


**Exhibit 98**




## Angola Block 18 Development Project Shell Management of bp Operations Value Assurance Review 2

9-13 October 2000

**VAR Review Team:**  
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### Format of Feedback

- Findings mentioned on exception basis
- Observations followed by associated recommendations that are prioritised in parenthesis using the following definitions:
  - Importance:**
    - High = Potential to significantly impact achieving project objectives
    - Medium = Potential for significant value erosion through schedule, cost, reserves or revenue (>5%)
    - Low = Potential for value erosion (<5%)
  - Urgency:**
    - High = Before proceeding with concept selection
    - Medium = Before conclusion of concept selection (VAR 3)
    - Low = Before Sanction
- 14 recommendations are made

Importance	H		7
	M		5
	L		
		L	H
		M	
		Urgency	

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**EXHIBIT**

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### Overall Conclusions



- **Shell team has a tough situation in a rapidly changing business environment**
  - Recent switch from exit to growth strategy
  - Lean resources and difficulty in attracting additional resources
  - Operator (bp) that is hard to influence, has a poor track record for delivery and is using high risk approaches
  - Challenging to find an economic concept; Major investment
  - Efforts divided between Blk18 development, Blk 18 exploration and growth
  - NOV influencing strategy and priorities not fully aligned within Shell
- **Shell team have addressed several issues and accomplished quality staff work to date, but remains in catch up mode and is having limited effect on bp**
- **Main recommendations:**
  - Upgrade, clearly define and get alignment on NOV influencing strategy, getting training and leveraging Sonangol
  - Improve co-ordination and alignment within Shell, balancing development, exploration, growth and shareholder aspirations
  - Complete stakeholder management & communication plans, merging with bp's
  - Obtain the additional experienced resources that are needed to deliver project and growth aspirations, providing sufficient incentives
  - Determine strategy and protocols for sharing Shell IP with bp and for getting access to lower Congo basin data and learnings from bp

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### Summary of Opportunity for Shell



- **Will be a challenge to deliver an attractive investment**
  - Major technical, organisational and political uncertainties and risks
  - Resource characteristics (e.g. reserves density) require a step improvement in development costs and performance
  - Strong Sonangol influence likely to erode value, especially if managed poorly
  - bp approaches (fast track, lack of planning and integration, not listening to partners, etc) exacerbates all of the challenges above
  - PSA provides little upside potential and reasonable downside protection
- **Shell exit no longer being considered due to Sonangol pre-emption rights being exercised with an IOU (can a swap avoid pre-emption?)**
- **Shell desires to be involved in this area of major activity**
  - Interested in large reserve and 2004+ production potential
  - Use Block 18 as a step to increase involvement and opportunities in Angola
  - Gain experience with this type of Deepwater turbidite reservoir
- **Shell and bp drivers should be aligned except for Block 17 synergies**
- **Has opportunity value consequences (Staff, Expex and Capex)**
  - If bp managed properly, will require less resources than Shell operated project
  - Higher Shell resources will be needed than other NOV due to challenges and bp issues

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**Operator Capabilities** 

- Current bp organisation appears to be able to deliver a successful project if given appropriate priorities and sufficient time
  - Senior Management have a good track record for delivering projects in Amoco
  - Technical staff has recently built up to reasonable levels and quality; not as good as Shell, but sufficient
  - Fast track schedule pressure seem to be the root cause of their current inability to deliver and poor Project Team dynamics, but there may be other issues
- Current priorities and schedule appears to be driven from above, may require major effort to change
  - Compelling case made to bp at VAR 2 presentation and the bp Delivery Manager initially reacted defensively, but has recently communicated that he has accepted the recommendations and shared the plans to address them
  - Need to change now; will erode value if wait until later
- bp have not earned credibility to be granted grace, flexibility or trust to deviate from project management good practices without thorough justification and execution plan
  - bp has yet to deliver a successful Deepwater project and is using the aggressive approaches that were considered the cause of previous project failures

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**Operator Capabilities** 

- bp is difficult to influence
  - Has reputation for not listening to partners when not in their interest to
  - Benefits from communications generally go in one direction
  - Generally know PSA and JOV well and will use to their advantage
  - Is driven by business drivers; need to talk in these terms for them to hear
- bp weakness in this project appear to be in project management, translation of static to dynamic model, how to optimise development concept and stakeholder management

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### Strategy for Influencing Operator



- **Shell team have a tough situation in a rapidly changing business environment**
  - Recent switch from exit to growth strategy
  - Efforts divided between Blk 18 exploration, Blk 18 development and overall country growth/exploration strategy
  - Operator (bp) that is hard to influence, has a poor track record for delivery and is using high risk approaches
  - Lean resources and difficulty in attracting additional resources
  - Challenging and large asset for which to find an economic concept
  - Lack of alignment within Shell on influencing strategy and priorities
- **Shell team have addressed several issues and accomplished quality staff work**
  - Influenced well placement and objectives
  - Well predictions better than bp
  - Static and progress toward dynamic models high quality
  - Costing based on analogues good quality
  - Working to understand of key economic drivers
  - Staying on top of exploration activities
  - Building a relationship with Sonangol (e.g. Bonga presentation)
  - Monthly activity summaries to RBD are valuable
  - Team members are flexible in handling a range of issues

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### Strategy for Influencing Operator



- **Shell efforts to influence bp appear to have had limited effect**
  - bp, as usual, is not delivering on partner requests unless in their interest (e.g. integrated schedule request has been ongoing since April 2000)
  - Shell efforts constrained by resource limitations
  - Messages given by different parts Shell organisation do not appear to have been clear and/or aligned; bp can chose the one they prefer
  - Good practice for managing NOV critical issues is to have clear, focussed, firm, consistent and regular communications until issue is resolved
  - Need to build credibility with bp that we will hold firm
- **JOA provides several control points to partners (especially during the development phase), but getting bp to abide by them has been difficult**
  - SDAN has focussed on understanding JOA and has been pushing bp to follow it
    - Examples: timing well proposals, CCM minutes, monthly reports, release of FPSO study (either 100% bp cost or release to JV)
  - bp utilises JOA to impose decisions on us when to their advantage (e.g. location of exploration well)
- **Shell understanding of PSA terms and implications is growing**
  - Economic screening evaluations have begun, undergoing debugging
  - No economist is available; Exploration Co-ordinator is running the economics
  - Gov't cash flow is strong throughout project life, lower share if fail to deliver

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### Strategy for Influencing Operator

- A clear and aligned influencing strategy has not been achieved yet
  - bp NoV white paper for guidance was recently proposed for managing NOV's; contributors included the Angola RBA
    - Document focused on technical aspects; should be broadened to include commercial aspects and developing the competencies and mindset for implementation
    - Several approaches possible depending on circumstances
  - Three views have been expressed by different parts of Shell
    - Full duplication of technical work, largely funded by Shell, to influence and/or help bp (SDS)
    - Perform enough independent work to ask the right questions (SDAN)
    - Let bp operate; minimum independent work and intervention (occasionally)
- Review team's observations and views on influencing strategy
  - Influence strategy should ensure Shell interests are addressed, provide project controls and be constructive, if possible (takes 2 to tango)
  - bp, as operator, should deliver the basics and details
  - Need to be careful to not fall for usual bp tactic of occupying us with technical details and preventing us from getting ahead of them on the strategic issues
  - Focus on areas of misalignment (e.g. development plan and/or unitisation of fields overlapping Block 17 and 18)

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### Strategy for Influencing Operator

- Review team's observations and views on influencing strategy (cont.)
  - Think ahead on how Shell technical work will tangibly be applied by bp to improve project value (how do you get bp to accept conclusions and merge with their own conclusions, especially if they are different)
  - Concerned with using Shell's limited resources to help solve bp's problem of being spread too thin and needing to establish themselves as a successful Deepwater operator in order to better compete with Shell for opportunities
  - Excessive assistance also may encourage them to continue with a fast track schedule which is not likely to maximise project value
  - Helping is doing bp a large favour, but bp gives impression they are doing us a favour to let us help. What is in it for Shell to help bp with operator duties?
    - Potential benefit to Shell if we can have full access to Blk 15/17 data
  - Shell study costs should be JV funded as much as possible (i.e. Shell do models of other fields, rather than the same field)
  - Good practice is have Shell equivalents at several key points in bp organisation
    - Enables working level relationships for understanding and resolving issues efficiently
    - Allows option for escalation of issues, which bp likes to do
  - Distance between SDS in US and bp in UK will be a barrier for effective engagement and monitoring of bp's technical efforts


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**Strategy for Influencing Operator** 

- **Potential to align with Sonangol to effect change in bp**
  - Sonangol has many of the same concerns as Shell, but has more influence
  - bp often uses direct communication with Gov't when Shell is operator
  - Important to communicate concerns to Sonangol to maintain Shell reputation; don't want to be grouped with bp if they fail to deliver
  - A small possibility Shell could be assigned operatorship if bp fails to deliver and we positioned ourselves well
- **Will be critical to align and co-ordinate communication and influencing strategy of Development and Exploration aspects**
  - Recovering from change from exit to growth strategy
  - Most of the Block 18 value is in developing the existing discoveries
  - SDAN has been trying to increase development competencies in organisation and increase focus to the development phase
- **No strategy formulated for sharing Shell Intellectual Property and learning from bp**
  - Asset and service providers have different views
  - Becoming critical as Shell interaction with bp increases
  - Shell IP can be protected while helping bp if a clear protocol is developed
  - Shell can benefit from getting access to Block 15 & 17 data

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**Strategy for Influencing Operator** 

**Recommendations:**

- Dissect PSA and finalise studies with economic model to understand implications all scenarios on all shareholders, including Sonangol and Angolan government using both technical and commercial expertise (H/H)
- Develop a clear and aligned strategy to influence and control bp to achieve Shell objectives and maximise project Block 18 value incorporating bp NOV Note for Guidance and review team's views as appropriate (H/H)
- Establish credibility with bp that Shell will be firm in following through with issues raised and exercising non-operator rights and operators obligations (H/H)
- Work to change bp priorities and schedule now, rather than later (H/H)
- Consider using J Breaux to help bp develop integrated schedule and project plan (M/H)
- More direct involvement by SDAN personnel in bp network to identify and share best practices (M/H)
- Determine strategy and protocols for sharing Shell IP with bp and for getting access to lower Congo basin data and learnings from bp (M/H)
- Evaluate the potential for the overlapping of fields across block 17 and 18 to increase Shell value and drive implementation if attractive (M/M)

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## Stakeholder Management



- Several stakeholders can impact project value and success
  - bp, Gov't, SDAN, Sonangol, Shell Excom, Capital Allocation, SDS, Exploration Forum, etc.
  - Each have some different drivers and are dispersed geographically; potential to take a lot of effort and travel to achieve alignment
  - Good stakeholder management will be critical for achieving growth aspirations
  - Has received significant attention by SDAN, but not in a systematic way due to limited resources (stakeholder map and management plan was not available)
  - Opportunities for Shell to engage Gov't/Sonangol have been limited
    - Limited contact because not an operator of an active development
    - SDAN GM is only Shell person located in Angola; Finance Mgr is being added
    - Others building relationships in Angola (e.g. Bonga presentation by Inglis)
    - Relationship with government appears good even after exit attempt, but has not been tested with hard choices
  - Monthly summary being used to keep RBD informed and aligned

### Recommendations:

- Complete and get alignment on a stakeholder management and communication plan (merging with bp's), including approaches to handle it as efficiently as possible (H/H)

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## Country and Block 18 Strategy



- Existing high level strategy and objectives seem reasonable
  - Staircase to growth has been defined
  - What/when objectives appear clear
  - An integrated activity plan is contained in the Business Plan. However the review team did not have the opportunity to review this plan during the limited time available.
- Lack of buy-in and awareness throughout the Global organisation
  - Hinders access to resources and funding
  - Causes misalignment with service providers

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## Reserves Booking



- Reserves booking would require work to achieve criteria - "technical maturity" and "commercial viability"
  - Existing work does not achieve criteria
  - Shell have expressed a strong desire for 300 MMBO booking by end of 2000 to meet reserve replacement goals (would have no NIAT impact in until production starts)
- - bp does not have internal drivers for booking reserves in 2000
- bp's lack of progress makes completing this work by end 2000 a major challenge
- Best chance for completing sufficient work by end of year is:
  - § - Focus on "Sweet Spot" approach which shows promise of commerciality, although the reserve amounts are lower (below 200 MMBO)
  - Shell do a detailed study on a field other than bp, rather than the same one
    - § - Having a detailed model of only one of four fields is less likely to meet the "technically maturity" criteria.
  - Continue to apply pressure on bp to deliver on their technical work
- Caution needs to be taken to not damage the longer term project objectives and schedule by the pursuit of a reserves booking in 2000

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## Shell Organisation



- Current Shell organisation is lean and it has been difficult to increase staff through OR
  - Country Manager (Angola), Asset Manager (NL), Exploration Co-ordinator (NL), SDS Technical team (US), Technical representative seconded to bp (UK), RBA (NL)
  - SDAN personnel have a mixtures of experience relevant to their roles
    - Positive is that there is someone with experience with bp in WoS and Bonga
    - Most are new to their type of role and to managing a NOV
  - » - Addition of Subsurface Co-ordinator (JG3) in planned in Jan 2001
  - Uncertainty about future, the abrupt disbanding of the previous team in late 1999 and NOV role are believed to have reduced candidates interest in SDAN positions
  - SDS Team have good technical expertise, but have other obligations to meet in parallel and are not used to working in non-operator role
- Limited resources have to cover Block 18 Development, Block 18 Exploration and growth aspirations in Angola
  - Activities have shifted to appraisal and development work
  - Additional block 18 exploration required within next 3 years, with high risks and lower rewards (additional drilling is not required though)
  - Exploration mindset currently appears to have strong influence on decisions

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**Shell Organisation** 

- **Additional resources and skills will be required to handle increase in future activities**
  - Economist to shadow work done by Bob Smith (bp Commercial Advisor) and provide support to the approval process
  - Increased development expertise and mindset, especially on subsurface issues
  - NOV experience or training
  - Someone with the experience and ability to integrate development activities and exploration/growth activities
  - Key interfaces located close to bp to enable frequent engagement
  - bp agreed to have a management representative in bp offices
    - Not clear what the role would entail and that it would be enough to occupy a senior person full time
    - Not obvious that the benefits to Shell would justify using a senior person compared to other opportunities within Shell
    - Alternative of using SDAN personnel that "mark" key positions in bp as part of their job appears more attractive

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**Shell Organisation** 

**Recommendations:**

- Obtain the Shell resources needed to deliver project based on the influence strategy, stakeholder management plan and other activities providing sufficient incentives. We estimate that this will include an E&P Mgr, an Economist and Surface Coordinator as full time SDAN personnel (H/H)
- Provide NOV and IP training to all people in contact with bp (M/H)
- Provide Venture training to Management and Co-ordinator positions (M/M)
- Provide more clarity or separate resourcing for exploration and development (M/H)
- Identify the key technical expertise Shell should provide (e.g. flow assurance) and arrange for costs to be covered by JV (H/H)

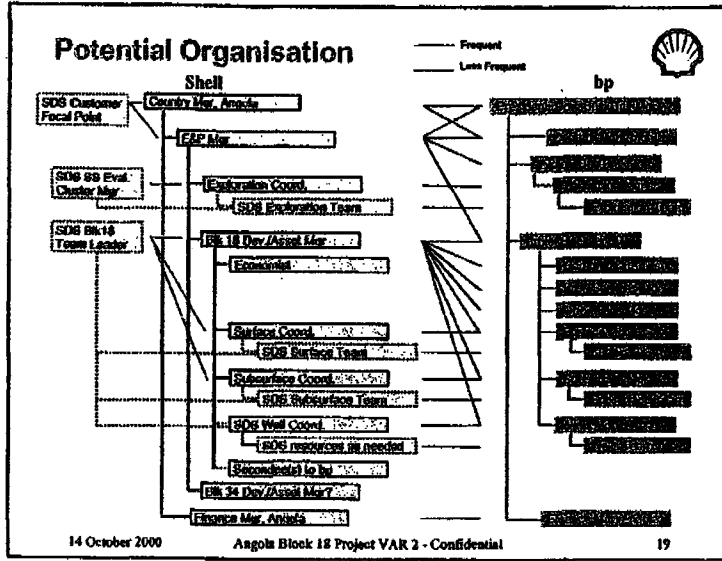
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