

The Shell Petroleum Company Limited

Internal Investment Proposal

Summary Information

Business unit and company	Shell Petroleum Development Company of Nigeria																								
Group equity interest	100% in SPDC, whereas SPDC is the Joint Venture (JV) operator of an unincorporated JV with a 30% interest.																								
Other shareholders / partners	Nigeria National Petroleum Corporation (NNPC: 55%), Total Exploration & Production Nigeria Limited (TEPNG: 10%), Nigeria Agip Oil Company (NAOC: 5%) in SPDC-JV.																								
Business or Function	E&P																								
Amount	US\$8.01 mln Shell share MOD 50/50. (US\$26.70 mln 100% JV)																								
Project	Gbaran Ubie Phase II Acceleration – Koroama TBUV2																								
Main commitments	<table><tr><th>Description</th><th>Requested (Shell Share)</th><th>Complete Budget (100% JV)</th></tr><tr><td>Location Preparation</td><td>-</td><td>-</td></tr><tr><td>Drilling</td><td>3.45</td><td>11.50</td></tr><tr><td>Completion</td><td>2.38</td><td>7.92</td></tr><tr><td>Flowlines & Hookup</td><td>1.99</td><td>6.63</td></tr><tr><td>SCD</td><td>0.20</td><td>0.65</td></tr><tr><td>Total Cost (US\$m)</td><td>8.01</td><td>26.70</td></tr></table>				Description	Requested (Shell Share)	Complete Budget (100% JV)	Location Preparation	-	-	Drilling	3.45	11.50	Completion	2.38	7.92	Flowlines & Hookup	1.99	6.63	SCD	0.20	0.65	Total Cost (US\$m)	8.01	26.70
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Source and form of financing	This investment will be financed with SPDC’s base budget. Formal JV partners’ approval will therefore be obtained.																								
Summary cash flow	<div><p>G U 2 TBUV Well forward looking Cashflow (Shell Share PSV RV-RT12)</p><p>Legend: RT Annual Cash Flow 0% (blue bar), RT CAPEX (light blue bar), Cum Cashflow 0% (blue line with circles), Cum Cashflow 7% (red line with triangles).</p></div>																								
Summary economics	Summary Economics (RV-RT12)	NPV7 (USD mln)	RTEP (%)	VIR7																					
	Base case	41.0	>50	5.29																					
	High Capex	40.7	>50	4.53																					

Section 1: The proposal (management summary)

Summary of the proposal including:

Approval is sought for US\$ 8.01 million Shell share MOD to drill, complete and hook-up 1 No NAG Development Well (Koroama TBUV-2). This well is part of the Gbaran Ubie Phase 2 project that is being accelerated based on rig availability and following the validation of the feasibility of drilling Koroama TBUV-2 from TBUR cluster location.

The Koroama field, with two existing wells is situated in OML-28 and was discovered in 1975 by Koroama-1. A Field Development Plan (FDP) of 2009 identified opportunities to drill and complete 8 new NAG development wells (including Koroama TBUV-2) in the eastern part of the field.

The base plan was for Koroama TBUV-2 to be drilled as part of the Koroama TBUR cluster drilling with 5 wells on sequence to be drilled from Q1, 2014. However, based on location design constraint for cluster drilling which specifies a maximum of 4 wells per location, this well was accelerated to fill up the spare slot in the TBUR location.

Koroama TBUR-2 and TBUR-3 are currently been batch drilled after which it is proposed to skid over and batch drill Koroama TBUR-1 and TBUV-2. The alternative of drilling the TBUV-2 well in the same cluster, after the Phase 1 TBUR wells have been drilled and hooked up, is the shut-in of 300Mmscf/d for circa 120days. This is a quick win acceleration opportunity that will bolster the production of gas required to fulfil SPDC's supply commitments to NLNG and also keep the Gbaran Central Processing Facility (CPF) full.

The objective of Koroama TBUV-2 is to provide an optimum drainage point at the crest of E1000X reservoir and develop 159.74 Bscf of gas and 3.02 MMstb of associated condensate reserves at an initial production potential of 100 MMscf/d. The well will supply gas to NLNG.

While Alternative Funding (AF) discussions are ongoing with the JV Partners, it is proposed to fund the drilling of Koroama TBUV-2 with SPDC's base budget. The 50/50-project cost for this proposal, is US\$8.01 mln Shell share CAPEX. The cost schedule is shown in the table 1.

Table-1: Project Cost Schedule.

Cost Profile (US\$'000)	2012	2013	Total	Remarks
Loc Prep			-	Loc Prep completed under Phase 1
Drilling	11.50		11.50	
Compl	7.92		7.92	
Flowlines & Hookup	4.03	2.60	6.63	
Total Capex	23.45	2.60	26.05	
SCD	0.59	0.07	0.65	
Total Cost	24.04	2.67	26.70	

Section 2: Value proposition and strategic and financial context

Koroama TBUV-2 will develop expectation reserves of 26.8 MMboe (385bbbls and 153.46Mscf condensate and gas respectively), 100% SPDC JV. The well will be drilled and completed in 2012. It will come on-stream Aug 2013 following the procurement and installation of hook-up materials. The production from the well will increase the utilization of Gbaran CPF and support gas supply to the NLNG

2.2 Summary Economics

The economics evaluation for this project was carried out on a forward-looking basis. The value of the base case was determined using 50/50 level III cost estimate and production forecast for the wells. Sensitivity analysis was carried out to determine the values of the project at different production volumes and high CAPEX. An additional BVA (Benchmark Verified and Approved) sensitivity was evaluated to address cost disputes with NNPC resulting in a 1.5% cost mark up. For each of these sensitivities, the project showed very robust economic indicators. This is due to the low capital expenditure and the utilization of existing facilities. (See table-2)

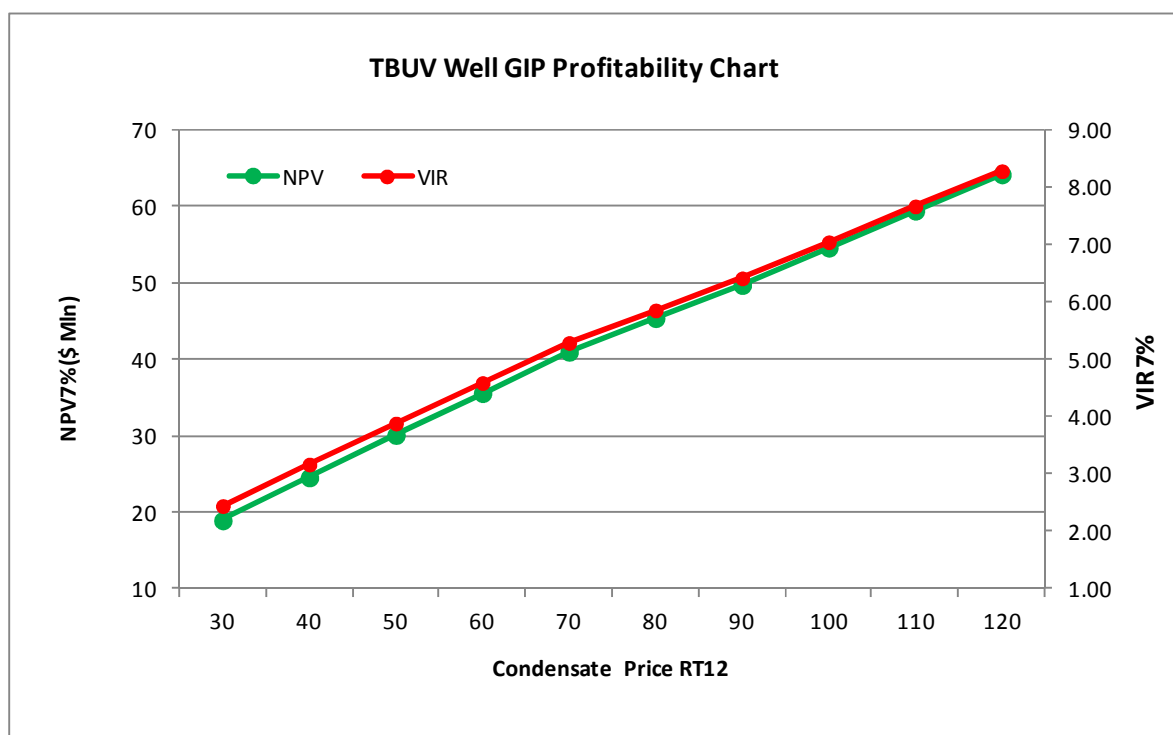
Table 2: Economics summary (Shell Share)

Cash flow forward from: 1/1/2012	NPV (S/S \$ mln)		VIR	RTEP	UTC (RT \$/boe)		Payout-Time (RT)	Maximum Exposure (RT- AT)
Cash flow forward from: 1/1/2012	0%	7%	7%	%	0%	7%	(yyyy)	\$mln (yyyy)
Base Case								
SV (\$50/bbl & \$1.31/mmbtu RT12)	43.0	30.1	3.88					
RV (\$70/bbl & \$1.74/mmbtu RT12)	58.3	41.0	5.29	>50	1.17	1.52	2013	6.63(2012)
HV (\$90/bbl & \$2.10/mmbtu RT12)	70.5	49.7	6.41					
Oil BEP (RT \$/bbl)		3.4						
Sensitivities (using RV)								
High CAPEX (P90)		40.7	4.53				2013	7.77(2012)
High Volumes		55.6	7.17				2013	6.63(2012)
Low Volumes		21.0	2.72				2014	6.63(2012)
1.5% BVA		40.6	4.98					

Key project parameters (Shell Share)

Parameter	Unit	BP11 Provision	Low	Mid	High	Comments
Capex (MOD)	US\$ mln	NA	7.0	7.8	9.1	not a stand alone activity in BP11
Opex (MOD) Project	US\$ mln	NA	1.16	2.02	2.87	ABC + SCD
Production Volume	mln boe	NA	3.65	8.05	12.29	not a stand alone activity in BP11
Start Up Date	mm/yy	NA		Jan-13		not a stand alone activity in BP11
Production in first 12 months	mln boe			4.1		

Fig-1: Profitability Indicator Chart.



Economic Assumptions

- Condensate price at the three PSVs: SV, RV and HV (\$50/bbl, \$70/bbl and \$90/bbl respectively) with applicable offsets.
- NLNG Gas PSV
- Gas taxed under CITA with Associated Gas Framework Agreement (AGFA) incentive.
- Education Tax of 2% assessable profit
- NDDC levy of 3% total expenditure
- GHV of 1150btu/scf for Export gas
- Abandonment estimated as 10% of total RT CAPEX
- SCD Cost was provided by project team
- ABC opex provided by project team
- Condensate taxed under PPT (PPT tax rate of 85%)

Section 3: Risks, opportunities and alternatives

Risks and mitigation plan

The key risks and mitigations for the project are discussed in the table below.

Risk	Mitigation plan
Insecurity in the Niger Delta	<ul style="list-style-type: none">• The existing GMoU for Gbaran Ubie node will be used for continuous engagement of the communities. Resolution of any legacy issues will be carried out in line with the new GMOU interface model and SP principles/rules to guarantee Freedom to Operate (FTO).• Prior to mobilization for drilling and construction a detailed security plan will be put in place in conjunction with the Area Security Adviser and approved by the head of security.• In addition the rig will engage community workers from the catchment area as unskilled labour under the new and operative Project Labour Agreement (PLA).
Delayed EIA approval	<ul style="list-style-type: none">• Commenced EIA approval process, provisional approval obtained from the Federal Ministry of Environment. The EIA report is currently with DPR for review and approval.
Health, Safety & Environment	<ul style="list-style-type: none">• Strict compliance with all SPDC & Group HSE policies and procedures and adherence to WIMS. All activities will be planned and delivered under the current drive to achieve 'Goal Zero'.• Controls will be put in place to mitigate identified hazards and their effects. These controls will be subjected to daily continual supervision to ascertain their adequacy and effectiveness all through the execution phase.
Production deferment	<ul style="list-style-type: none">• There is also the risk of delay in flowline, manifold and surface facilities readiness for hook-up and subsequent production. To mitigate this risk, extensive engagement with project engineering and other concerned parties for alignment on deliverables and timelines is ongoing.
Tax conditions and exemptions	<ul style="list-style-type: none">• Tax conditions and exemptions applicable to Gbaran Ubie Phase-1 project apply to this development.

Opportunities

Production will commence immediately the wells are completed and flowline and other surface facilities are ready. This implies early return on investment and protects the company's interests by keeping the CPF full and ensures no defaults on gas contracts.

Alternative

A possible alternative is to drill as per current plan i.e. without acceleration; this may imply deferring resource volumes from these wells, hence this alternative was not deemed attractive.

Section 4: Corporate structure, and governance

This proposal is within the SPDC corporate structure and governance framework.

Section 5: Functional Support and consistency with Group and Business Standards

This proposal complies with Group Business Principles, policies and standards. Regional functional support was obtained (Finance, Technical, commercial, HSE/SCD and Legal).

Section 6: Project management, monitoring and review

The optimization study has been technically reviewed and assured by the discipline. The decision to drill, complete and hook-up these wells has been approved by the Asset Development and the Gbaran Ubie Project team management.

Section 7: Budget provision

Budget provision for an existing well on the sequence for 2012 will be swapped to enable the drilling of TBUV2. The swapped well will then be funded following conclusion of Alternative Funding (AF) discussions.

Section 8: Group financial reporting impact

The financial impact of this proposal on Shell Group financial is as outlined in the table below:

US\$ Mln	2012	2013	2014	2015	2016	Post 2016
Total Commitment	7.22	0.80	0.00	0.00	0.00	0.00
Cash Flow						
SCD Expenditure	0.18	0.02				
Pre-FID Expenditure						
Capital Expenditure	7.04	0.78				
Operating Expenditure	0.39	0.06	0.03	0.03	0.03	0.31
Cash flow From Operations	2.33	5.23	9.25	8.65	7.82	39.51
Cash Surplus/(Deficit)	-4.71	4.45	9.25	8.65	7.82	39.51
Profit and Loss						
NIBIAT +/-	0.05	3.87	9.66	7.71	7.17	38.13
Balance Sheet						
Avg Capital Employed	2.38	4.47	4.38	4.12	3.32	1.77

Section 9: Disclosure

Disclosures, if required, will be done in line with existing Group and SPDC policies and guidelines.

Section 10: Financing

This investment will be financed with JV funding and Shell share capital expenditure will be met by SPDC's cash flow.

Section 11: Taxation

Taxation assumptions have been reviewed and no material tax risks have been identified.

Section 12: Key Parameters

Approval for US\$8.01 mln (50/50 MOD, Shell share) to drill, complete, procure and lay flowlines to produce Koroama TBUV-2 well.

Section 13: Signatures

This Proposal is submitted to UIG, VP Technical for approval.

Supported by:	For Business approval:
.....
Olagunju, Toyin	Gagar, Amos
UIG/T/P	FUI/FB
Date ../.../...	Date ../.../...