in July 1999. Initially located in Rijswijk, he will re-locate to Houston in Q4 1999. This team will have the necessary complement of geologists and seismologists to support a number of deepwater ventures, but will work as part of the Evaluation Cluster. There will be continuity of staff assigned to Trinidad Shell projects, but Trinidad Shell will only incur staff costs for the time actually spent on those projects, recorded by time writing. It is anticipated that Trinidad Shell will require a dedicated regional geologist at least through Q1 2000.

The WDU team will be made up of a Team Leader, well engineers, drilling engineers, and a rig team associated with the Stena Tay.

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RJW00290052
### SHELL DEEPWATER – TRINIDAD SHELL

**Strategic Contract - III**

#### Knowledge Transfer:
- SDW and Trinidad Shell staff will make full use of global web sites for knowledge sharing and will hold regularly scheduled internationally coordinated technical meetings.
- Informal discussions between SDW and Trinidad Shell are encouraged. In addition a schedule for regular formal communications and discussions will be agreed between SDW, Trinidad Shell and EPG.

#### Operational Readiness:
- To be developed as required.

#### Fully discussed and agreed by:
- Trinidad Shell:
- Shell Deepwater:
- EPG:

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*Draft Strategic Contract 08/06/99*

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RJW00280053
Appendix 3 – Draft Strategic Contract with Shell Brasil EP

SHELL DEEPWATER – SHELL BRASIL EP

Strategic Contract - I

Critical Local Conditions/PSC Terms:

Shell Brasil EP will maintain an office in Rio. PSC does not require work to be done in Brazil, however, work performed outside of Brazil is taxed at 35%.

Affiliate supplied services must be at cost, and upon request, must demonstrate that charges are competitive in the market.

Participation in BS-4 carries a requirement for the Heavy Oil Study.

SDW Relationship to Shell Brasil:

Shell Deepwater (SDW) is accountable to Shell Brasil for all technical work (process, quality, peer review, link to global knowledge) according to the agreed CTR’s. SDW will provide requested technical support to business and planning processes, as well as provision of technical advice to Shell Brasil when required. SDW will act as “Project Execution Manager” for the agreed scope of work.

Shell Brasil is responsible for all “Asset Management” decisions, business representation, local hiring, local content and relationships, local infrastructure, operations, support and logistics, and managing the relationships with and aspirations of Co-Venturers. SDW will provide technical support as requested to enable Shell Brasil to fulfill these responsibilities.

Governance remains with the existing RBD/OU structure.

All services are to be provided under the terms and conditions of Service Agreements being negotiated between SIEP BV and Shell Brasil EP. Where appropriate, SIEP BV will subcontract work to the Deepwater business unit of SIEP Inc.

Services and Funding Model:

Shell Deepwater will provide the full range of technical services from evaluation through development execution for all Shell Brazil deepwater interests, both operated and non-operated.

Evaluation services will be provided by the Brazil Evaluation Team to be located in Houston, which will do all necessary technical work for prospect maturation and evaluation according to a schedule agreed with Shell Brasil. The Evaluation Team will coordinate work with the existing Maturation Team formed in SEPIV. A transition plan will be developed to bring all Brazil evaluation work together under the technical direction of SDW.

For Well Delivery, the SDW Well Delivery Unit will be responsible to ensure that all benefits of a global organisation are achieved. Functional management, which includes mandated performance related work products such as peer reviews, DTL processes, etc., will be provided by SDW. The accountability to Shell Brasil by the SDW Well Delivery Unit Team in Brazil for planning, well design, and drilling operations, is for the delivery of completed wells which achieve the objectives of the asset owner as set out in the CTR. This linkage to SDW will also enable learnings from Shell Brasil drilling to be captured and leveraged within the global SDW organisation.

Albacore Leste Development Planning work will continue. SDW will coordinate with current staff to continue work on this non-operated project. The scope of any Development Planning work to be carried

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out will be included in the CTR with Shell Brasil; it will at least be critical to capture learnings as non-operator.

Economics, and Commercial and Negotiating Services will continue to be provided by SEPIV, utilising the existing skill pool with knowledge of and experience with the PSC.

Shell Deepwater will work on a demand based system, with project cost accumulated and charged to the customer under a CTR which defines the deliverables, timetable and costs. The CTR will also cover costs for work done by other SEIP groups (e.g. SEPTAR) as well as third parties (outside SEIP). With the exception of specific outside charges for work requested by Shell Brasil (which will be charged at cost), the charges associated with time written to Shell Brasil ventures will be the only charges to Shell Brasil (i.e., no additional overhead, start-up or transition costs).

Agreed Process:

At the conclusion of the Annual Budget Planning Cycle, as endorsed by the RBD, Shell Brasil will meet with Shell Deepwater to establish the CTRs and other service issues for the upcoming years. To facilitate this, it is expected that Shell Deepwater would have actively participated in RBD challenge workshops and forums preceding finalisation of the global annual program.

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RJW00290055
SHELL DEEPWATER – SHELL BRASIL EP

Strategic Contract - II

Technical Organisation and Key Milestones:

The present team will transition to Houston by 1 Sept. 1999, to be on seat at least 1 month ahead of seismic delivery.

Shell Brasil Exploration Manager assumes a transitional role as Evaluation Team Leader through Q4 1999, then moves to an Asset Management role in Houston. The SDW Evaluation Team Leader position is to be resourced globally through Open Resourcing/Pathways, to be on seat for transition late in Q4 1999.

Commitments and Activity in Shell Operated Blocks

BC-10: First 3D seismic data available 11/99, all 3D data available in mid Q1 2000
5 commitment wells in total; 3 planned in 2000, 2 in 2001

BS-4: 2D seismic data available Q4 1999; 3D data in Q2 2000
Additional seismic, dependent on success, may be acquired in 2001
2 commitment wells; 1 planned in 2000, 1 in 2001.

Commitments and Activity in Non-Operated Blocks

BC-2: 3D seismic data acquisition will commence in late 1999
2 commitment wells are currently planned in 2001, although could be accelerated.
FAZ-1: 2D seismic acquisition possible in 2000, 3D in 2001
no commitment drilling

Albacore Leste: Pending approval of a development project at Albacore Leste, Shell Deepwater will provide the necessary technical support for this non-operated project. The scope of any Development Planning work on this or other projects will be agreed with Shell Brasil following project approval.

Technical Staff:

Evaluation Team Leader and three geologists/interpreters currently in Rijswijk will transition to Houston in Q3 1999.

Commitment seismic has either been acquired, or will be by late 1999. The Acquisition Geophysicist will remain in Rio through 1999 under the direction of Shell Brasil EP, but with the responsibility to liaise frequently with the SDW Evaluation Team Leader.

Pending budget approval, SDW will add up to 7 staff to the Evaluation Team through early/mid 2000.

The Well Delivery Unit Team in Brazil will initially be made up of a Team Leader, well engineers and a drilling engineer. A rig Team will be added closer to spud date.

There is a desire to add Brazilian staff to Shell Deepwater teams as soon as is practicable, through placement, secondment or posting, as appropriate.

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RJW00290056
SHELL DEEPWATER – SHELL BRASIL EP

Strategic Contract - III

Knowledge Transfer:
The Evaluation Team is to include subsurface practitioners with Brazil, GoM, and global experience. As the team grows, Brazilian subsurface staff member(s) will be added to the team to work in Houston.

In Well Delivery, there will be opportunities for operations, rig team and survey staff to move to other global ventures as drilling activity shifts.

Inclusion of Brazilians in Development Planning and Execution teams, including leadership positions, is critical as the teams are built up following discoveries and project approval.

Operational Readiness:
To be developed as required.

Fully discussed and agreed by:
Shell Brasil:
Shell Deepwater:
EPG:
SEPIV (for Commercial Services):

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RJW00290057
Appendix 4 - Draft Strategic Contract (SDW Proposal) with SNEPCO

SHELL DEEPWATER - SNEPCO

Strategic Contract - I

Critical Local Conditions/PSC Terms:

In accordance with the PSC, the Nigerian National Petroleum Corporation (NNPC) is Concession Holder and Asset Owner.

SNEPCO is "Contractor" to NNPC and is accountable to NNPC and Co-Venturers (Esso, Agip and Elf) for Operation, Asset Management, Nigerian Content, and cost effectiveness for all expenditures.

Annual cost recovery, auditing and certification by NNPC are critical to the PSC economics.

All contracts greater than $250,000 have to be referred to NNPC for approval prior to commitment.

SDW Relationship to SNEPCO:

Shell Deepwater (SDW) is accountable to SNEPCO for all technical work (process, quality, peer review, link to global knowledge) according to the agreed CTR's. This accountability will be through a series of audits and accountability reviews (internal or external) rather than the establishment of a shadow technical organisation in SNEPCO.

SDW will provide requested technical support to business and planning processes, and provision of technical advice to SNEPCO when required. SDW will act as "Project Execution Manager" for the agreed scope of work.

For Well Delivery, the SDW Well Delivery Unit will be responsible to ensure that all benefits of a global organisation are achieved. Functional management, which includes mandated performance related work products such as peer reviews, DTL processes, etc., will be provided by SDW. The accountability to SNEPCO by the SDW Well Delivery Unit Team in Lagos for planning, well design, and drilling operations, is for the delivery of completed wells which achieve the objectives of the asset owner as set out in the relevant CTR. This linkage to SDW will also enable learning from SNEPCO drilling to be captured and leveraged within the global SDW organisation.

SNEPCO is responsible for all "Asset Management" decisions, business representation, local hiring, local content and relationships, local infrastructure and managing the relationships with and aspirations of NNPC and Co-Venturers. SDW will provide technical support as requested to enable SNEPCO to fulfill these responsibilities.

Governance remains with the existing RBD/OU structure.

All services are provided under the terms and conditions of the existing Services Agreement between SIEP BV and SNEPCO. Where appropriate, SIEP BV will subcontract work to the Deepwater business unit of SIEP Inc.

Services and Funding Model:

<table>
<thead>
<tr>
<th>Current SNEPCO operated licenses 212, 219:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNEPCO responsibility</td>
</tr>
<tr>
<td>-----------------------</td>
</tr>
<tr>
<td>Basic seismic interpretation and subsurface evaluation, e.g., prospect identification and initial prospect maps.</td>
</tr>
</tbody>
</table>

Draft Strategic Contract 08/06/99

RJW00290058
Center in order to produce the basic interpretation products as described above.
Responsibility for liaison with SDW Well Delivery Unit Team relative to local operations.
Initiate and coordinate contacts with co-venturers.
Economics - input on PSC terms, local conditions.
Asset management responsibilities, including local content and business representation.

Detailed prospect evaluation, including quantitative interpretation, amplitude calibration, trend curve analysis, risking, and prospect and drillsite maturation.
Advanced seismic processing beyond that required for basic seismic interpretation, e.g., detailed velocity analysis, inversion work, FSDM. SDW is the primary contact with seismic processors external to SNEPCO (SGS or other contractors).
Subsurface interpretation beyond the capacity or capability of existing staff in SNEPCO; not in a peak shaving capacity, but long term needs for specialist skills or capacity increases based on the outcome of current studies or activities.
Development Planning, commercialisation options, corridor strategies.
Delivery of completed wells to the agreed CTR, including performance related well delivery products (e.g. Drill The Limit, peer review, global knowledge sharing).
Knowledge management coordination.
Peer review.
Economics - technical input, reservoir engineering, costs, productivity, ...
Attend partner meetings; provide necessary technical input, as requested by SNEPCO.

Current SNEPCO non-operated licenses 209, 211, 316:

<table>
<thead>
<tr>
<th>SNEPCO responsibility</th>
<th>SDW responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same as above.</td>
<td>Same as above.</td>
</tr>
</tbody>
</table>

New licenses and interests, ultra deepwater, ultra-ultra deepwater, new acquired interests in any licensed blocks with no current SNEPCO interest:

<table>
<thead>
<tr>
<th>SNEPCO responsibility</th>
<th>SDW responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiate and coordinate contacts with co-venturers.</td>
<td>Same as above, with the addition of all basic subsurface interpretation and evaluation work, and related processing.</td>
</tr>
<tr>
<td>Economics - input on PSC terms, local conditions Asset management responsibilities.</td>
<td></td>
</tr>
</tbody>
</table>

Shell Deepwater will work on a demand based system, with project cost accumulated and charged to the customer under CTR's, which define the deliverables, timetable and costs. Charges will be based on time writing by SDW staff and the Deepwater Services tariff schedule. The CTR will also cover costs for deepwater work done by other SIEP groups (e.g., SEPTAR) as well as third parties (outside SIEP).

The SDW Niger Delta Evaluation Team will be responsible for the evaluation of ventures in the Niger Delta, whether in Nigeria or Gabon. As such, the team activities will be funded from the approved budgets of SNEPCO, Shell Gabon, or for some work, the SEPIV Roving Budget, consistent with the relevant CTR.

Agreed Process:

At the conclusion of the Annual Budget Planning Cycle, as endorsed by the RBD, SNEPCO will meet with Shell Deepwater to establish the CTR's and other service issues for the upcoming years. To facilitate this, it is expected that Shell Deepwater would have actively participated in RBD challenge workshops and forums preceding finalisation of the global annual program.

Existing CTR's between SNEPCO and SIDS BV will be incorporated into, or replaced by, the CTR's between SNEPCO and SDW as appropriate.
SHELL DEEPWATER – SNEPCO

Strategic Contract – II

Technical Organisation and Key Milestones:

SDW staff, while not responsible for the basic evaluation work on existing licenses (as described above), will interact regularly with SNEPCO staff in order to incorporate this work into regional studies and the evaluation of future opportunities. Ongoing work in SNEPCO includes an evaluation of the currently held partner operated blocks 209, 211 and 316, to be completed by end-August 1999.

During the first two weeks of August 1999, SDW will provide resources for the peer review (VAR1) of the S02F being prepared in support of SNEPCO’s upcoming application for ultra-deep water licenses.

The timeline and milestones already in place for Bonga Development Planning do not change. Key milestones include a Cost Optimisation Workshop scheduled for mid-July 99, draft FDP is due in mid-September and final FDP due in mid-November 1999. FID is scheduled for mid December 1999, and assuming a positive decision, Bonga development planning work will transition from Rijswijk to Houston through Q1 and early Q2 2000. Existing CTR’s between SNEPCO and SIDS BV will be incorporated into the CTR’s between SNEPCO and SDW.

Additional specific milestones for both SDW and SNEPCO will be defined in the CTR’s.

Technical Staff:

Evaluation: It is anticipated that the SDW Niger Delta Evaluation Team will initially be made up of a Team Leader, regional geologist, quantitative geophysicist, and a geologist/interpreter. All of these jobs are to be posted globally (Open Resourcing, Pathways).

Well Delivery: See Relationship section.

The Bonga Development Planning Team is currently in place and is to remain in Rijswijk through end 1999, working to the agreed CTR’s.

There is a desire to add Nigerian staff to SDW teams as soon as practicable and available, through placement, secondment or posting as appropriate.
SHELL DEEPWATER – SNEPCO

Strategic Contract - III

Knowledge Transfer:

Evaluation team is to include GeM and West Africa experienced subsurface practitioners. In addition, Nigerian subsurface staff member(s) will be added to the team to work in Houston.

In well delivery, there will be opportunities for operations, rig team and survey staff to move to other global ventures as drilling activity shifts.

The Bonga Development Planning Team will continue to include SNEPCO and SPDC staff members as well as secondees (NAPIMS, DPR) as appropriate.

Inclusion of Nigerians in Development Execution teams, including leadership positions, is critical as the teams are built up following project approval.

In all cases, Nigerian staff will be located with the technical teams in Houston/Rijswijk. Opportunities will also exist, primarily through the global posting process, for Nigerian staff to work on other Shell Deepwater ventures around the world.

SDW and SNEPCO staff will make use of global web sites for knowledge sharing as well as holding regularly scheduled internationally coordinated technical forums.

SDW and SNEPCO will ensure migration back to SNEPCO of technical data, models and documentation.

Operational Readiness:

Assignment of operational staff to existing DW operations is important to develop skills and experience in readiness for Bonga start-up.

Fully discussed and agreed by:

SNEPCO:
Shell Deepwater:
EPG:

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RJW00290061
Appendix 5 – Rules of Engagement

The Rules of Engagement will be distributed at the Excom meeting.