

The Shell Petroleum Development Company of Nigeria Limited

Internal Investment Proposal

Summary Information

Directorate	Major Project & Engineering Directorate				
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	Nigerian National Petroleum Corporation (NNPC) 55%; TotalFinaElf (Total) 10%; and Nigeria Agip Oil Company (NAOC) 5%.				
Amount	US\$1.64 mln Shell share MOD, 50/50 (US\$5.46 mln MOD 100% JV) in addition to previously approved US\$1.22 mln Shell share (US\$4.08 mln 100% JV), bringing the total amount to US\$2.86 mln Shell share, 50/50 (i.e. US\$9.54 mln 100% JV).				
Project	Upgrade of Existing IA Hospital Facilities in Port Harcourt				
Main commitments	Upgrade of IA Hospital Facilities (Staff Offices, Laundry, Modifications of OPD, IPD building and Gas Shed)				
	Description	Previously Submitted (100%)	This Proposal (100%)	Revised IP (100%)	Revised IP (Shell share)
	Upgrade of IA Hospital Facilities	3.51	4.45	7.96	2.39
	Purchase of Medical Eqp't & Furniture	0.31	1.01	1.32	0.40
	Upgrade of Cold Storage Facilities	0.22	0.00	0.22	0.07
	IT Upgrade in B4 Medical Offices	0.04	0.00	0.04	0.01
	Total Commitment	4.08	5.46	9.54	2.86
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	N/A				
Summary economics	Summary economics	NPV 7% (USD mln)	VIR 7%	RTEP (%)	
	Base case (2008& 2009 Expenditures (RV-RT))	-0.4	-0.24	n/a	
	FLC (RV-RT)	-0.7	-0.24	n/a	

1. The proposal

Management summary

This proposal seeks support and approval for the incremental cost of \$1.64mln (Shell share) required to cover the increase in scope for the Upgrade of Facilities in Shell IA, Port Harcourt. This will increase the total project cost from \$1.22mln (Shell share) to \$2.86mln (Shell share). Over the years, the IA hospital facilities in Port Harcourt have deteriorated due to under investment. It was feared that the patients' health could be severely compromised if the hospital facilities (which are below Shell's medical standards/Nigerian medical Standards and are HSE

critical), were left in their dilapidated state. This was not only repeatedly highlighted in corporate health audits by SIEP, but was also flagged as a result of SPDC internal audits. Whilst staff numbers & dependants in PH have grown over the years, it should be noted that the hospital was last upgraded over 20 years ago, hence increased capacity is required. This led to occupation of part of the ground floor of B4 by the medical department in order to provide accommodation for the hospital's managerial and administrative offices, the occupational health laboratory and physiotherapy facilities.

Work on the hospital extension planned to be executed in four phases, commenced in 2003 and was expected to be completed in 2005. The four phases included design (phase I); extension of the Block for offices and consulting rooms and construction of the Laundry (Phase II); modifications of Fire Alarm and Nurse Call systems in OPD building (Phase III) and construction of IPD and Gas shed (Phase IV). The work was estimated to cost \$1.22mln (shell share). A group investment proposal for this amount was approved in July 2004.

However, as at the end of 2005, only phases I & II had been completed and Phases III and IV were on going. During the period, there was a surge in the prices of construction materials that necessitated a revalidation of the project cost. Also, early 2006, the customer (EPG-SHS) came up with changes in the scope and specifications of the IPD and Gas Shed for improved functionality and in line with Audit recommendations.

The changes included 10% increase in the footprint; replacement of floor tiles (including corridor wall tiles) with anti-static mat (to eliminate bacterial growth); integration of the fire alarm system with the existing medical building; laying of dedicated power supply armoured cables to eliminate constraints in the original proposed power source; provision of purpose built switchgears which separates life saving equipment from rest of the building for improved functionality and are fitted with withdrawable breakers for safety; change of sanitary fittings from conventional types to purpose built for hospitals; Provision/replacement of nurse call systems in the existing OPD & Extension buildings; connecting walkways; introduction of wall partitions in the hitherto open wards; change in door specification for hygienic purposes and changes in equipment and furniture, etc.

The increase of \$1.64mln (Shell share) or US\$5.46mln (MOD 100% JV) in the revised IP as against the original scope of \$1.22mln (Shell share) or US\$4.08mln (MOD 100% JV) in the approved investment proposal is made up of the following:

- Phase III works (modifications of the Fire alarm and Nurse Call systems in OPD)
- Increased building footprint for required functional spaces
- Modifications to gas shed (RC walls)
- Introduction of link ways, external perimeter pavement slabs and RC septic tanks
- Rock wool insulation for roof
- Digital fire alarm & Nurse call systems in IPD instead of analogue system to allow for integration with modified OPD
- Modifications to windows and doors and introduction of ISO wall Partitions in the Wards
- Modifications to plumbing installations (including provision of wall mounted WC and accessories •Use of 3 No. Electrical switchboards instead of one provided in contract for safety and improved functionality
- High grade antistatic semi rigid, non-fibrous and impermeable PVC coverings on floor and part of walls in place of ceramic tiles and paint

Estimated cost of these works: \$2.883mln (MOD 100% JV)

Others (\$2.567mln):

Medical equipment and furnishing

Medical Gas Piping & Installation

Additional cost for project management, salaries, QA/QC due to elongation of project duration

5% Contingencies

5% VAT

Capital Expenditure Details: (All figures MOD, US\$ mln, 100% JV)

Phasing (Shell Share)	(2003 – 2006)	2007	2008*	2009	Total
Total CAPEX requirement	2.48	1.60	4.00	1.46	9.54

**Proposed IP was circulated for signatures in 2008 and commitment made while awaiting signatures and also revised to accommodate 2009 proposed expenditure.*

2. Value proposition and strategic and financial context

The existing IA Hospital facilities cannot effectively manage the current manpower levels in Port Harcourt and the increased emergency medical support to government security operatives and contractor workforce due to worsening security situation in the Niger Delta.

The present condition of the clinic is such that it is operating far below optimum with attendant consequences as outlined below and delivery on schedule was also a requirement of the 2006 audit.

- Inability to accommodate all cases that require admission due to drop in bed capacity from already constrained 50 beds to 30.
- Inability to appropriately segregate patients by illness type, which is a preferred approach to managing hospital acquired infection. There is no isolation ward.
- The current operating room is being shared with the labour ward, which means long transit time in between uses for mandatory sterilization.
- Surgeries may be reduced to emergencies only for long periods with a hope that for some cold cases such delays are manageable. Same goes for Obstetrics and Gynaecology cases (surgical deliveries).
- Overall quality of care provided is impacted negatively.

Summary Economics

The base case for the upgrade of the existing IA Hospital Facilities in Port Harcourt project was evaluated as an infrastructure project on cost only basis, which incorporates the 2008 spent that is part of headline size of this IP. There are sensitivities of 2009 expenditure only as well as the full life cycle economics that included all the prior costs. All the costs were treated as non-oil and gas infrastructure CAPEX

Summary of the evaluation is shown in the table below.

EP Summary Economics Grid IA Hospital Facilities Upgrade (Shell Share)

PV Reference Date: 1/7/2009	NPV (\$/S \$ mln)		VIR	RTEP	UTC (RT \$/bbl or \$/mln btu)		Payout-Time (RT)	Maximum Exposure\$mln
Cash flow forward from: 1/1/2009	0%	7%	7%	%	0%	7%		
Base Case (2008 & 2009 Expenditure only)								
SV-RT (\$50.3/bbl & \$1.37/Mscf)	-0.2	-0.4	-0.24					
RV-RT (\$60.4/bbl & \$1.63/Mscf)	-0.2	-0.4	-0.24	n/a				1.1(2009)
HV-RT (\$80.7/bbl & \$2.15/Mscf)	-0.2	-0.4	-0.24					
Sensitivities (using RV-RT)								
2009 Expenditure only	-0.07	-0.1	-0.25					0.4(2009)
Full life Cycle	-0.4	-0.7	-0.23					1.6(2009)

Key Project Parameter (IA Hospital facilities Upgrade) Shell share.

Parameter	Unit	Bus Plan	Low	Mid	High	Comments
Capex (MOD)	US\$ mln		1.64	1.64	1.64	2008 and 2009 expenditures
Production Volume	mm boe					
Start Up Date	mmm-yy					
Production in first 12 months	mm boe					

Economic Assumptions

- All costs treated as non oil and gas infrastructure Capex
- NDDC levy of 3% total expenditure
- Future maintenance OPEX excluded.

3. Risks, opportunities and alternatives

Alternatives Considered:

Maintaining the Original Design: One alternative considered is to accept the original design (with all its shortfalls), complete the project (Modification of the OPD, New IPD building, & Gas Shed). The original scope will provide a facility (IPD building) that doors and corridors are too narrow for wheeled beds, jointed floors (which trap bacteria in crevices), inadequate number of isolation wards, Isolated fire alarm (as against complete integration of the hospital buildings) & an obsolete analogue Nurse call systems (instead of a digital system), etc.

Re-tender the additional works at a later stage: The other option is defer and re-tender the additional scope. This will not only involve a lengthy contracting process, but will also delay the realisation of the project to its full scope and its benefits by approximately 2 years of contract re-tendering with attendant escalation of project cost estimated at 30% of cost of the deferred works in light of the increase in price of essential construction material in the last 3 years.

Risks associated with the development of the project and mitigations include:

S/ N	Risks	Risk Description	Mitigation/Remedial Effort
1	HSE Risks	Risk of striking live electrical/telecoms cable or water lines during construction.	Sonic surveys will be done within the project site to determine the presence and identify the location of underground facilities like electricity and telecommunication cables, water lines etc.
2	HSE Risks	Risk of fall during erection of roof trusses as a result of working on heights	Pre-mob of equipment to be used for lifting e.g crane, slings, shackles etc. Adequate JHA and Job Safety Analysis (JSA) to be conducted with staff prior to commencement of lifting activities.
3	HSE Risks	Adverse impact of noise from construction works on IA staff and operations	Detailed job hazard analysis prior to commencement of construction - This shall ensure that the chosen work method, speed and sequence of construction activities does not constitute additional threat to the integrity of the I.A environment and occupants.
4	HSE Risks	Generation of wastes such as broken blocks, steel pipes, sand and aggregate debris etc during construction.	A dedicated SPDC HSE Inspector shall be maintained on site during the construction period.
5	HSE Risks	Facilities already in place may be stretched and in some cases over taxed.	SPDC Waste Management Plan shall be complied with in handling the generated wastes.
6	Commercial	Delay due to late NAPIMS approval of increase in contract ceiling as a result of the additional scope	Proactive engagement of NAPIMS senior management has commenced with SPDC BJV to secure timely approval of the variation proposals arising from additional scope.
7	Managing community issues	Delayed completion of work due to stoppage by communities	SPDC and contractor are mitigating this with Proactive engagement of the communities through the IA GMoU Cluster as part of the pre-mobilisation activities and will continue to interface with that structure, to ensure peaceful operation, throughout the duration of the project.
8	Security Risks	Hostage taking	This is being mitigated by strict adherence to SPDC security policies and use of SREM (Security Risk Evaluation Matrix) before embarking on journeys and during execution.

4. Corporate structure, and governance

The existing corporate structure and arrangements of SPDC-JV with SPDC as operator will be used as the vehicle for the investment and operations. The project assurance model of the ORP is also being implemented.

5. Functional Support and consistency with Group and Business Standards

This proposal complies with Group Business Principles, policies and standards. Functional support for this proposal is provided by Finance, Security, Social Performance and Community Affairs, HSE, Legal, Treasury and Tax functions.

The project was included in the BP 2008, and is designed to best Engineering standards and practices to ensure that a fit-for -purpose facility is constructed and delivered.

6. Project management, monitoring and review

The SPDC Project Engineer resident in Corporate Civil Engineering (EPG-TPEVE) shall be responsible for the day-to-day project management coordination of the work. EPG-TPSM and a dedicated contract will provide the relevant Inspection services/ project management (Architectural, civil, electrical, mechanical and QA) on the project. The construction contractor shall also be required to have own project management services for the works.

7. Budget provision

Budget provisions for the project in 2009 is F\$1.386mln.

BUDGET PHASING					
	Prior Years	2007	2008	2009	TOTAL
	\$ (000)	\$ (000)	\$ (000)	\$ (000)	
Description of Activities					
Phase I & II Works (incl. Additional works)	1,884	0	0	0	1,884
Phases III & IV	0	870	559	0	1,429
Additional Works/Change in specs	0	0	1,528	502	2,030
Electricals (UPS, Cables & Hookup)	0	0	626	98	724
Air Conditioning Works	0	0	495	83	578
Equipment & Furnishing	0	0	360	370	730
Mediacal Gas Piping & Installation	0	0	224	0	224
Tele/Data Comms	0	0	43	93	136
Project Management/Salary/QA/QC for Civil & Elect/Mech Discipline activities	480	290	300	240	1,310
Subtotal	2,364	1,160	4,135	1,386	9,045
VAT	118	58	246	69	491
TOTAL	2,482	1,218	4,381	1,455	9,536

Section 8: Group financial reporting impact

The impact on Shell Financial Statements is considered immaterial and so no financial table is applicable.

9. Disclosure

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

10. Financing

This investment will be financed with JV funding and Shell share capital expenditure will be met by SPDC's own cash flow. NNPC (and other JV partner) is already being engaged on this.

11. Taxation

The Completion of IA Hospital IPD and Gas Shed at Shell IA Port Harcourt project shall have appropriate tax treatment in line with statutory requirement.

12. Key Parameters

Consideration is required of the soundness of the expenditure commitments for the following;

- Completion of IA Hospital IPD and Gas Shed at Shell IA Port Harcourt for the sum of \$2.86 mln (Shell share).

13. Signatures

This Proposal is submitted to SPDC Organisational Representative for approval.

Supported by: Agwae, Agomatigho EPF-G-TD Date .../.../....	Approved by: Kennet, Chris EPG-TDO Date/.../....
Initiator: <i>Ekpekurede, Christopher</i> <i>Mr Project Manager (EPG-TPEV)</i> Date .../.../....	