The Shell Petroleum Company Limited

Group Investment Proposal

Summary Information

Business unit and company	The Shell Petroleum Development Company of Nigeria Limited (SPDC)
Group equity interest	100% in SPDC. Shell is the JV operator of an unincorporated Joint Venture with a 30% interest.
Other shareholders / partners	Nigerian National Petroleum Corporation (NNPC: 55%); TotalFinaElf (10%); and Nigeria Agip Oil Company (NAOC: 5%).
Business or Function	Exploration & Production (EP)
Amount	US$6.62 mln Shell share (50/50, MOD); US$22.05 mln 100% JV
Project	Rehabilitation of Forcados Terminal Crude Storage and Process Tanks
Main commitments	**This Proposal (US$ mln) 50/50 MOD**

Description	100% JV	Shell Share
Tank Rehabilitation Work	18.96	5.69
14% Contingency	2.65	0.80
2% SCD	0.43	0.13
Total	**22.05**	**6.62**

Source and form of financing	This investment will be financed with JV funding and Shell share capital expenditure will be met by SPDC's own cash flow and/or existing shareholder facility. Formal JV partners' approval will therefore be obtained.
Summary cash flow	Not applicable as analysis is cost only
Summary economics	The project was evaluated as a 'cost only' OPEX which assures asset integrity and business continuity. The project returns an NPV 7% $-0.26 (Shell share) with an associated maximum exposure of $0.88mln in 2014.

Section 1: The Proposal

Management Summary

This investment proposal seeks approval for US$ 6.62 mln Shell Share to cover detailed inspection and rehabilitation of Forcados Terminal crude storage and processing tanks.
The workscope incorporates the following:

(a) Annual settlement surveys on tank stability vis-a-vis consolidation
(b) Corrective measures to assure tank integrity complies with the Department of Petroleum Resources statutory inspection requirements.
(c) Restoration of the technical integrity of all tanks in Forcados Terminal during the period 2010 - 2014.

The specified statutory inspection and refurbishment cycle is 5 years. This cycle captures the workscope for period 2010 – 2014 while the next workscope cycle in 2015.

There are a total of fourteen tanks in Forcados Terminal, ten are for crude storage (each/660000bbls) and the remaining four are for process purposes (dehydration and emulsion, each/300000bbls)
Two of the tanks namely T207 and T205; had inspection and rehabilitation works completed in 2005 and 2009 respectively.
The remaining crude storage tanks are overdue for the five yearly statutory surveys. The delay is primarily from long lead-time in contract approval process (typically 2years+) and the limited number of competent local contractors willing to work under the Niger Delta security condition.
The condition of the tanks overdue for refurbishment is deplorable, tank T204 was taken out of service after its fire incident, while tanks T201, T202, T206 & T210 which have leaking roofs drain are still in use.

The leaks on the tanks roof drains constitute threats to the environment and have potential adverse impact on their availability.

The full scope of the tank refurbishment will be determined after the statutory detailed inspection of each tank. The preliminary cost is based on historical refurbishment cost.
The summaries of work activities under this proposal include detailed condition survey and rehabilitation, in addition to annual statutory settlement survey of each overdue tank. The cost phasing for schedule works is as below:

Table-1: Cost Phasing US$mln 50/50 MOD

EXPENDITURE	2010	2011	2012	2013	2014	Shell Share	100% JV $mln
Tank Rehabilitation Cost	1.29	1.11	1.54	0.48	1.28	5.69	**18.96**
14 % Contingency	0.18	0.16	0.21	0.07	0.18	0.80	**2.65**
2% SCD	0.03	0.03	0.04	0.01	0.03	0.13	**0.43**
Total	**1.50**	**1.29**	**1.79**	**0.56**	**1.49**	**6.62**	**22.05**

Background:
The Statutory and Group requirements on tank inspection and maintenance, stipulates carrying out tank inspection and maintenance every five years.

Apart from the statutory internal inspection and refurbishment works completed on tanks T207 and T205 in 2005 and 2009 respectively, all the other vertical storage tanks in Forcados Terminal are due for statutory internal inspection and refurbishment.

Section 2: Value Proposition and Strategic and Financial Context

The Forcados Terminal tank rehabilitation project is necessary to ensure compliance with the statutory and group requirement. Executing the proposed tank inspection and refurbishment works will give the following benefits:

- Restore 100% availability, reliability and technical integrity of the ten storage tanks and four process tanks
- Reduce to ALARP the risk of failure to process the crude receipted at the Terminal, thus ensuring uninterrupted export operations at the Forcados Terminals.
- Ensure SPDC compliance with DPR Statutory Regulations thus reducing the accumulated waiver received so far for non-compliance.
- Prevent environmental pollution and consequent cost of clean-up/remediation
- Safeguard SPDC/Group reputation/image.
- Demonstrate commitment to maintenance of asset integrity

Summary Economics

The Rehabilitation of Forcados Terminal crude storage tanks were evaluated on a forward-looking basis to assess the impact on cash flow. The Project is considered a 'cost only' OPEX which assures asset integrity and business continuity.
Sensitivity was carried out on High /Low opex. Details are as shown in the economics grid below:

Table 1: Economics Grid for Refurbishment of tanks for Forcados Terminal

PV Reference Date: 1/7/2010	NPV (S/S $ mln)		VIR	RTEP	UTC (RT $/boe)		Payout-Time (RT) year	Maximum Exposure (RT) $mln
Cash flow forward from: 1/1/2010	0%	7%	7%	%	0%	7%		
Base Case								
SV ($50/bbl RT 10)	-0.99	**-0.88**						
RV ($60/bbl RT 10)	-0.99	**-0.88**	NA	NA	NA	NA	NA	0.99 (2014)
HV ($80/bbl RT 10)	-0.99	**-0.88**						
BEP (RT $/bbl)	**NA**	**NA**						
Sensitivities (using RV)								
High Opex		**-1.05**	NA					1.89 (2014)
Low Opex		**-0.70**	NA					0.79 (2014)

Key Project Parameter Data (Shell Share)

Parameter	*Unit*	BP09	Low	Mid	High	Comments
CAPEX (MOD)	US$mln	NA	NA	NA	NA	
OPEX Investment (MOD)	US$mln		5.3	6.62	7.95	High/Low= +/-20% base
Production volume	Mmbbl	N/A	N/A	N/A	N/A	
Commission Date	mm/yyyy	N/A	N/A	NA	N/A	
Production in first 12 months	MMboe	N/A	N/A	N/A	N/A	

Assumptions:

- Costs are treated as Oil Independent Opex expenditure.
- Project Cost includes specific SCD cost
- NDDC levy applied at 3% total expenditure

Section 3: Risks, opportunities and alternatives

Risks

The principal risks associated with this proposal and key mitigation measures are as follows:

S/N	Risk Description	Mitigation/Remedial Effort
1	**Technical / Operational**	Full scope of the tank rehabilitation can only be determined on site when each tank has been taken out of service, desludged/cleaned and then inspected in accordance with API 653. To take care of the potential additional scope, a contingency provision of about 10% on the tank rehabilitation cost estimate has been included in this IP budget proposal.
2	**Budget/NAPIMS Approvals** Inadequate/delay in providing budget for 2010 activities.	Engage NAPIMS to secure their support/buy-in for their own counterpart funding, and where necessary, this shall be escalated to the topmost management of NNPC for resolution, and we are confident that this will be achieved.
3	**HSE Risk** Pollution and harm to people.	The main risk is the pollution of environment due to structural failure, which can lead to loss of ISO14001 certification and consequently loss of production (LTO) and image problems, if the work is not carried out. SPDC HSE policies will be strictly adhered to during the execution of all work. Mandatory Hazard and Effects Management Process (HEMP) activities will be carried out with a risk register (including security) to be developed for the work scope including contracted activities. Detailed job hazard analysis will be done prior

S/N	Risk Description	Mitigation/Remedial Effort
		to commencement of high HSE risk work. Rigorous use of HEMP and other tools to control hazards will be deployed during the project execution. Contractor management for the execution of the site works Group standard EP 2005-0110 Contractor HSE Management.
4	**Security** Project being affected by current security situation in Niger Delta.	It is planned that this project will be executed in full compliance with the corporate security plans for operating in the field. An approved security plan for this project will be put in place. The Security Plan shall be developed and strictly applied through all phases of the project. The work will be done within the Forcados Terminal and will therefore not be as vulnerable as these other projects on carried out in the field or in the Island itself. The Integrated Production Security Surveillance (IPSS) is in place and there is adequate security framework. The contractor will have own security arrangement approved by SPDC security officer.
5	**Community** Risk of community disruption of project execution.	SPDC HSE and SCD policies will be strictly adhered to with a view to minimize the risk of accident/incident and disruptions. In addition, a project-specific HSE plan incorporating all the potential hazards relating to these projects will be put in place. Ogulagha and Odimodi Communities will be proactively engaged and MOUs signed (where none exist) before commencement of work activities. The MOU will outline specific benefits to the host communities in terms of employment, sub-contracting of services and supplies and community development projects. A maximum sum of 2% of cumulative CAPEX is provided for execution of SCD projects.
6	Safety	To mitigate the risk of safety to plant, equipment and personnel working in a live hydrocarbon plant with concurrent operations. The Permit-to-work system shall be strictly adhered to. A concurrent operations plan shall be developed as part of the project HSE management plan.

Opportunities

- Ensure continuity in meeting statutory obligations on integrity of the oil and gas infrastructures.
- Ensure continued maximum capability for export of crude oil at the terminal

Alternatives Considered

- Do Nothing: Failure to execute this project would imply that the anticipated opportunities would not be realised. This ultimately will mean attendant revenue loss for SPDC, JV and the stakeholders. Failure to comply with the statutory inspection and refurbishment has adverse impact on the reputation of the Company, with possible consequence of sanction by the regulatory authority.
- Phase the activities between 2010 and 2014: Phasing the activity seemed the optimum alternative.

Section 4: Corporate structure, and governance

This project fits within the existing SPDC corporate structure and governance.

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

This proposal is consistent with overall SPDC and Group strategy and objectives on asset integrity and in accordance with SPDC 2010 – 2014 Business Plan.

The proposal obtained regional functional support (HSE/SD, Legal, Tax, Treasury).

Section 6: Project management, monitoring and review

Monitoring and Review

The Project status will be reported weekly and monthly to SPDC Management, and at Major Projects Quarterly Management Review Meeting with JV Partners. A project quality management plan is being developed and this will be cascaded to the successful contractor/sub-contractors for their guidance and compliance. Monitoring and reviews shall be carried out in line with the project quality plan. In line with Group and SPDC guidelines for the management of major projects, the project will be subject to periodic PERT reviews.

HSE Management

A project HSE Management Plan is being developed, consistent with SPDC's HSE Management System and the Group HSE-MS. Contractor management for execution of the work will follow the EP 2005-0110 Contractors HSE Management standard to ensure continuous HSE performance improvement.

In view of the current security situation in Niger delta, a project-specific security plan incorporating all the potential hazards relating to this development and how they will be addressed will be developed for use during the project execution.

Section 7: Budget Provision

The required budget has been sourced, agreed with JV partners, and included in 2010 business plan

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	2010	2011	2012	2013	2014	Post 2014
Total Commitment	1.50	1.29	1.79	0.56	1.49	0.00
Cash Flow						
SCD Expenditure	0.03	0.03	0.03	0.01	0.03	0.00
Commitment OPEX	1.47	1.26	1.76	0.55	1.46	0.00
Capital Expenditure	0.00	0.00	0.00	0.00	0.00	0.00
Operating Expenditure	0.04	0.04	0.05	0.02	0.04	0.00
Cash Flow from Operations	(0.4)	(0.2)	(0.3)	0.09	(0.4)	0.21
Cash Surplus/(Deficit)	(0.4)	(0.2)	(0.3)	0.09	(0.4)	0.21
Profit and Loss						
NIBIAT +/-	(0.2)	(0.2)	(0.3)	(0.1)	(0.2)	0.00
Balance Sheet						
Average Capital Employed	0.11	0.20	0.22	0.17	0.15	0.11

Section 9: Disclosure

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

Section 10: Financing

SPDC's capital expenditure is financed from a combination of its own cash generation and further drawing on the existing shareholder facility (assuming the balance of the shareholder facility remains above zero) for an amount not exceeding US$22.05 mln, otherwise it be subject to a separate Group Financing Proposal.

Section 11: Taxation

The project was treated as an oil project. Capital expenditure is tax deductible at the statutory rate of 85% under the Petroleum Profit Tax Act 2004. Fiscal depreciation is given over 5 year's straight line with a1% retention in the fifth year. In addition, a one off investment allowance of 5% is claimable on the capital expenditure

Section 12: Key Parameters

The key parameters of this proposal, which totals USD6.62 mln Shell Share, are as follows:

- Tank rehabilitation works for US$ 5.69 mln Shell share.
- Contingency US$0.80 mln Shell share
- SCD OPEX: US$0.13 mln Shell share.

Section 13: Signatures

This Proposal is submitted to UIG/T/P for approval.

For Business approval:

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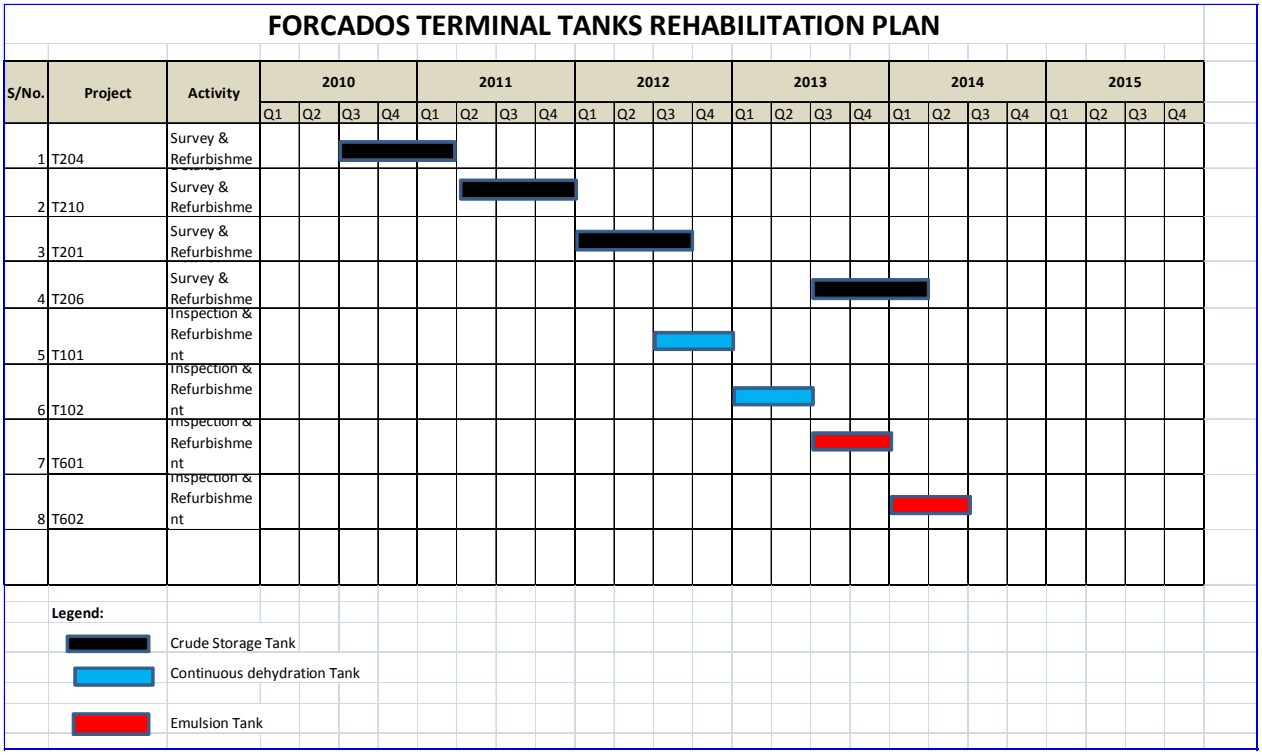
Rob Van Velden	Andrew Birch
EPF-G-T	UIG/T/P
Date …./..../....	Date …./..../....

Initiator: _____

I.E. Dibua EPG-TPPT

APPENDIX


FORCADOS TERMINAL TANKS REHABILITATION PLAN
S/No.
Project
Activity
2010
2011
2012
2013
2014
2015
Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4
1 T204 Survey & Refurbishme
2 T210 Survey & Refurbishme
3 T201 Survey & Refurbishme
4 T206 Survey & Refurbishme
5 T101 Inspection & Refurbishme nt
6 T102 Inspection & Refurbishme nt
7 T601 Inspection & Refurbishme nt
8 T602 Inspection & Refurbishme nt
Legend:
Crude Storage Tank
Continuous dehydration Tank
Emulsion Tank