The Shell Petroleum Development Company of Nigeria Limited

Internal Investment Proposal

Summary Information

<table>
<tr><td>Business unit and company</td><td>Shell Petroleum Development Company of Nigeria</td></tr>
<tr><td>Group equity interest</td><td>100% in SPDC, whereas SPDC is the Joint Venture (JV) operator of an unincorporated JV with a 30% interest.</td></tr>
<tr><td>Other shareholders / partners</td><td>NNPC (55%), TotalFinaElf (10%), and Agip (5%)</td></tr>
<tr><td>Business or Function</td><td>Exploration & Production (EP)</td></tr>
<tr><td>Amount</td><td>US$ 3.19 mln Shell share. MOD, 50/50 (US$ 10.65 mln 100% JV)</td></tr>
<tr><td>Project</td><td>Forcados Terminal Mechanical, Electrical and Instrumentation and Civil Works (from 2010 to 2014).</td></tr>
<tr><td>Main commitments</td><td>
<table>
<tr><td></td><td colspan="2">(US$ mln)</td></tr>
<tr><td></td><td>Shell Share</td><td>100% JV</td></tr>
<tr><td>Forcados Terminal mechanical works</td><td>0.48</td><td>1.61</td></tr>
<tr><td>Forcados Terminal Electrical works</td><td>0.34</td><td>1.14</td></tr>
<tr><td>Forcados Terminal Instrumentation works</td><td>0.37</td><td>1.22</td></tr>
<tr><td>Forcados Terminal Civil Works</td><td>1.54</td><td>5.12</td></tr>
<tr><td>2.0% for Sustainable Community Development (SCD)</td><td>0.05</td><td>0.18</td></tr>
<tr><td>15% contingency.</td><td>0.41</td><td>1.36</td></tr>
<tr><td>Total</td><td>3.19</td><td>10.65</td></tr>
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</td></tr>
<tr><td>Source and form of financing</td><td>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.</td></tr>
<tr><td>Summary cash flow</td><td>Cost only Project. Cash Flow chart not applicable.</td></tr>
<tr><td>Summary economics</td><td>
<table>
<tr><td>Summary economics*</td><td>NPV7% (US$ mln)</td><td>RTEP (%)</td><td>VIR7%</td></tr>
<tr><td>Base case</td><td>-0.7</td><td>NA</td><td>-0.25</td></tr>
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Section 1: The proposal

Management summary

This Investment Proposal seeks approval for US$ 3.19 mln Shell share (US$ 10.65 mln 100% JV) to cover full cost of Mechanical, Electrical, Instrumentation and Civil work activities at the Forcados Terminal.

Work Scope:

Mechanical Works:

- Upgrade of 5 terminal overhead gantry cranes at the crude storage tank manifold houses.
- Rehabilitation of the fire system piping works.
- Upgrade of the Crude Loading Platform (CLP) overhead crane
- Change out of corroded 42" pipe from the storage tanks to the booster pumps.
- Procurement of crude transfer pumps for at the jetty.
- Routing of all vent lines to flare header Implementation of GHG emission
- Executing any emergency mechanical modification/works that may arise.

Electrical Works:

- Upgrade of the Siemens substation.
- Change out of damaged 1km underground armoured cables.
- Upgrade of the HVAC system to Ozone friendly system.
- Change out of damaged street light poles and fittings.
- Change out of the Crude Loading Platform (CLP) 2No. Generating sets
- Upgrade of office buildings lightning system.
- Executing any emergency electrical modification/works that may arise.

Instrumentation Works:

- Upgrade of the solar turbine control system from turbotronic 2 to turbotronic 4 systems. Upgrade of the Forcados terminal and Crude Loading platform (CLP) fire and gas detection system.
- Installation of flare gas meters.
- Upgrade of continuous dehydration flare/fuel gas control for optimised flaring.
- Field instrument and control valve upgrade.
- Executing any emergency electrical modification/works that may arise.

Civil Works

- Rehabilitation of the Forcados Terminal and Process Roads
- Drilling and completion of the water wells for fire hydrant system and potable supply;
- Completion of the Forcados Terminal Recreation / Air operations building;
- Construction of the Walkways for process zones, security ring wall;
- Dredging of the Forcados Barge and Effluent slots;
- Design and construction of the Forcados Terminal New Staff accommodation;
- Rehabilitation/Repair of Storage Tank bundwalls;
- Staff Offices and Accommodation refurbishments;
- Executing any emergency civil modification/works that may arise.

Executing these works activities would enable SPDC to achieve the following:

i. Assurance of asset integrity for terminal operations and export activities.
ii. Restoration of fire and gas protection to the CLP
iii. Compliance with Green house gas emission controls
iv. Avoidance of HSE risks and Asset loss.
v. Ensuring uninterrupted export operations at Forcados terminals.
vi. Supporting Forcados terminal operation activities.

The detailed and phased expenditure of project on a yearly basis for the next 5 years is shown in Table 1 below:

Table 1: Capex Phasing ($mln MOD, 100% JV)

Scope	2010	2011	2012	2013	2014	Total
Forcados Terminal Mechanical works	0.57	0.25	0.32	0.25	0.22	1.61
Forcados Terminal Electrical works	0.28	0.09	0.33	0.23	0.20	1.14
Forcados Terminal Instrumentation works	0.24	0.15	0.36	0.24	0.22	1.22
Forcados Terminal Civil Works	0.80	0.61	3.20	0.23	0.28	5.12
2% for Sustainable Community Development (SCD) and 15% contingency	0.05	0.04	0.04	0.03	0.02	0.18
15% contingency	0.29	0.17	0.62	0.14	0.14	1.36
Total	**2.24**	**1.30**	**4.88**	**1.12**	**1.10**	**10.65**

Section 2: Value proposition and strategic and financial context

The Forcados Terminal Mechanical, Electrical, Civil and Instrument works are asset integrity projects.

Executing the proposed projects will give the following benefits:

- Reduce to ALARP the risk of facilities and infrastructure failure to process the crude receipted at the Terminal, thus ensuring uninterrupted export operations at the Forcados Terminal.
- Ensure the overall safety of the Terminal resulting to better work environment and improved staff welfare and productivity.
- Ensure SPDC compliance with National Statutory Regulations by ensuring the maintenance of facilities and infrastructure required for oil export.
- Prevent environmental pollution and consequent cost of clean-up/remediation
- Safeguard SPDC/Group reputation/image.
- Demonstrate commitment to maintenance of asset integrity.
- Reduce to ALARP the risk of failure to the crude oil processing and export thereby preventing deferment of western division potential production.
- Reduce to ALARP the HSE risk of failure to the crude oil containment and pollution of the environment

Summary Economics

The Forcados terminal infrastructure upgrade project was evaluated as a cost only Oil infrastructure project using 50/50 cost estimate. The project returns an NPV7% as of US$ -0.7 mln RT10 and VIR 7% of –0.25. Sensitivity was carried out to show the impact of high capex. See table 2 below for further details.

Table 2:

EP Summary Economics Grid

PV Reference Date: 1/7/2010	NPV (S/S $ mln)		VIR	RTEP	UTC (RT $/bbl or $/mln btu)		Payout-Time (RT)	Maximum Exposure$mln (RT)
Cash flow forward from: 1/1/2010	**0%**	**7%**	**7%**	**%**	**0%**	**7%**		
Base Case								
SV ($50/bbl RT10)	-0.5	**-0.7**	**-0.25**	NA	NA	NA	NA	$1.6 mln (2012)
RV ($60/bbl RT10)	-0.5	**-0.7**	**-0.25**	NA	NA	NA	NA	$1.6 mln (2012)
HV($80/bbl RT10)	-0.5	**-0.7**	**-0.25**	NA	NA	NA	NA	$1.6 mln (2012)
Sensitivity								
High Capex (+20%)		**-0.8**	**-0.29**					$1.9 mln (2012)

Key Project Parameter Data Ranges (Shell Share)

	Unit	Bus Plan (BP09)	Low	Mid	High	Comments
Capex (MOD)	US$ mln	0.7		3.1	3.8	Budget provision made for 2010 facilities work. While 2011-2014 expenditure to be provided for in Business plan for 2011-2014.
Opex (MOD)	US$ mln	0.01	NA	0.10	0.10	SCD
Production volume	Mmbbl	NA	NA	NA	NA	
Commissiom Date	mm/yyyy	NA	NA	NA	NA	
Production in first 12 months	Mmboe	NA	NA	NA	NA	

Economic Assumptions:

- SCD cost of 2.0% of CAPEX treated as Oil Independent OPEX.
- NDDC Levy of 3%

Section 3: Risks, opportunities and alternatives

Alternatives Considered

Do nothing was not a viable alternative, as this could compromise the asset integrity of the terminal and increase the HSE risks of spillage, and damage to asset. It also poses the risk deferment of scheduled maintenance, crude export or supplying off-spec Forcados crude, which could lead to legal and reputation issues. The terminal will fail the ISO recertification and Green House Gas (GHG) emissions, which will eventually result in the shutdown of the terminal deferring the whole of western division production.

Risks

S/N	Risk Description	Mitigation / Remedial effort
1	Design not meeting Specification and use of right and quality materials' (Technical / Operational)	To reduce this risk exposure to ALARP, close coordination and review of progress in combination with after-action review of key milestones will be carried out. Appropriate design reviews will be completed and necessary approvals obtained. All required Discipline, FEED and Operations team would be consulted in all phases of the project. Past performance and technical ability of the Contractors shall be a key criteria in pre-qualifying stage.
2	Budget/NAPIMS Approvals Inadequate/delay in providing budget for 2010-14 activities could prevent tank refurbishment.	To mitigate this exposure, NAPIMS & other partners will be continuously engaged for their support, buy-in and provision of their own counterpart funding.
3	Community incident and disruptions/ accident	Manage within the existing SPDC HSE and SCD policies and proactively engage communities and sign MOUs (where none presently exists) before commencement of work activities.
4	Communal clashes and general insecurity as applicable in the Niger-Delta area. (Political/Security)	It is planned that this project will be executed in full compliance to the corporate security plans for operation in the field. An approved security plan for this project will be put in place. Security Plan shall be developed and strictly applied through all phases of the project. The contractors involved will have own security arrangement approved by SPDC security officer.
5	HSE	Manage within an approved project safety plan covering all construction / logistics activities hazard analysis and mitigation methods. In addition, a project-specific HSE plan incorporating all the potential hazards relating to these projects will be put in place. SPDC HSE policies will be applicable during construction. Worksite hazard management and contractor management would be detailed out. Life saving rules will be deployed to both SPDC and contractor staffs.
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.

Section 4: Corporate structure, and governance

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

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

Increasing and sustaining export production from Forcados Terminal have always been the aspiration of the SPDC management team; to this end adequate support is given to the Terminal Engineering team to execute their projects. Functional supports have been obtained from Engineering, legal, Corporate Affairs, (with respect to Sustainable Community Development, HSE, Security) and Technical Planning. Other relevant functional inputs will be carried on board to ensure seamless execution of this project.

Section 6: Project management, monitoring and review

The Terminal Engineering team will execute these projects. In carrying out the project, relevant functional inputs will be applied to ensure seamless execution. SPDC HSE and SCD policies and 12 life saving rules 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. Community will be proactively engaged and MOUs signed (where none exist) before commencement of work activities.

A project Engineer will be dedicated to the various projects to monitor progress on daily and weekly basis

A project site representative (inspector) who is skilled in the various aspects of the projects will also be deployed for the project to ensure that vendors carry out the scope of work as stated in the contract document and that good quality project is delivered to the asset teams.

Post-investment review for this project will be included in the overall scope.

Section 7: Budget provision

The approved budget for 2010 made provision of F$0.7mln (Shell share) for the terminal facilities work. The 2011 to 2014 budget requirements of US$2.5 mln (Shell Share) will be provided for in the 2011 – 2014 business plan preparation.

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	0.67	0.39	1.47	0.34	0.33	0.00
Cash Flow						
SCD Expenditure	0.01	0.01	0.03	0.01	0.01	0.00
Capital Expenditure	0.66	0.38	1.44	0.33	0.32	0.00
Operating Expenditure	0.02	0.01	0.04	0.01	0.01	0.00
Cash Flow from Operations	0.11	0.18	0.42	0.50	0.53	1.01
Cash Surplus/(Deficit)*	(0.6)	(0.2)	(1.0)	0.17	0.21	1.01
Profit and Loss						
NIBIAT +/-	0.03	0.02	0.07	0.03	0.03	(0.5)
Balance Sheet						
Average Capital Employed	0.40	1.02	2.11	3.16	3.54	14.43

Section 9: Disclosure

Media Relations Protocol, Investor Relations Protocol and Market Abuse Directive Guidelines will follow approved SPDC procedures.

Section 10: 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.

Section 11: Taxation

No specific Group, regional or country sensitivities exist. There are no unusual tax considerations.

Section 12: Key Parameters

This investment proposal seeks approval for $3.19 mln Shell share, MOD, 50/50 ($10.65 mln 100% JV) for the implementation of Forcados Terminal Mechanical, Electrical and Instrumentation and Civil Works.

Section 13: Signatures

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

For Business approval:

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

Initiator: _____

Emman. I. Dibua

EPG-TPPT