

The Shell Petroleum Development Company of Nigeria Limited

Internal Investment Proposal

Summary Information

Directorate	Technical Directorate										
Group equity interest	100% in SPDC, whereas SPDC is the Joint Venture (JV) operator of an unincorporated JV with 30% interest.										
Other shareholders / partners	Nigeria National Petroleum Company (NNPC: 55%), Total: 10%, Nigeria Agip Oil Company (NAOC: 5%) in SPDC-JV										
Amount	USD 1.17 million Shell share, MOD, 50/50 USD 3.89 million 100% JV										
Project	SPDC East Selected Asset Integrity Fix Program 2010 - 2014										
Main commitments	<table border="1"> <thead> <tr> <th></th><th colspan="2">Amount (USDmln) MOD</th></tr> <tr> <th>Activity Description</th><th>Shell Share</th><th>100% JV</th></tr> </thead> <tbody> <tr> <td>SPDC East Asset Integrity fix program</td><td>1.17</td><td>3.89</td></tr> </tbody> </table>			Amount (USDmln) MOD		Activity Description	Shell Share	100% JV	SPDC East Asset Integrity fix program	1.17	3.89
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Activity Description	Shell Share	100% JV									
SPDC East Asset Integrity fix program	1.17	3.89									
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. 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' facility capex which assures business continuity. The project returns an NPV 7% USD-0.28mln (Shell share) with an associated maximum exposure of USD0.65mln in 2011.										

Section 1: The proposal (management summary)

This proposal seeks the support and approval of **USD 1.17** million (Shell share) required for the SPDC East Asset Integrity Fix Program for Flowstations, Gas plants and flowlines.

The oil and gas facilities in the SPDC Eastern division are aged and although some work had been done in prior years there are still some gaps in assuring the integrity of the facilities. A multi-discipline team - Focused Asset Integrity Review' (FAIR) team was set up to assess the integrity status of these facilities and provide recommendations for rectifying observed gaps.

The work scope summary for the proposed project is listed below: -

- Rehabilitation of Gaslift facilities installation at Adibawa, Etelebou, Nun River, Ekulama 1, Belema and Santa Barbara
- Rehabilitation of flare knock out vessels, closed drain vessels and saver pits automated evacuation system in land and swamp flowstations situate at Nkali, Imor 1and 3, Obigbo, Umuechem, Agbada 1, Nembe crk 1, 2, 3, 4 and Odeama creek, Nun River, Belema, Ekulama 2, and Bonny.

- Re-construction and commissioning of an automated saver pit evacuation system at Adibawa flowstation
- Hook up of flowlines and Gaslift lines to cathodic protection system in land and swamp districts namely Adibawa, Imo River 1, 2 and 3, Obigbo, Umuechem, Agbada 1 and 2, Nembe creek 1, 2, 3, 4 and Odeama creek, Nun River, Belema and Ekulama, Soku flowstations.

The expenditure for this proposal is planned within a four-year period as detailed below.

Expenditure Phasing (Shell Share - \$mln)

	USD mln (MOD)					
	2010	2011	2012	2013	Total Shell Share	Total 100% JV
CAPEX	0.76	0.21	0.08	0.12	1.17	3.9

A total of nine call -off and three lumpsum active contracts would be used to execute these projects in 2010 and beyond.

The sum of **US\$2.550** million was approved at the 2009 DEVCOM by the JV partners to enable execution of identified asset integrity works enlisted in the BP09.

Because of the large foot prints of the projects as indicated in the works scope above and the low value of the individual projects, no specific percentage of the budget would be set aside for Sustainable Development Projects. However, SPDC would secure FTO from the various host communities while the vendors are required to employ workers from the host communities for non-technical scopes of the projects.

Section 2: Value proposition and strategic and financial context

SPDC East assets have deteriorated over time due to age and lack of routine checks and maintenance due to inaccessibility occasioned by insecurity situation in the Niger delta. A holistic and focused strategy was developed via the 'Focused Asset Integrity Review' (FAIR) team to address Land and Swamp facilities issues to boost production, maintain asset integrity and comply with DPR statutory regulations. This is one of elements of the 'Asset Integrity Must Win' Initiatives. The strategy is to fix these identified gaps within a 4-year period with a priority focus on the items that have immediate and direct impact on facility fit-for-purpose status.

Summary Economics

The economics is forward looking to assess the impact of expenditure on cash flow. This project is considered 'cost only' oil facility capex which assures business continuity. Details of the results are shown in the table below:

Table 1: Economics Grid for SPDC East Selected Asset Integrity Fix Program

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)	-0.18	-0.28						
RV (\$60/bbl RT 10)	-0.18	-0.28	-0.25	NA	NA	NA	NA	0.65 (2011)
HV (\$80/bbl RT 10)	-0.18	-0.28						
BEP (RT \$/bbl)	NA	NA						

Key Project Parameter Data (Shell Share)

Parameter	Unit	Bus Plan (RV)	Low	Mid	High	Comments
Capex (MOD)	US\$ mln	0.77		1.17	NA	
Opex (MOD)	US\$ mln	NA		NA		
Production Volume	mln boe			NA		
Start Up Date				NA		
Production in first 12 months	mln boe			NA		

Economics Assumptions:

- Costs are treated as Oil facility capex expenditure.
- NDDC levy applied at 3% total expenditure
- SCD cost is not applied as contract strategy is adhoc and provided under call-off terms

Section 3: Risks, opportunities and alternatives

The principal risks associated with this project and key mitigation measures are but not limited to:

Risks Category	Risk Description	Mitigation/Remedial Effort
Commercial	Delay in project execution due to inadequate payment to contractors.	Prompt processing of contractors work completion certificate for value of work done
	Delays Internal & External approvals	Prompt and continuous engagement of JV partners will be ensured throughout the project execution.
Technical	Limited Indigenous vendor with adequate capacity	The technical evaluation criteria will be robust and stringent enough to screen out incompetent vendors
HSE Risk	HSE hazards and Interface problems with existing habitation.	Detailed job hazard analysis prior to commencement of work and throughout project execution period.

Managing community issues	Potential delay due to pressure to use labour from communities.	Community will be proactively engaged and MOU's signed (where GMOU does not currently exist, before commencement of work activities. FTO will be secured via SPDC community relations officers for the various communities. Vendors to employ community workers to execute non-technical scopes of the projects.
Security	Threat to Personnel & Assets. Disruptions to commencement/execution/completion of asset integrity fix activities.	<p>Front-end planning of asset integrity activities includes development of activity-specific security plans, in consonance with relevant Asset security plans.</p> <p>SPDC Security Risk Exposure Matrix (SREM) will be routinely applied for evaluation of real-time risk on projects; including use of information provided to the asset teams via the Integrated Pipeline Systems Surveillance (IPSS) contracts.</p> <p>It is also noteworthy that the Nigerian crisis team headed by the Managing Director is in place to manage the security issues in our operating facilities and environs. Freedom to operate (FTO) will be guaranteed before moving to work site(s). Measures will be put in place to safely evacuate personnel in case of heightened security breaches. Appropriate provisions, including force majeure clause will be included in contract to minimize cost of serious security incidents.</p>

Alternatives Considered

Do Nothing- Failure to execute these projects would imply that the anticipated benefits and opportunities will not be realized. The “do nothing alternative” does not appear a viable alternative as it will cause further deterioration of aging facilities with its attendant compromise of asset integrity, production deferment, revenue loss and negative environmental impact. This will result to revenue loss for SPDC, JV and the stakeholders.

Section 4: Corporate structure, and governance

The existing corporate structure and arrangements of SPDC-JV with SPDC as operator will be employed for the investment and operations. The project assurance model of the ORP-lite will be implemented.

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

SPDC functional support has been obtained for the project, with budget allocated for the work. JV partners have been engaged upfront on project details and these were again consented to, at the budget defence sessions. Corporate Security Department, Finance, HSE/SCD, Legal and Tax Functions have provided full functional support for this IP.

Section 6: Project management, monitoring and review

Project Engineers will be dedicated to these projects to monitor progress on daily and weekly basis.

Project site representatives (inspectors) will also be employed for these projects to ensure that Vendors carry out the scope of work as stated in the contracts documents and that good quality projects are delivered to the asset teams. Post-investment review for this project will be included in the overall scope.

Section 7: Budget provision

Adequate provision was made for forward spend in 2010 Business Plan (BP09). US\$2.550 million was approved at the 2009 DEVCOM by the JV partners.

Section 8: Group financial reporting impact

The proposal will not have significant impact on Shell Group financials.

Section 9: Disclosure

Material disclosures, if any, will be done in line with the Group and SPDC Disclosure policies and guidelines.

Section 10: Financing

This investment will be financed with JV funding and Shell share capital expenditure will be met by SPDC own cash flow. Formal JV partners' approval will therefore be obtained.

Section 11: Taxation

Taxation is in line with general SPDC taxation of OPEX and CAPEX.

Section 12: Key Parameters

Consideration is required of the soundness of the expenditure commitments for:

- Asset Integrity Fix Program works for the sum of **USD 1.17** (Shell share).

Section 13: Signatures

This Proposal is submitted to SPDC Organisational Representative for approval.

Supported by:

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Ogunjimi Kayode

EPF-G-PI

Date/...../.....

Approved by:

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Birch, Andrew

EPG-TP

Date/...../.....

Initiator: *Nwadiuto Onyekwelu*

EPG-TPEA

Date/...../.....

Attachment 1 – Asset Integrity Fix program



Asset integrity fix
program