The Shell Petroleum Development Company of Nigeria Limited

Group Investment Proposal

Summary Information

<table>
<tr><td>Directorate</td><td>Technical Directorate</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>Nigeria National Petroleum Corporation (NNPC: 55%), Total: 10%, Nigeria Agip Oil Company (NAOC: 5%) in SPDC-JV</td></tr>
<tr><td>Business or Function</td><td>Upstream International</td></tr>
<tr><td>Amount</td><td>USD 38.43 mln Shell share, MOD, 50/50 (128.09 mln 100% JV)</td></tr>
<tr><td>Project</td><td>Rehabilitation of SPDC Field Roads and Bridges (East & West)</td></tr>
<tr><td>Main commitments</td><td>
<table>
<tr><th></th><th>Shell Share $mln</th><th>100% JV $mln</th></tr>
<tr><td>Roads and Bridges East</td><td>21.07</td><td>70.25</td></tr>
<tr><td>Roads and Bridges West</td><td>16.58</td><td>55.28</td></tr>
<tr><td>SCD</td><td>0.77</td><td>2.56</td></tr>
<tr><td>Total (Shell Share)</td><td>38.43</td><td>128.09</td></tr>
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<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.</td></tr>
<tr><td>Summary cash flow</td><td>Not applicable. Cost only evaluation.</td></tr>
<tr><td>Summary economics</td><td>
<table>
<tr><th>Summary economics (Shell Share)</th><th>NPV7% (USD mln)</th><th>VIR7%</th></tr>
<tr><td>Base case</td><td>-8.0</td><td>-0.25</td></tr>
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Section 1: The proposal

<u>Management Summary</u>

This investment proposal seeks approval of US$38.43mln Shell share (US$128.09mln 100% JV) over a five year period (2011 – 2015) for the reconstruction and rehabilitation of 113km of roads and 2No company bridges in the Eastern and Western Division of SPDC. This is to provide all-seasons access to field production facilities in support of production activities. This will also provide access to the host communities located along the field roads.

The field roads were originally constructed with local fill material and have been in use for circa 15 years without any upgrade works. As a result, 113km of field roads as detailed in Appendix 1 are in very poor condition. A significant number of the roads are in operational areas located in the seasonally flooded fields and are so severely eroded and dilapidated that they are usually impassable during the rainy season. The poor state of these roads hinders routine production operations activities and curtails the ability of production operations staff to respond promptly to operational emergencies. In some cases, the poor state of these roads triggers community blockade with its attendant production deferment. A brief description of the scope of works planned to be executed under this proposal is presented in ***Appendix I-Scope of Work***.

Table 1: Cost Phasing (Shell Share)

Project	US$ mln (MOD, Shell Share)					
	2011	**2012**	**2013**	**2014**	**2015**	**Total**
Roads and Bridges East	3.06	3.12	3.18	6.26	5.88	21.5
Roads and Bridges West	3.05	8.57	1.16	2.27	1.88	16.93
Total – Shell Share	**6.11**	**11.69**	**4.34**	**8.53**	**7.76**	**38.43**
100% JV	**20.37**	**38.97**	**14.46**	**28.43**	**25.86**	**128.09**

Section 2: Value proposition and strategic and financial context

The business requirement to restore the integrity of infrastructure is captured in the business plan for 2011 and beyond. These projects will reinstate the integrity of the subject road and bridge infrastructure and achieve the following objectives:

- Ensure continuity in meeting statutory obligations on integrity of oil and gas infrastructure
- Provide all-year access to production facilities and avert Road Traffic Accidents (RTAs) and consequent loss of life, asset and/or reputation
- Ensure continuous production of oil and gas

These projects are critical to the sustenance of SPDC Licence to Operate (LTO) as the rehabilitation/construction of the roads and bridges will facilitate access to various flow-stations, wells and manifolds. The works will also provide access to various host communities and fulfil SPDC social responsibility to communities in the operational areas. The direct benefits of the proposal can be summarised as follows:

- Compliance with DPR Statutory Regulations
- Improved integrity of road and bridge infrastructure
- Seamless and uninterrupted oil and gas production
- Enhanced corporate image

Summary of Economics

The FID economics for the reconstruction and rehabilitation Roads IP was evaluated as a cost only Non-Oil and Gas (NOGI) infrastructure project using the 50/50 project level III cost estimate.

Sensitivities were carried out on the project cost to show the impact of low and high CAPEX, 1.5% cost mark up due to BVA (benchmarked verified and approved) issues and the impact of the proposed Petroleum Industry Bill (PIB IAT version 9). The details are shown in table 2 below.

Table 2: Economic Grid (Shell share)

PV Reference Date: 1/7/2011	NPV (S/S $ mln)		VIR	RTEP	UTC (RT $/boe)		Payout-Time (RT)	Maximum Exposure (RT)
Cash flow forward from: 1/1/2011	0%	7%	7%	%	0%	7%	yyyy	mln
Base Case								
RV-RT ($70/bbl RT11)*	-5.6	**-8.0**	-0.25	NA	NA	NA	NA	US$ 17.04 mln (2015)
Sensitivities (on base case)								
Low Capex (-10%)		-7.2	-0.25					US$ 15.35 mln (2015)
High Capex (+15%)		-9.2	-0.25					US$ 19.58 mln (2015)
1.5% FID cost mark up due to BVA issues		-9.6	-0.29					
PIB		-13.6	-0.43					

*Note: Same result applies to SV-RT and HV-RT since there is no revenue stream.

Key Project Parameter Data (Shell Share)

	Unit	Bus Plan BP10	Low	Mid	High	Comments
Capex (MOD)	US$ mln	37.7	33.9	37.7	43.3	Provided in BP10. Low & high based on Capex sensitivity.
Opex (MOD)	US$ mln	0.8	0.7	0.8	0.9	SCD
Production volume	Mmboe	NA	NA	NA	NA	
Start Date	mm/yyyy	Jun-11	NA	Jun-11	NA	

Economics Assumptions

- Full project 50/50 cost estimates treated as CAPEX
- Project specific SCD Opex applied and treated as Opex
- No abandonment cost assumed in this evaluation.
- Infrastructure life span of 15 Years.
- NDDC levy 3% of total expenditure.

PIB (IAT Version 9) Assumptions

- 20% of overseas cost is non-deductible for determination of NHT taxable income.
- CIT is 30% of taxable income.
- Depreciation schedule for qualifying expenditure is 4 x 20% and 19%.
- NDDC levy calculated as 3% of expenditure.
- Withholding tax is applicable at a rate of 7.5%.
- Infrastructure life span of 15 Years.
- No abandonment cost assumed in this evaluation.
- Project specific SCD Opex applied and treated as Opex.

Section 3: Risks, opportunities and alternatives

Alternatives considered

Do Nothing: Failure to execute these projects would put at risk SPDC ability to sustain oil and gas production in facilities accessed via these roads and bridges and may result in increased deferment. It may also invite negative reaction to SPDC from the host communities around these production facilities. This ultimately may result in revenue loss for the Joint Venture. Additionally, the continuous use of these roads in their bad state may impact on the safety of personnel and equipment.

Execute the entire backlog activities in 2011. In view of the poor state of roads & bridges; this option seemed viable, however given the volume of work to be carried out, it is not possible to complete all the works within one year. Consequently, this option may not be the optimum (best) alternative.

Phase the backlog activities between 2011-2015- Phasing the backlog activity appears to be the optimum alternative. This emerged from the ranking exercise carried out jointly with the Asset Teams.

Risks

The following are the risk categories associated with the execution of this project.

S/N	Risks Category	Risk Description	Mitigation/Remedial Effort
1	Commercial	Delay in project execution due to inadequate payment to contractors	Prompt processing of contractors work completion certificate for value of work done
		Delays in Internal & External approvals	Prompt and continuous engagement of internal stakeholders and JV partners will be ensured throughout the project execution.
2	Technical / Operational	Limited Indigenous vendor with adequate capacity	The technical evaluation criteria will be robust and stringent enough to screen out incompetent vendors. Provision of experienced personnel for the project and rigorous supervision of contractor using all available project management tools.
3	HSE Risk	HSE hazards and Interface problems with existing habitation.	Detailed job hazard analysis prior to commencement of work. Proper supervision throughout the execution period.
4	Legal	Claims/Litigations arising from blockade/flooding, construction damage/nuisance	Ensure inclusion of a clause in the contract passing full liability for construction damage to contractor
		Impact on 3rd party properties.	Work with land and compensation team to ensure impacted 3rd parties are appropriately compensated and with Legal to ensure appropriate legal documents to this effect are signed.
		Community regarding road as "Shell Road" placing obligation on Shell to maintain.	To get appropriate government approval before commencement of road and hand over road on completion to government as public road with legal preparing appropriate documents relieving Shell of any post-construction obligations to communities.
5	Managing community issues	Potential delay due to pressure to use labour from communities.	• Community will be proactively engaged and MOU signed (where GMOU does not exist), before commencement of work activities.

S/N	Risks Category	Risk Description	Mitigation/Remedial Effort
			• 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.
6	Security	Threat to Personnel & Assets. Disruptions to commencement/ execution/completion of Roads & Bridges projects.	• Front-end planning of projects includes development of activity-specific security plans, in consonance with relevant Asset security plans. • SPDC Security Operating Level (SOL) will be routinely applied for evaluation of real-time risk on projects. • Use of government security forces (Joint Task Force – JTF) to provide protection for operational sites. • Own security arrangements by construction contractors subjected to review / acceptance by SPDC security dept prior to implementation. • It is 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 sites. • Measures will be put in place to safely evacuate personnel in case of heightened securities breaches. • Appropriate provisions, including force majeure clause will be included in the contracts to minimize cost of serious security incidents.

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

This IP is functionally supported by HSE, SD, Legal, Tax and Treasury.

SPDC HSE and SDCR policies will be strictly adhered to with a view to minimise the risk of accident and disruptions to work programme. The 3 Golden rules and 12 Life saving rules will be continually emphasised as an essential step in attaining GOAL ZERO.

In addition, a project-specific HSE plan incorporating all the potential hazards relating to these projects will be put in place. Contractor's HSE plan will be reviewed to ensure it adequately addresses all possible hazards of the project and communicated to contractor staff in kick-off meetings, daily tool box meetings and site inspections.

Social Performance Management

Freedom to operate (FTO) will be secured from all affected communities. For communities covered by operational GMoU's this will be through their respective Cluster Development Boards. For those without operational GMoU's individual FTO's will be through the community representatives.

The key benefits that will be offered are: employment opportunities, community support, sub-contracting to community vendors and associated community content initiatives. To manage social performance (SP) in the project, 2% of the total project cost will be used for the engagements and community support. The Asset/SDCR teams will manage social performance in the project.

Section 6: Project management, monitoring and review

- Project Engineers will be dedicated to these projects to monitor progress on daily and weekly basis.
- Company site representatives (CSR) will be employed for these projects 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 these projects will be included in the overall scope.

The individual road works will be managed via the ORP-Lite process, which was derived from the ORP for managing projects less than $10 million. It has various reviews and decision gates. The decision executive is the Central Engineering Manager. Post Investment Reviews will be done, in line with good project management practice.

Section 7: Budget provision

This investment proposal falls within the BP10 and BP11 planning cycle; hence there is budget provision for the proposed commitment in the 2011 DEVCOM approved budget proposal.

Section 8: Group Financial Reporting Impact

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

US$ Million	2011	2012	2013	2014	2015	Post 2015
Total Commitment	**6.11**	**11.68**	**4.34**	**8.53**	**7.77**	**0.00**
Cash Flow						
SCD Expenditure	0.12	0.23	0.09	0.17	0.16	
Pre-FID Expenditure						
Capital Expenditure	5.99	11.45	4.25	8.36	7.61	
Operating Expenditure	0.19	0.35	0.13	0.26	0.23	
Cash flow From Operations	0.12	2.19	4.85	4.52	6.53	2.24
Cash Surplus/(Deficit)	(5.87)	(9.27)	0.59	(3.83)	(1.08)	2.24
Profit and Loss						
NIBIAT +/-	0.24	0.50	0.28	0.47	0.49	
Balance Sheet						
Avg Capital Employed	3.06	10.99	15.72	17.72	20.66	19.25

Section 9: Disclosure
Disclosures, if required, will be done in line with existing Group and SPDC policies and guidelines

Section 10: Financing
The project will be funded from SPDC's own generation of funds and existing shareholder facility assuming the balance of the shareholder facility remains above zero; otherwise it will be subject to a separate Group Financing Proposal.

Section 11: Taxation
The Field Roads and Bridges rehabilitation project was treated as an oil project. Capital expenditure is tax deductable at the statutory rate of 85% under the Petroleum Profit Tax Act 2004. Fiscal depreciation is given over 5 year's straight line with 1% retention in the fifth year. In addition, a one off investment allowance of 5% is claimable on the capital expenditure.

Section 12: Key Parameters
Approval is requested for:

- Rehabilitation of Field Roads & Bridges for a sum of $38.43mln MOD (50/50, Shell share).

Section 13: Signatures
This Proposal is submitted to UIG Directors for approval.

Supported by:	For Business approval:
....	....
Bernard Bos	**Ian Craig**
FUI/F	**UIG**
Date ..../..../....	**Date ..../..../....**

Initiator: *Ekpekurede, Christopher*

Head Corporate Civil Engineering (UIG/T/PEV)

Date …../…../…..

Appendix I

Scope of Works

Road and Bridges East

Land 2 Asset Area Roads & Bridges		***- 30km plus 2 Bridges***
• Adibawa Field Roads	9.0km	
• Etelebou Field Roads	6.0km	
• Kolo Creek Field Roads	6.0km	
• Ubie Field Roads	3.0km	
• Oguta Field Roads	6.0km	
• Adibawa Main Access Bridge Replacement		
• Etelebou Well-11 Access Bridge Replacement		

Land 1 Asset Area Roads		***- 32km***
• Agbada Field Roads	6.0km	
• Imo River Field Roads	5.0km	
• Umuechem Field Roads	8.0km	
• Obigbo Field Roads	7.0km	
• Obele Field Roads	6.0km	

Roads and Bridges West

• Escravos North Bank Roads	15km
• F/Terminal Roads	16km
• Ogbotobo/Yokri Field Roads	10km
• Land Asset Area Roads	10km

This scope has been transformed into work packages and captured as specific asset integrity big-ticket items that form part of SPDC business plan for 2011 and beyond.