The Shell Petroleum Development Company of Nigeria Limited

Internal 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>USD16.25 mln Shell share (MOD), 50/50 (USD54.16 mln 100% JV)</td></tr>
<tr><td>Project</td><td>SPDC 2011 Flow line replacement campaign</td></tr>
<tr><td>Main commitments</td><td>
<table>
<tr><td>Activity</td><td>Shell Share (US$mln MOD)</td><td>100% JV (US$mln MOD)</td></tr>
<tr><td>East Asset team Planned flowline replacement</td><td>5.48</td><td>18.28</td></tr>
<tr><td>East Asset team Vandalised flowline replacement</td><td>2.70</td><td>9.00</td></tr>
<tr><td>West Asset team Planned flowline replacement</td><td>5.40</td><td>17.99</td></tr>
<tr><td>West Asset team Vandalised flowline replacement</td><td>2.34</td><td>7.81</td></tr>
<tr><td>SCD</td><td>0.33</td><td>1.08</td></tr>
<tr><td>Total</td><td>16.25</td><td>54.16</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><td>Summary economics (Shell Share)</td><td>NPV7% (USD mln)</td><td>VIR7%</td></tr>
<tr><td>Base case</td><td>-4.3</td><td>-0.27</td></tr>
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Section 1: The proposal (management summary)

This proposal covers the 2011 flow line replacement for SPDC - East and West Divisions that will assure a 2011 daily oil production of ca. 57Mbopd. A total of 216.85km of flowlines is firmly proposed for replacement during the planned period (East – 86.85km, West 130km). Also an 82km Optional scope (East – 40km, West 42km), is included to address thefts / vandalisation if they occur *(See Appendix 1, table 1A/B for details).* The project scope includes procurement, coating and construction, including cathodic protection. It is also proposed to complete the Mininta – Ahia bulkline in 2011. The scope of this is the completion of construction works, with procurement of some outstanding materials. The firm scope is based mainly on a structured replacement plan, as incorporated into the Flowline Integrity Management System (FIMS) and available reserves. For the West, most of the firm scope is from the prioritised Flowlines Replacement Master list in use since the 2008 Re-entry when the campaign commenced to replace these swamp lines which were stolen / vandalised or degraded during the period of nil-activity in the West.

Flowline theft / vandalisation incidents are still significantly high *(See Appendix 2 for details)*, with well known adverse consequences on the environment and production. SPDC has always acted decisively in addressing the environmental consequences of these acts of sabotage. While an effective proactive long term strategy to discourage these thefts (e.g. RtP flowlines) is still in the works, the short term strategy will still be mainly reactive. In the past few years, the increasing amount of resources put into these adhoc replacements has limited our ability to deliver on the planned statutory scope. This 2011 Investment Proposal addresses this challenge and for the first time, we will seek to secure a firm budget for the replacement of vandalised and stolen flowlines.

In summary, this proposal addresses the following

1. Replacement of aged and corroded flowline based on data from the Flowline Integrity Management System (FIMS)
    a. Proactive replacement of aged lines that are in service in order to prevent spills
    b. Replacement of corroded lines in order to deliver new opportunities based on updated WRM model
2. Replacement of vandalised and stolen flowlines

For the replacement of the corroded flowlines, priority was given to producing lines with higher impact on the overall Production output of the asset teams.

For the replacement of Stolen or vandalised lines however, we have allowed for an Optional scope based on historical trend of vandalisation in the past 3 years, taking into consideration the effectiveness of current efforts at flowline ROW surveillance.

In order to assure on the integrity and longevity, the new lines or replaced sections will be treated with the standard 3-layer PE coating and cathodically protected to minimise corrosion. Post installation surveillance monitoring and data gathering activities would continue to help improve the FIMS and thus future analysis, projections and proactive response time.

Above plans notwithstanding, Asset Operations and Security support teams are exploring ways to strengthen existing surveillance efforts as well as employ other proactive efforts to ensure a downward trend in flowline thefts / vandalisation.

Expenditure Phasing (Shell Share - $mln)

Description	2011(Shell Share)	100% JV
Flowline replacement	15.92	53.08
SCD	0.33	1.08
Total	**16.25**	**54.16**

The details of the location and flowlines to be replaced are presented in Appendix 1: tables 1a and 1b. Conduit List Planned/Unplanned for Replacement in 2010 including their execution status is shown in Appendix 3.

Section 2: Value proposition and strategic and financial context

Specifically, this project will ensure the integrity of about 80nos oil and gas flow lines being proposed for replacement, thus adding to production ca 57Mbopd of oil in both East and West.

Replacing these flow lines will minimise the risk of leakages and spills due to flowline integrity issues, and in the case of vandalisation, minimise unplanned deferments, thereby enhancing SPDC's reputation as a responsible corporate citizen. These benefits will facilitate the sustenance of SPDC's License to operate (LTO) and continued production from SPDC assets in order to meet its production targets.

Summary Economics

The FID economics for the Flow lines replacement project for East and West was evaluated as a cost only Oil and Gas (OGI) 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, and 1.5% cost mark up due to BVA (benchmarked verified and approved) issues. The details are shown in table 2 below.

Table 1: Economics 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 ($70/bbl RT11)*	-2.7	**-4.2**	-0.26	NA	NA	NA	NA	US$ 12.7 mln (2011)
Sensitivities (on base case)								
Low Capex (-10%)		-3.8	-0.26					US$ 11.4 mln (2011)
High Capex (+15%)		-4.8	-0.26					US$ 14.5 mln (2011)
1.5% FID cost mark up due to BVA issues		-5.0	-0.30					

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

Table 2: Key Project Parameter Data (Shell Share)

	Unit	Bus Plan BP10	Low	Mid	High	Comments
Capex (MOD)	US$ mln	15.9	14.3	15.9	18.3	Provided in BP10. Low & high based on Capex sensitivity.
Opex (MOD)	US$ mln	0.3	0.3	0.3	0.4	SCD
Production volume	Mmboe	NA	NA	NA	NA	
Commissiom Date	mm/yyyy	Dec-11	NA	Dec-11	NA	

Economics Assumptions

- Full project 50/50 cost estimates treated as CAPEX
- 10% of total project RT CAPEX treated as abandonment cost.
- Project specific SCD Opex applied and treated as Opex.
- NDDC levy 3% of total expenditure.

Section 3: Risks, opportunities and alternatives

Alternative Considered

- Do nothing: This implies leaving the flowlines as is. This option however, will expose the company to the risk of possible spills and production losses resulting from integrity related leakages.
- Shut off High-risk flowlines; this is a commercially unviable option especially for high producers and will impact on our production system capacity and stability.

Opportunity

- Opportunity exists to achieve the following:
- Reinstate integrity of flowlines.
- Ensure continuity in meeting statutory obligations on integrity of the oil and gas flowlines.
- Avert possible flowline failures (rupture)
- Assure continued oil and gas production.
- Increase Production capacity by laying flowlines to new opportunities; contingent upon reducing impact of unplanned work on budget

Risks

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

Risks Category	Risk Description	Mitigation/Remedial Effort
Commercial	Delays Internal & External approvals	Delays in securing internal and joint venture partners' approval could delay the project. Prompt, aggressive and continuous engagement of internal stakeholders and JV partners will be ensured throughout the project execution.
	Delays in procurement of materials	The engineering team will finalize discussion with SCM on the procurement of standard hook up items as stock items.
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.
	Unnecessary replacement of good lines.	The flowlines to be replaced is selected by obtaining and analysing the relevant fluid and static data, UT measurements, followed by a review leak history in last 5years and failure investigation. The result of this checks are kept and updated regularly in the flowlines information management system (FIMS)
HSE Risk	HSE hazards and Interface problems with existing habitation.	Detailed job hazard analysis prior to commencement of work. Proper supervision

	Pollution of environment due to flowline leaks as a result of poor asset, which can lead to loss of ISO14001 certification, and consequently loss of production (LTO) if deteriorated flowlines are not inspected and maintained.	Flowline Integrity Management System (FIMS) has been put in place for better prediction of flowline integrity to eliminate leaks.
Managing community issues	Potential delay due to pressure to use labour from communities.	• Community will be proactively engaged • Terms of agreement during FTO engagements (labour employment, sub contracting & community support). • 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 flowline replacement activities.	• Front-end planning of flowline replacement activities includes development of activity-specific security plans, in consonance with relevant Asset security plans. • SPDC Security Risk Exposure Matrix (SREM) will be routinely applied for evaluation of real-time risk on flowline replacement projects. • Use of government security forces (Joint Task Force – JTF) to provide protection for operational sites. • Structured approach to community entry for flowline activities, in close collaboration with SPDC Sustainable Community Development (SCD) Team, to avoid unnecessary tensions. • Use of information provided to the asset teams via the Integrated Pipeline Systems Surveillance (IPSS) contracts. • Own security arrangements by installation contractors subjected to review / acceptance by SPDC security dept prior to implementation.

Section 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-lite would be implemented.

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

Conducting our business in a safe and responsible manner is the bedrock upon which SPDC policies and practices are founded. Increasing and sustaining production is the primary commercial aspirations of the company. The safe and efficient execution of this project represents technical directorate's contribution to this overarching goal. Support from other functional teams (i.e. Legal, Treasury, SPCA, HSE, Security, Economics & Finance) will also be secured to ensure a seamless project execution.

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 Board. 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

A project Engineer will be dedicated to this project to monitor progress on daily and weekly basis.

Project site representatives will also be employed for this 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

There is a budget provision for the proposed commitments in the 2011 business plan. With proper project management, the financial commitments of these projects will not exceed the expenditure limits.

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	**16.25**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Cash Flow						
SCD Expenditure	0.33					
Pre-FID Expenditure						
Capital Expenditure	15.92					
Operating Expenditure	0.48					
Cash flow From Operations	1.45	3.16				
Cash Surplus/(Deficit)	(14.47)	3.16				
Profit and Loss						
NIBIAT +/-	0.70					
Balance Sheet						
Avg Capital Employed	7.58	13.59	12.01	12.01	12.01	12.01

Section 9: Disclosure

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

Section 10: Financing

The project will be funded from SPDC's JV budgetary provision for 2011 activities to an amount not exceeding USD54.16 Mln.

Section 11: Taxation

The flowline replacement project is taxed with oil fiscal regime. 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 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

Consideration is required of the soundness of the expenditure commitments for: The 2011 SPDC flowline replacement for the sum of US$16.25 mln (Shell share).

Section 13: Signatures

This Proposal is submitted to UIG Directors for approval.

Supported by:	For Business approval:
.....	**.....**
Bernard Bos	**Lismont Bart**
FUI/F	**UIG/T**
Date ..../..../....	**Date ..../..../....**

Initiator: *Ojo Afolabi*
Mr Project Manager (UIG/T/PA)
Date …/…./….

Appendix 1:

For the East, the 40 no flowlines (total length ca. 86.85km) proposed for replacements in 2011 have been selected on two key basis:

Swamp: Completion of swamp flowstations re-entry scope, some of which could not be completed in 2011.

Land: selected and prioritised from FIMS list and are aligned with 2011 production forecast. Asides that their replacement is statutory, their Net Oil potential (bopd) and Reserves volume (MMbbls) further justify their selection for full replacement in 2010 (See Appendix 1, table 1A for details).

For the West, most of the firm scope is from the prioritised Flowlines Replacement Master list in use since the 2008 Re-entry when the campaign commenced to replace all swamp lines vandalised / stolen / degraded during the period of nil-activity in the West. Total length of flowlines to be replaced is 130km.

Opportunities that come up within the year, but not captured in the lists below will be ranked and if executed, a list of revisions and actual work done will be captured in the next IP.

Table 1A showing Conduit List Planned for Replacement in 2011 (East)

S/NO	Field	Tag number	Fluid	LINE SIZE (INS)	LINE LENGTH (KM)	Net Pot. (bpd)	Rem Res (mmbl)	estimated Conduit Life(yrs)	Cost ($'000)
1	CAWTHORNE CHANNEL	CAWC045T	oil	6	1.36	3046.8	11.32	10.17213828	414.80
2	CAWTHORNE CHANNEL	CAWC043S	oil	4	1.70	2340.4	20.97	24.53116177	405.77
3	AWOBA	AWOB003L	oil	4	2.00	1190.6	1.3	2.98942216	477.38
4	OBIGBO NORTH	OBGN002T	oil	4	0.42	1120.4	3.34	8.161747259	54.05
5	BONNY NORTH	BONN010L	oil	4	0.98	1058.6	3.41	8.819262407	233.92
6	OGUTA	OGUTA W/26T	oil	4	2.90	1044	0.17	0.445818615	373.20
7	CAWTHORNE CHANNEL	CAWC004T	oil	4	0.24	901.03	2.43	7.383746837	57.29
8	EKULAMA	EKUL038S	oil	4	2.78	882.33	4.58	14.21164032	663.56
9	AWOBA	AWOB006L	oil	4	3.50	873.61	1.37	4.293512641	835.42
10	EKULAMA	EKUL036S	oil	4	1.20	772.69	3.6	12.75577895	286.43
11	EKULAMA	EKUL036L	oil	4	1.20	770.88	5.15	18.29069577	286.43
12	IMO RIVER	IMOR023L	oil	4	0.66	753.26	1.29	4.688723038	84.94
13	OGUTA	OGUTA W13T	oil	4	4.98	752	0.09	0.327668312	640.88
14	AGBADA	AGBD061L	oil	4	4.65	706.66	1.55	6.005248238	598.41
15	AWOBA	AWOB005L	oil	4	2.20	558.3	0.56	2.746187428	525.12
16	CAWTHORNE CHANNEL	CAWC037L	oil	4	1.33	553.53	1.05	5.193473392	317.46
17	BONNY NORTH	BONN018S	oil	4	0.85	535.1	2.28	11.66566958	202.89
18	CAWTHORNE CHANNEL	CAWC021S	oil	4	1.78	514.57	0.75	3.990493209	424.87
19	EKULAMA	EKUL038L	oil	4	2.78	467.51	3.82	22.370837	663.56
20	EKULAMA	EKUL021L	oil	4	3.07	459.59	1.55	9.233596728	732.78
21	UMUECHEM	UMUE012L	oil	3	0.62	413.35	0.76	5.033909757	79.79
22	AGBADA	AGBD033L	oil	4	5.57	405.87	1.18	7.959849037	716.80
23	CAWTHORNE CHANNEL	CAWC021L	oil	4	1.77	384.9	0.49	3.485442675	422.48
24	OGUTA	OGUTA W12T	oil	6	4.32	372	0.782	5.755374504	885.60

25	IMO RIVER	IMOR036L	oil	4	0.89	359.97	0.65	4.943753678	114.53
26	AWOBA	AWOB009S	oil	4	3.20	506	1.17	6.330603599	763.81
27	OGUTA	OGUTFLO26T	oil	4	5.57	381	1.54	11.06637851	716.80
28	OGUTA	OGUTFLO13T	oil	4	4.98	719	0.563	2.143824747	640.88
29	BONNY NORTH	BONNFLO12S	oil	4	0.01	263	0.62	6.454249004	1.43
30	CAWTHORNE CHANNEL	CAWC018T	oil	4	2.00	442	0.24	1.486615812	477.38
31	BELEMA	BELEFLO06L	oil	4	1.96	147	0.73	13.59612976	467.83
32	BELEMA	BELEFLO10L	oil	4	2.95	618	1.15	5.094706157	704.14
33	NEMBE CREEK	NEMCFLO64TA/B	oil	4	3.20	2240	2.39	2.921189009	763.81
34	KRAKRAMA	KRAKFLO04T	oil	4	1.04	115	0.22	5.237627593	248.24
35	KRAKRAMA	KRAKFLO04S	oil	4	1.04	303	0.36	3.252892024	248.24
36	KRAKRAMA	KRAKFLO08L	oil	4	1.37	614	0.03	0.133771211	327.01
37	KRAKRAMA	KRAKFLO08S	oil	4	1.04	439	0.58	3.617206051	248.24
38	KRAKRAMA	KRAKFLO13L	oil	4	3.40	570	1.82	8.741909531	811.55
39	KRAKRAMA	KRAKFLO14L	oil	4	0.64	938	2.44	7.121914628	152.76
40	KRAKRAMA	KRAKFLO16S	oil	4	0.70	510	0.37	1.986283904	167.08
41	AHIA	BULKLINE-3	oil	10	14.50	5558.9		0	1042.49
				GRAND TOTAL					**18280.00**

Table 1B showing Conduit List Planned for Replacement in 2011 (West)

S/NO	Field	Tag number	Fluid	LINE SIZE (INS)	LINE LENGTH (KM)	Net Potential (bpd)	Rem Res (mmbl)	Cost ($'000)
1	EVWRENI	EVWRW1L	Oil	4	0.5	582	0.26	55.00
2	OLOMORO	OLOM006L	Oil	4	0.73	300	0.36	80.30
3	OLOMORO	OLOM006S	Oil	4	0.73	1200	1.30	80.30
4	OLOMORO	OLOM036S	Oil	4	1.20	210	0.76	132.00
5	OLOMORO	OLOM017S	Oil	4	1.50	1238		165.00
6	KOKORI	KOKRW001S	Oil	6	0.5	746	0.52	55.00
7	KOKORI	KOKRW001L	Oil	6	0.5	351	0.52	55.00
8	BENISEDE	BEN9L	Oil	4	1.70	574	0.096	238.00
9	BENISEDE	BEN19L	Oil	4	2.60	261		364.00
10	OPUKUSHI	OPUK10L	Oil	4	1.70	290		238.00
11	OPUKUSHI	OPUK16T	Oil	4	1.40	776		196.00
12	OPUKUSHI	OPUK27T	Oil	6	4.00	627		560.00
13	OPUKUSHI	OPUK30L	Oil	4	6.00	200		810.00
14	OPUKUSHI	OPUK30S	Oil	4	6.00	600	1.498	810.00
15	OPUKUSHI	OPUK38T	Oil	4	2.50	664	0.94	350.00
16	OPUKUSHI	SIEB1T	Oil	6	2.10	1100	1.42	294.00
17	OPUKUSHI	SIEB2L	Oil	6	1.20	1000	0.958	168.00
18	OPUKUSHI	SIEB2S	Oil	6	1.20	900	0.735	168.00
19	OPUKUSHI	SIEB3L	Oil	6	0.20	900	0.836	28.00
20	OPUKUSHI	SIEB3S	Oil	6	0.20	1500	0.44	28.00
21	OPUKUSHI	BULK	Oil	6	30.00	Bulk Line		4200.00
22	OPUKUSHI	AJAT1L	Oil	6	13.00	1400	1.92	1820.00
23	OGBOTOBO	OGBO1T	Oil	4	1.40	734	1.89	196.00

24	OGBOTOBO	OGBO5T	Oil	6	5.40	818	1.24	756.00
25	OGBOTOBO	OGBO8T	Oil	6	2.55	234	0.40	357.00
26	OGBOTOBO	OGBO9T	Oil	6	4.00	620	1.61	560.00
27	OGBOTOBO	OGBO10T	Oil	6	4.50	708	0.84	607.50
28	OGBOTOBO	OGBO11T	Oil	6	4.50	504	0.40	607.50
29	OGBOTOBO	OGBO12T	Oil	6	4.00	679	0.19	555.00
30	OGBOTOBO	OGBO13T	Oil	6	4.00	2830	3.61	555.00
31	OGBOTOBO	OGBO14T	Oil	6	2.50	960	1.76	350.00
32	OTUMARA	OTUM009T	Gas	4	1.20	938		168.00
33	OTUMARA	OTUM011T	Gas	4	2.00	445		280.00
35	OTUMARA	OTUM044S	Gas	4	7.0	350		945.00
36	OTUMARA	OTUM051G	Gas	4	3.20	798		448.00
37	OTUMARA	OTUM057T	Gas	4	3.20	400		448.00
38	OTUMARA	OTUM007S	Gas	4	1.90	300		266.00
				TOTAL	**130.81**	**26,737.00**		**17,993.60**

Appendix 2

Data on Vandalised/Stolen flowlines

SPDC - EAST

	PLANNED REPLACEMENTS				**VANDALISED/STOLEN LINES REPLACED**			
Year	**Planned Full Replacement**		**Actual Full Replacement**		**Sectional Replacement**		**Full Replacement**	
	No. of lines	**Length (Km)**	**No. of lines**	**Length (Km)**	**No. of lines**	**Length (Km)**	**No. of lines**	**Length (Km)**
2008	n/a		16	**33.303**	12	**N/A**	12	**36.91**
2009	27	67.881	5	**12.36**	9	**10.3**	8	**19.90**
Q1-Q3,2010	39	97.69	7	**19.83**	33	**28.728**	12	**34.76**
					Total Length(km) of vandalised lines in Q1-Q3, 2010			**63.59**

SPDC - WEST

	PLANNED REPLACEMENTS		**VANDALISED /STOLEN LINES REPLACED**	
Year	**No. of lines**	**Length (Km)**	**No. of lines**	**Length (Km)**
2008	**0**	**0**	**0**	**0**
2009	**25**	**68**	**48**	**52**
2010	**9**	**85**	**76**	**35**

Appendix 3:

The sum of F$ 27.99 mln (F$8.40 mln Shell Share) was approved for flowline replacement under the 2010 flowline replacement IP for the replacement of 39 lines in the East and 9 lines in the West. Out of these, 22 lines (planned) and 50 lines (unplanned, including sectional replacements) were completed in the East. For the West, 4 lines (planned) and 36 lines (unplanned, including sectional replacements) were completed and a total spend of F$27.99mln (F$ 8.40mln Shell Share). *See details in table below.*

Table 3A: Conduit List Planned for Replacement in 2010 including their execution status

S/No.	Field	Conduit	Fluid	ANSI RATING	Pipe Size (INS)	Length of line (Km)	Projected 2010 (bopd/MMscf)	COST ($)	COMPLETION STATUS
STATUS OF 2010 IP									
					EAST				
1	AKASO	AKOS003L	oil	600	4	4.7	917.34	1473450	COMPLETED
2	AWOBA	AWOB 3L	oil	600	4	2	1054.25	627000	COMPLETED
3	AWOBA	AWOB 3S	oil	600	4	2	307.45	627000	COMPLETED
4	CAWC*	CAWC23L	oil	600	4	1.74	633.12	545490	COMPLETED
5	EKULAMA	EKUL026L	oil	600	4	3.83	244.58	1201646	COMPLETED
6	EKULAMA	EKUL038L	oil	600	4	2.78	246.38	870276	COMPLETED
7	EKULAMA	EKUL038S	oil	600	4	2.78	470.11	870903	COMPLETED
8	AKASO	AKOS009S	oil	600	4	4.65	623.56	1457775	COMPLETED
9	ALAKIRI	ALAK21T	gas	2500	6	2.09	17177.36	655842	**ON HOLD**
10	AWOBA	AWOB 7L	oil	600	4	1.4	3125.54	438900	COMPLETED
11	EKULAMA	EKUL031S	oil	600	4	2.91	61.44	911345	
12	EKULAMA	EKUL039L	oil	600	4	2.19	229.38	685311	
13	SOKU	Soku W14L	oil	600	4	1.8	375	429642	
14	SOKU	Soku W21S	oil	600	4	2.8	112	668332	
15	SOKU	Soku W08T	oil	600	4	2.4	227	572856	
16	AKASO	Akaso 10L/S	oil	600	4	3	700	716070	
17	AKASO	Akaso 13L	oil	600	4	2.44	400	582404	
18	CAWC*	CawC W51T	oil	600	4	1.14	1000	272107	
19	CAWC*	CawC W18T	oil	600	4	2.44	500	582404	To be done in 2011
20	AWOBA	Awoba W6L	oil	1500	4	3.5	1669	835415	To be done in 2011
21	AWOBA	Awoba W9S	oil	1500	4	3.2	1600	763808	To be done in 2011
22	CAWC*	CawC 24T Riser Leak repairs	oil	600	4	0.05	500	11935	
23	NEMBE	Nembe Creek 63L/S	oil	600	4	4.68	6834	1117069	COMPLETED
24	BELEMA	Belema 01L/S	oil	600	4	5.36	6637	1279378	COMPLETED
25	BELEMA	Belema 02T	oil	600	4	3.09	3710	737552	COMPLETED
26	NEMBE	Nembe Creek 10T	oil	600	4	2.47	3124	589564	COMPLETED
27	NEMBE	Nembe Creek 23T	oil	600	4	5.93	2952	1415432	COMPLETED
28	BELEMA	Belema 08T	oil	600	4	1.14	1864	272107	COMPLETED
29	BELEMA	Belema 05L	oil	600	4	1.85	563	441577	
30	BELEMA	Belema 06L	oil	600	4	1.96	147	467832	
31	BELEMA	Belema 04T	oil	600	4	4.37	542	1043075	
32	NEMBE	Nembe Creek 43L	oil	600	4	1.2	3145	286428	COMPLETED
33	NEMBE	Nembe Creek 43S	oil	600	4	1.2	2465	286428	COMPLETED
34	NEMBE	Nembe Creek 27L	oil	600	4	1.2	1294	286428	COMPLETED
35	NEMBE	Nembe Creek 27S	oil	600	4	1.2	647	286428	COMPLETED
36	NEMBE	Nembe Creek 19L	oil	600	4	1.28	1510	305762	COMPLETED
37	NEMBE	Nembe Creek 15S	oil	600	4	0.98	1416	232961	
38	NEMBE	Nembe Creek 22S	oil	600	4	1.88	1121	448976	COMPLETED
39	NEMBE	Nembe Creek 56S	oil	600	4	2.07	921	494327	COMPLETED
						97.7	**71065.51**	25791233	
					WEST				
1	OLOMORO	OLOMW003L	Oil	600	4	2.5	1265	478,750	
2	OLOMORO	OLOMW005L	Oil	600	4	0.5	900	95,750	Completed
3	KOKORI	KOKR035T	Oil	600	4	1.95	680	373,425	
4	KOKORI	KOKR001L	Oil	600	4	1.95	420	373,425	
5	EVWRENI	EVWR001L	Oil	600	4	0.5	200	95,750	
6	UTOROGU	UTOR029T	Gas	2500	6	0.7	50	195,000	Flowlines laid in 2008, but hooked up in 2010
7	UTOROGU	UTOR031T	Gas	2500	6	0.7	45	195,000	-do-
8	UTOROGU	UTOR030T	Gas	2500	6	0.7	45	195,000	-do-
9	UTOROGU	UTOR025T	Gas	2500	6	0.7	50	195,000	-do-
						10.2		**2,197,100**	

Table 3B : Unplanned Conduit List Replaced in 2010 (East)

Team	Well Name	FLUID TYPE	Length replaced(km)	Net Oil	Work Type
	EAST				
PEL2	ADIB016T	Oil	2.5	839	Flowline Full Replacement
PEL2	Ahia 7L	Oil	1.8	568	Flowline Full Replacement
PES1	AKOS003S	Oil	5.3	1713	Flowline Full Replacement
PES1	AKOS004S	Oil	2.8	4500	Flowline Full Replacement
PES1	CAWC042T	Oil	2	1828	Flowline Full Replacement
PES2	EKUL005L	Oil	3.1	682	Flowline Full Replacement
PES2	EKUL005S	Oil	3.1	805	Flowline Full Replacement
PES2	EKUL024T	Oil	3.058	711	Flowline Full Replacement
PES2	EKUL035S	Oil	1.73	1054	Flowline Full Replacement
PEL1	IMOR37L	Oil	4.6	289	Flowline Full Replacement(Integrity)
PEL1	OBGN003L/S	Oil	2.2	748	Flowline Full Replacement
PES1	SOKU028L	oil	0.6	317	Flowline Full Replacement
PEL2	ADIB010S	Oil	0.06	1477	Flowline Sectional Replacement
PEL2	ADIB025L	Oil	0		Flowline Sectional Replacement/spool piece
PEL2	ADIB04S	Oil	0.5	116	Flowline Sectional Replacement
PEL2	ADIB07T	Oil	0.4	35	Flowline Sectional Replacement
PEL2	ADIB08S	Oil	0.5	170	Flowline Sectional Replacement
PEL1	AGBD012L	Oil	0.036	279	Flowline Sectional Replacement
PEL1	AGBD032S	Oil	2	1207	Flowline Sectional Replacement
PEL1	AGBD58L	Oil	0.036	643	Flowline Sectional Replacement
PES1	AKOS007L	Oil	4	1625	Flowline Sectional Replacement
PES2	AWNW001L	Oil	5.5	4528	Flowline Sectional Replacement
PES2	AWNW001S	Oil	5.5	2593	Flowline Sectional Replacement
PES1	AWOB 7L	Oil	0.072	6500	Flowline Sectional Replacement
PES1	CAWC024T	Oil	1	200	Flowline Sectional Replacement
PES2	EKUL027S	Oil	0.12	1700	Flowline Sectional Replacement
PEL1	Imor 19S	Oil	0.05	226	Flowline Sectional Replacement
PEL1	ImoR 21L	Oil	0.7	419	Flowline Sectional Replacement
PEL1	Imor 53L	Oil	0	479	Flowline Sectional Replacement
PEL1	Imor 53L	Oil	0.2	479	Flowline Sectional Replacement
PEL1	Imor 53L	Oil		479	Flowline Sectional Replacement
PEL1	IMOR57L	Oil	0.042	405	Flowline Sectional Replacement
PEL2	KOCR 25T	Oil	1.5	870	Flowline Sectional Replacement
PEL2	KOCR25T	Oil	1	1083	Flowline Sectional Replacement
PEL2	KOCR21T	Oil	0.8	645	Flowline Sectional Replacement
PEL2	Kocr 3T	Oil	3	1222	Flowline Sectional Replacement
PEL1	Nkali 10S	Oil	0.2	489/4.2mmscf	Flowline Sectional Replacement
PEL1	Nkali 13S	Oil	0.2	624/5MMSCF	Flowline Sectional Replacement
PEL1	OBGN048L	Oil	0.25	800	Flowline Sectional Replacement
PEL2	OBGN048S		0.25	0	Flowline Sectional Replacement
PEL1	Otam 5L	Oil	0.012	222	Flowline Sectional Replacement
PES1	SOKU016L	GAS(HP)	0.12	HP GAS	Flowline Sectional Replacement
PEL1	AGBD029GLL	GAS	0.012		Gasline Sectional Replacement
PEL1	AGBD58 GLL	GAS	0.036		Gasline Sectional Replacement
PEL1	IMOR001GLL	GAS	0.2	409	Gasline Sectional Replacement
PEL1	IMOR012GLL	GAS	0.2	168	Gasline Sectional Replacement
PEL1	IMOR037GLL	GAS	0.2	437	Gasline Sectional Replacement
PEL1	IMOR057GLL	GAS	0.2	402	Gasline Sectional Replacement
PEL 1	OBGN010TGLL	GAS	0		Gasline Sectional Replacement(FLANGE)
PEL1	OBGN027T/GLL	Oil	0.15	678	Gasline Sectional Replacement
	TOTALS		62.634	47140	

Unplanned Conduit List Replaced in 2010 (West)

S/No.	ITEM DESCRIPTION	Length Replaced	Size
1	Eriemu 21 New F/L; Eriemu 16L&S, 14L&S, 11L&S, 8L&S F/L Rerouting	2.14	4in
2	Eriemu 8, 11, 13, 14, 16, 19 GLL Sectional Replacement	4.2	2in
3	Olomoro Wells 2, 12, 14, 21, 25, 26, 31, 33, 35 GLL Sectional Replacement	2.4	2in
4	Afiesere Well 8, 18, 36, 37 GLL Sectional Replacement	1.80	2in
5	Uzere 17, 19, 20, 26 GLL Sect Replacement	0.7	2in
6	Olomoro Wells 21, 23, 24, 38 F/L	3.0	4in
	GRAND TOTAL	**14.24Km**	