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Preface

This report is part of a study addressing technological and institutional aspects of the development and utilisation of offshore petroleum resources in Nigeria. Norway and Nigeria have signed a memorandum of understanding on private sector development in the Nigerian upstream oil and gas industry. One of the objectives of the co-operation is to increase local content in the Nigerian industry. As a first step, NORAD and the Norwegian Ministry of Petroleum and Energy (OED) have funded an Intsok-study on local content and how to improve the capabilities of Nigerian supply and service companies. The study also assesses the potential for co-operation between Norwegian and Nigerian enterprises. SNF in conjunction with Rogaland Research and Kragha and Associates in Nigeria have been commissioned by Intsok/OED to undertake this study.

Résumé

The report is based on an assessment expert workshop designed for collective handling of complex problems and issues, i.e. E & P policy issues connected to increased local content. Different methods like structured assessment, foresight and gap analysis were supported by techniques like brainstorming, development of univocal terminology, arranging ideas into categories, and evaluation of ideas and alternatives, using multiple criteria and techniques.

The experts have suggested a new E & P avenue that encompasses five strategies to be followed if the ambition of increased local content should be fulfilled. This avenue reflects a significant change in present E & P policy, suggesting upgrading and changes in institutions, structures and processes.

Thanks to contributors.

The project would like to acknowledge the assistance of Mr. Moses Kragha and Associates in the organising of the expert workshop on E & P policy assessment set up in Lagos on 07 November 2002. This acknowledgement also extends to all the 16 experts (listed in Appendix A.1) who dedicatedly worked through a series of assignments on various aspects of Nigerian E & P policy aiming to increase local content.

This report has also benefited from extensive comments and energizing ideas from the project steering group; Mr. Odd Godal (Statoil), Mr. Per Hagen (Intsok), Mr. Egbert Imomoh (Shell), Mr. Kjell Miskov (AkerKværner), Mr. H. Sola Oyinlola (Schlumberger) and Mr. Tore Sandvoll (Sandvoll Energy).

Stavanger, 10 January 2003

Jan Erik Karlsen, project leader

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1 Introduction

1.1 Background of the project

The project was established to address technological and institutional aspects of the development and utilisation of offshore petroleum resources in Nigeria.

Objective:

1. Assess the enabling environment for private sector development in the Nigerian upstream petroleum industry
2. Recommend ways and means of increasing and improving the capabilities of Nigerian supply and service companies
3. Assess areas of co-operation where the Norwegian business community can enhance employment, revenue generation and other development effects

Client: Intsok

Donors: NORAD (Norwegian Agency for Development Cooperation)/OED (Norwegian Ministry of Petroleum and Energy)

Methods:

- Supply and Value Chain analysis
- Gap Analysis
- Expert assessment and foresight analysis on
 - E& P Technology
 - E&P Policy
- Comparative case studies

Project organisation: International consortium constituted with Nigerian/Norwegian partnership of SNF, Kragha & Associates and RF.

Time frame: Pilot study (August 2002- February 2003)

1.2 Definition of 'local content'

“The quantum of composite value added to, or created in the Nigerian economy without compromising quality, health, safety and environmental standards”.

“Value added”: - *Human*; as % of total employment, per skills level
- *Material and services*; stated as % of total price

E.g. 100% value added for:

- All manufacture in Nigeria with Nigerian raw materials
- Consultancies by Nigerians
- Leased equipment by 100% Nigerian companies

E.g. for non-Nigerian goods sold by 100% Nigerian companies, value added =

- Finishing in Nigeria or, % of amount over and above that paid to the overseas supplier.

2 Basis for the policy assessment

The workshop participants were prior to the actual expert assignment given an overview over a comparative study focusing strategies to increase local content. A summary of the study is given below:

2.1 Local Content in a Comparative Perspective¹

As part of the project a comparative study has been undertaken analysing the local industrial development related to the upstream petroleum sector in Brazil, Indonesia, Malaysia, Mexico, Nigeria and Norway. These countries were at different development stages both at present and at the time when petroleum resources were first discovered in the country. Nigeria and Indonesia were poor, populous countries at the time when the first investments in the petroleum sector were undertaken. They both had a GDP per capita between USD 220 and 250 in the early 1960s, far below the other countries in the sample. However, while Indonesia developed a strong industrial base, mainly outside the petroleum sector, and the economy grew rapidly, Nigeria's economy stagnated and industrial production likewise (Kyvik Nordås, Heum, Vatne 2002:1).

We notice that Nigeria was the largest oil producer among the six during the 1970s, but was overtaken by Mexico in 1980 and Norway in 1991. Indonesia's and Malaysia's production has levelled off. Brazil is a relatively small producer, but output has increased sharply recently, due to the opening of deep offshore fields. The increasing trend in Brazil is expected to continue as new fields come on stream. The petroleum sector accounts for a much higher share of total national income in Nigeria than in the other countries, mainly because Nigeria has been less successful in developing its non-oil economy (Nordås, Heum, Vatne 2002:3).

Nigeria has produced oil since 1958. However, the legislation regulating the Nigerian upstream sector goes back to 1969. The state has the exclusive right to exploit the hydrocarbons of Nigeria, a right that has been vested in NNPC following its establishment. The petroleum act has not been amended significantly since its signing into law in 1969. The tax conditions and other regulations applicable at present are those stated in the Memorandum of Understanding between the Ministry of Minerals and Energy, NAPIMS and Shell signed in 2000 (Kyvik Nordås, Heum, Vatne 2002: 7).

Some important lessons for Nigeria can be drawn from the case studies. First, the role of the national oil company has to be updated. Over time it has become clear that regulatory powers should be strictly separated from operating activities, in order to ensure transparency and to avoid creating a fertile ground for rent-seeking and outright corruption. All countries have introduced reforms to that effect, but to a differing extent. Nigeria still has a long way to go

¹ This section is in full based on the summary report by H. Kyvik Nordås, P. Heum & E. Vatne on 'Local content in the upstream oil industry – a comparative study'. Bergen: SNF working paper, 2002.

before regulations and operations are strictly separated (Kyvik Nordås, Heum, Vatne 2002:11).

Second, the relationship between the national oil company and oil majors must be transparent and stable. However, it is not possible to draw any firm conclusions on what is the optimal contractual relation between the oil majors and the national oil company when the objective is to transfer technology and develop the national oil company's competence. It is, however, clear that joint ventures are not a good idea when investments are substantial and the national oil company is financially weak (Kyvik Nordås, Heum, Vatne 2002:12).

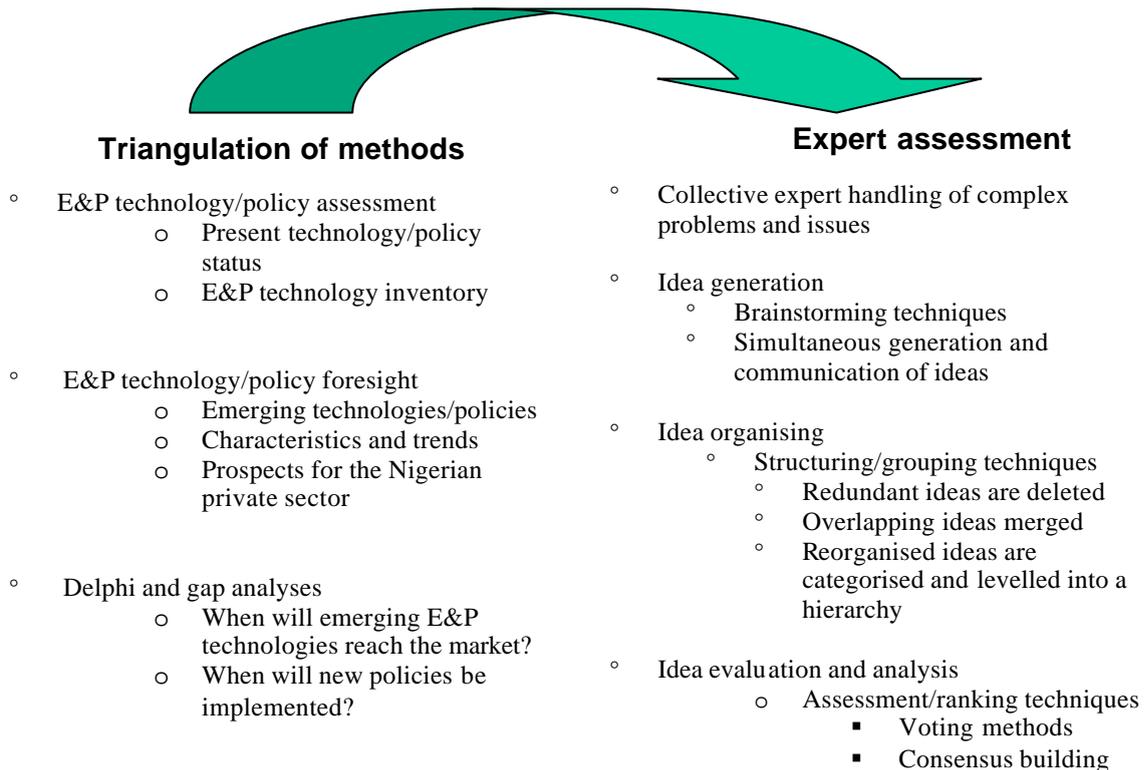
Third, the industrial policy including local content must be realistic in ambition and measures applied to develop national supply industry. Research from other industries concludes that local content requirements are not very successful of developing an indigenous industrial base, but somewhat more successful in bringing in the primary foreign investors' international suppliers to the host country. We therefore suggest that local content should be defined in terms of value added in Nigeria by local staff, rather than in terms of ownership of the company performing the value added activities. In a globalised industry a local subsidiary of a multinational can be just as effective in using local inputs and developing capacity and competence in the Nigerian community as a company for which Nigerians hold a majority of the shares (Kyvik Nordås, Heum, Vatne 2002:13).

Nigeria does not have the industrial capacity, competitive environment and the checks and balances as Malaysia had. The lessons from the other case studies and not least Nigeria's own past experience with state-owned heavy industries indicate that further experiments with channelling the oil revenues into new such ventures are unlikely to create value for the nation (Kyvik Nordås, Heum, Vatne 2002:14).

3 Expert workshop arrangement

3.1 Workshop design

This expert workshop was designed for collective handling of complex problems and issues, i.e. E&P policy issues. Different methods like structured assessment, foresight and gap analysis were supported by techniques like brainstorming, development of univocal terminology, arranging ideas into categories, and evaluation of ideas and alternatives using multiple criteria and techniques as illustrated in the figure below.



The expert session was chaired by a team of experienced facilitators, who guided the brainstorming, idea organising, and consensus building processes.

3.2 Gap analysis

The experts were introduced to and guided in applying 'gap analysis' as a vehicle for the assessment. Gap analysis is a 'bottom up' approach that allows for creativity and collaboration at the appropriate level where most E&P decisions are made. The intent of gap analysis is to provide focus and direction for proactive, rather than reactive E&P management at the national level in Nigeria.

A 'gap' is the *absence or under-representation* of an element of policy and performance in the E&P regime. Gap analysis identifies *E&P priorities* that will ensure the objectives are met. The ultimate product of a gap analysis is not a list of gaps, but an *action plan* showing priority areas for *gap-closing efforts*.

The E&P policy assessment expert group were requested to address the following:

1. Identify gaps between existing capacity and policy objectives for E&P sector
2. Propose and rank 'gap-closing' measures

During the assessment the following gap analysis stages were addressed;

Baseline and gap identification

- Policy/industry objectives
- Present performance

Gap closing strategies

- Basis for a reoriented RTD and industrial policy
- Competence building
- Capacity building
- Appropriate measures and actions
- Short/medium/long term considerations

First the experts identified and classified the *objectives* of the E&P policies. Next they examined the existing and proposed system of *policy measures*. Then they determined which measures were *poorly represented* or *unrepresented* in the present regime. Finally, they identified the extent to which existing strategies will *fail to meet* the performance objectives in the future and linked this assessment to effective gap closing strategies.

3.3 Workshop instruments

The expert workshop used three kinds of written instruments in their assessments;

1. Relevance Tree
2. Baseline E&P policy identification form
3. Future gap closing measures identification form

Examples of the instruments are represented in Appendix B.

3.4 Objectives of the policy assessment workshop

Establish an agreed baseline as to the *present* state of policies

- Observed and experienced impacts and effects
- The policies' performance towards achieving their objectives

Document and prioritise policy areas which, with the view of increased local content,

- have highest potential for improvement
- are not presently covered to a sufficient extent
- are considered major hindrances for achieving the target levels

4 Results

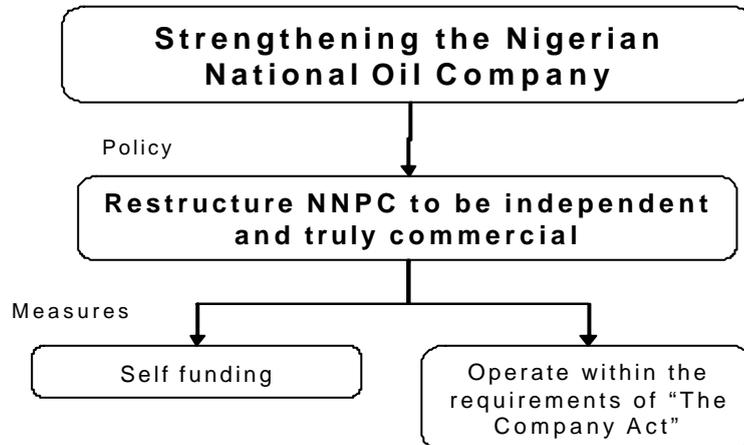
Below is a brief summary of the workshop’s findings, linked to the five main strategies which constituted the basis for the workshop. The assessments for all strategies are depicted in *Policy relevance trees* as illustrated in Appendix B and discussed in the order they were introduced to the experts.

A transcript of the concluding presentations with proposed policies and measures, have been consolidated and included in Appendix C.

4.1 Strengthening the Nigerian national oil company

Focus of the Strategy 1 assessment:

The NOC is not seen to have the appropriate manpower or structure for an independent, commercial outfit. Restructure NNPC to be independent and truly commercial.



Strengthening the national oil company implies that it in the longer run will be in exactly the same position as the international oil companies, i.e. being able to promote local content packages.

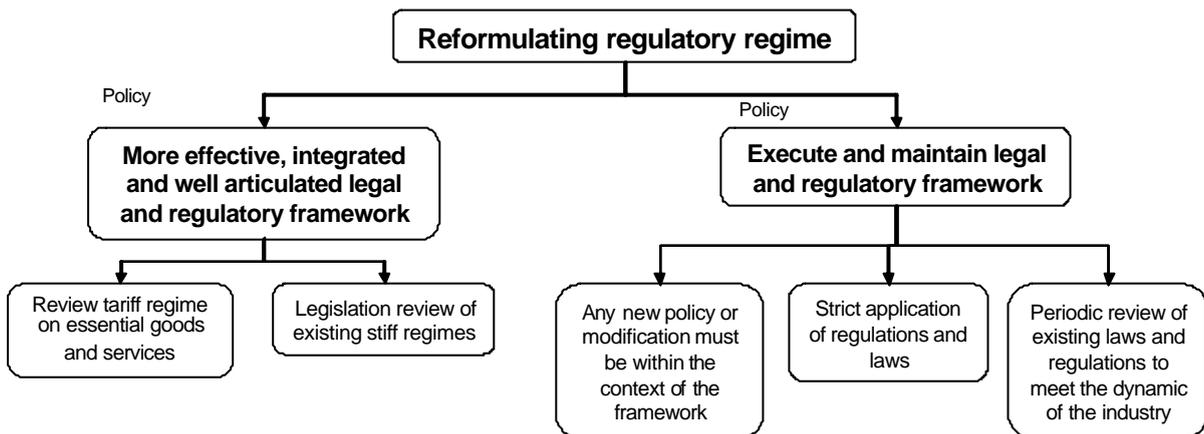
Restructuring the national oil company implies as emphasised in the comparative study (cf. chapter 2.1) that regulatory powers should be strictly separated from operating activities, in order to ensure transparency and to increase commercial autonomy. Nigeria still has a long way to go before regulations and operations are strictly separated, as pointed out by the experts.

4.2 Reformulating regulatory regime

Focus of the Strategy 2 assessment:

The legal framework suffers from a Petroleum Act which is dated back in 1969, and which today has lost relevance and has no effect as it has been superseded by numerous proposed bills, memoranda of understandings and individual agreements with different intent from case to case. In effect there is no law in place that governs the execution of the nation's petroleum industry. Stakeholders suffer from the situation with conflicting elements of policies. Even officials cannot tell what is current rule or practice, and there is no authority who can take measures against what is regarded as misconduct or practice.

Hence, there is strong demand for a consistently structured, well articulated framework which can be communicated and understood, and to which current regulations and future amendments can be clearly linked.



The experts commented that it is imperative to develop an articulate written policy that supports local content. At present there is no such policy in place. This will imply contractual obligations for local content requirements.

Likewise, the experts claim that policy guidelines should not change within 5-8 years. On the other hand, having no real updating of the Petroleum Act since 1969 the regulatory regime is running the risk of becoming obsolete. It is essential that stakeholders, entrepreneurs and investors can trust the regime for longer term commitments and that terms are predictable. Only one body or organisation must be responsible for the consistent maintenance of the laws.

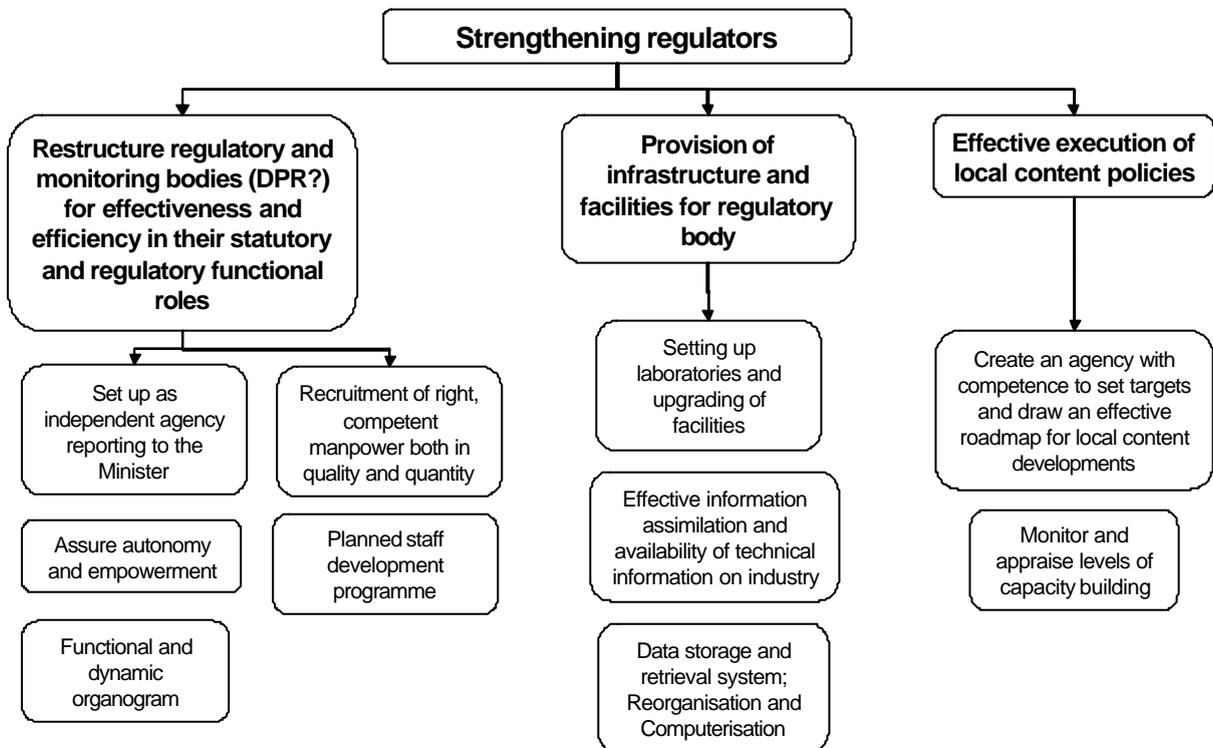
Strict compliance with laws by all companies, and active role by the industry in reviewing of policies were also pointed out. This could include periodic comparison with international practice and reviewing, as well as periodic compliance review of all companies and operators.

4.3 Strengthening regulators

Focus of the Strategy 3 assessment:

Today’s regulatory agency (DPR) is unable to oversee policy on local content. It is viewed to have “lost insight, overview and trust”.

The structure for reinforcement of the law or its intents is missing. Such organisation should be the enabler of small and larger local content achievements, and once the regulatory body is properly organised and fit for purpose, it is regarded that the rest will follow.



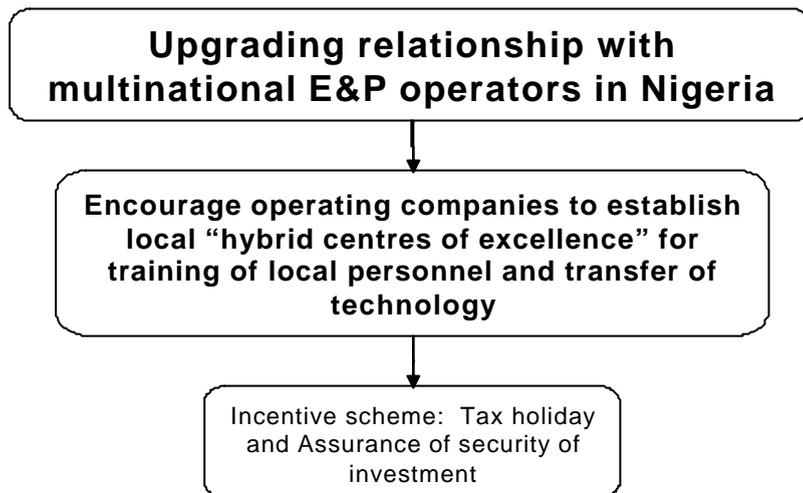
A series of concrete actions were proposed by the experts. In general, strengthening capability of the regulators should focus on autonomy and empowerment as well as recruitment and in-house training programmes. Additionally, infrastructural reinforcement such as laboratories, media contacts, data systems etc. should also be launched.

The execution of local content policies should include getting stakeholders involved in setting of realistic targets and monitoring of capacity building efforts.

4.4 Upgrading relationship with multinational E&P operators in Nigeria

Focus of the Strategy 4 assessment:

Encourage operating companies to establish local “hybrid centres of excellence” for training of local personnel and transfer of technology.



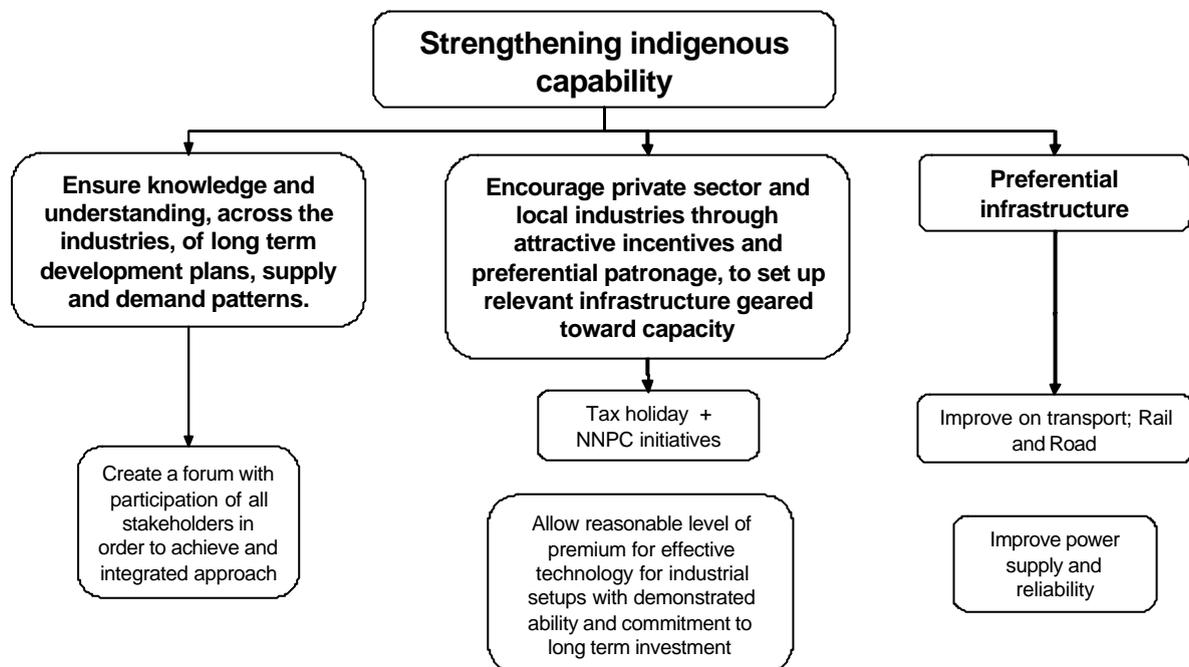
The expert workshop on E&P policy suggested as one major policy measure to establish a ‘Hybrid Centre of Excellence’ aiming at upgrading the knowledge based relationship with the major E&P operators in Nigeria. This proposal deals with the challenge of how to strengthen strategic competence and capability within the context of such a centre of excellence. This centre could be established as a joint venture between Nigeria and Norway. Both countries are developing oil and gas fields in deep water and have a need for high performance deep water technology and knowledge within reservoir management, drilling, field development and environment. A hybrid centre could be established with the assistance from the Norwegian Agency for Development Cooperation (Norad), Norway and the Petroleum Technology Development Fund, Nigeria, having the major oil companies and service companies as potential clients. This idea was also launched the same day as the expert workshop by Ogiemwonyi (06 Nov 2002:11), stating “The encouragement of Operating Companies through some incentive schemes to set up local “Hybrid centres” of excellence”, as a policy thrust envisaged.

The experts also emphasised the use of incentive schemes such as Tax holidays and Assurance of security of investment. Such schemes presuppose some level of political stability.

4.5 Strengthening indigenous capability

Focus of the Strategy 5 assessment:

Local capacity in the higher-end grows out from a knowledge base. It will be imperative to create an educational and R&D sector with adequate infrastructure and facilities. Focus and strong emphasis should be on technological development. The nation and the industry have to be realistic about where the local content policy has most potential for realisation. The technology assessment carried out by this project identified critical technology areas with characteristics that make them suitable for local deliveries.



The experts emphasised that local R&D is virtually non-existent. It appears as if central authorities are not aware of the impacts R&D will have on developments. Likewise, PTI collapsed due to lack of funding. One consequence was that good talents left for foreign education, and never returned.

An idea which was discussed at some length was to create a forum with participation of all stakeholders in order to achieve an integrated approach. It is the local industry's interest to increase share of local content, and this should be the driving force for organising such a forum. The forum should start at the low end, i.e. look at relatively low tech, low cost contracts. A learning period is foreseen to find a correct structure and organisation, establish rules and demonstrate results that would convince the sceptics and encourage new participants to join.

It was also pointed out that the lack of culture and environment for long term financing is a core hindrance for local capacity development. The majority of small up sprung banks offer only high-interest, short term financing, and only the two or three leading commercial banks with international ties operate in a longer term perspective. The experts claim that no suggestions have so far been raised by the authorities as to how this fundamental issue can be approached.

4.6 National committee on local content

As a parallel input is below a summary presentation of the policy thrusts recommended by the “National committee on local content” (2002), which was one major source applied as background material for this study. This material was, however, not presented during the workshop.

Strategy 1: Strengthening the Nigerian National Oil Company

<u>Policies:</u>	<u>Measures:</u>	<u>Success criteria:</u>
<ul style="list-style-type: none"> ◦ Commercialisation of NNPC ◦ Strengthening NPDC, FES ? ◦ Competence building ◦ Finance 	<ul style="list-style-type: none"> ◦ Full ability to operate as commercial or focused entity ◦ Trained personnel 	<ul style="list-style-type: none"> ◦ Performance criteria ◦ Efficiency ◦ Increased capacity

Strategy 2 &3: Reformulating regulatory regime and strengthening regulators

<u>Policies:</u>	<u>Measures:</u>	<u>Success criteria:</u>
<ul style="list-style-type: none"> ◦ Articulate written policy that supports local content ◦ Amending / drafting laws in line with promoting LC ◦ Contractual obligations on LC requirements ◦ Empowering DPR ◦ Excising NAPIMS from NNPC ? 	<ul style="list-style-type: none"> ◦ Regulations supporting stipulated targets ◦ Political will ◦ Attractive investment climate ◦ Full ability to monitor and regulate without interference ◦ Increased cooperation between regulators ◦ Trained personnel 	<ul style="list-style-type: none"> ◦ Performance criteria ◦ Verifiably increased local content ◦ Increased partnerships (%) ◦ Increased investments in core LC industries (%) ◦ Increased indigenous higher level personnel in MNCs (%)

Strategy 4: Upgrading relationship with multinational E&P actors operating in Nigeria

<u>Policies:</u>	<u>Measures:</u>	<u>Success criteria:</u>
<ul style="list-style-type: none"> ◦ Increased cooperation ◦ Reward compliance with LC requirements ◦ National competence building ◦ Increased investments for LC 	<ul style="list-style-type: none"> ◦ Training cooperation ◦ Establishing plants ◦ Concessions for compliance with LC regulations 	<ul style="list-style-type: none"> ◦ Increased indigenous research capability (%) ◦ Increased fabrication in Nigeria (%) ◦ Increased training in Nigeria (%)

Strategy 5: Strengthening indigenous capability

<u>Policies:</u>	<u>Measures:</u>	<u>Success criteria:</u>
<ul style="list-style-type: none"> ◦ Strengthening PTI ◦ Increased research (universities, new centres) ◦ Developing basis industries (steel, etc.) ◦ Enable local companies' participation ◦ Increased indigenous company capability 	<ul style="list-style-type: none"> ◦ Encourage increased utilisation of PTI by companies ◦ Closer cooperation between stakeholders, partnerships ◦ Increased R&D expenditure by government+private sector ◦ Creating databank on competent local expertise ◦ Raw materials inventory ◦ Giving local companies preference without reducing service (contractors, shippers, etc.) 	<ul style="list-style-type: none"> ◦ More locally produced materials (%) ◦ More research done locally (%) ◦ Locally available steel, raw materials, etc. (%) ◦ Current accessible data on raw material, indigenous capability (%)

* Courtesy of Professor Yinka Omoroghe, 05 November 2002.

5 Discussion

A considerable amount of input has been gathered from a number of sources; reports and other documents, the expert workshop on local content policy itself, and discussions before and after the workshop.

In order to structure comments and views on related aspects, the structure outlined below, mirroring Policy relevance tree is a suitable format for collection of facts and views. The workshop results have been merged with the Government Committee recommendations, which then has been further expanded and supplemented.

A separate chapter (4) and an Appendix (C) have been dedicated for each of the five main strategies, which constitute the basis for the discussion and analysis presented in the main body of the report.

A number of improvement areas have been raised regarding the basic enabling environment such as laws and regulations, finances, fundamental infrastructure as well as competence and capacity building. These may not only seem to carry direct impact on the overall objective of this study, namely ‘increased local content’ but also cover a broader range of topics related to the industrial climate of Nigeria.

However, one main impression from the work carried out is that without a well functioning physical and legal framework in place, the ambitions for local industrial and supplier development will continue to be visions rather than achievable targets.

5.1 Fundamental shortcomings

The workshop highlighted the following core constraints as reasons for low local content:

- a) Low technological base
- b) Poor access to finance
- c) Constrained regulatory framework suffering from inconsistencies and contradictions
- d) Inadequate entrepreneurial capacity building
- e) Neglected R&D
- f) Low industrial / infrastructural base (road, water, electricity, ++)
- g) Poor investment climate for domestic and foreign investments

5.2 Thrust areas conducive to increased local content.

1. Industry revolving fund to initiate concerted actions and matrix organised industrial consortia.
2. Occupancy of niches or models of learning processes of gradually more complex assignments?

3. Infrastructural enforcement of yards, docks and mechanical industry to serve the whole western Africa?
4. How to make Nigeria a more attractive investment region?
5. Is DPR beyond repair?
6. Could/would NNPC be more commercial and possibly privatised?
7. What is the position of R&D in E&P fields in Nigeria?

5.3 “Implementability”

During the last years there have been several intents and claims to restructure fundamental processes and practices in Nigeria. Proposed bills and regulations have been received with acclamation but had little effect.

This situation was raised at the policy workshop as a key problem, and it was stressed that any proposal for changes had to be assessed for ‘implementability’. I.e. the expert panel would keep clear of good intents and focus on policies and implementation measures that, given a considered implementation plan, would have a fair chance of being realised within a given period of time.

“From rhetoric to action” needs the cooperation and commitment from the buyers, i.e. the operators. Mere persuasion does not work; articulated and enforced legislation is required and must be the first major step. However, it must be balanced to what is acceptable and competitive since the international operators have alternative investment opportunities elsewhere.

6 Preliminary conclusions and recommendations

6.1 Prerequisites for a national E & P strategy?

The quest for concerted actions to increase local content was prominent among the experts. According to the experts Nigeria needs a *forum* with participation of all stakeholders in order to achieve an integrated approach. In Nigeria 90% of the total revenue is from oil and gas production and over 90% of the foreign exchange earnings come from the sales of crude oil. Therefore, (NNPC 2002:37);

“A situation where less than 5% of the total annual budget of about USD 5.5 billion (is spent on local goods and services) in the industry is very worrisome to both the Federal Government and citizenry”.

Nigerians have very little share of the oil and gas business, local participation is very low and in order to arrest and dissuade capital flight, a local policy is being developed.

The objectives of the local content development are to significantly increase the contribution of the expenditures in the upstream sector to the Gross Domestic product over a defined period of time.

Concerted actions need a strategy and start up situations need to *plan*. There is no source for information about the (E&P) industry's short and medium term demands for goods and services.

“Get all stakeholders together to work out common plans with achievable and constantly increasing targets for local content”.

To achieve anything in terms of local content, the industry needs to move in common, not company by company. Some companies may be sceptical to a joint forum or fund run by the government. Hence, it is important that such forum is operated as an independent, private sector body, with participation of government and DPR representatives.

It is the local industry's interest to increase share of local content, and this should be the driving force for organising such forum.

The forum should start at the low end, i.e. look at relatively low tech, low cost contracts. A learning period is foreseen to find a correct structure and organisation, establish rules and demonstrate results that would convince the sceptics and encourage new participants to join.

Markets

Limited demand from the Nigerian E&P sector may hamper the will to invest. When discussing capacity building in Nigeria, it is important to think beyond the local market where overcapacity could be offered in neighbouring countries. Timing, capacity planning and coordination with respect to domestic and export work, are issues which this forum could look after.

Challenges

- Funding of initial set up / administration
- Not allowed to operate independently
- Not supported by all major stakeholders

Nigeria should encourage private sector and local industries through attractive incentives and preferential patronage, to set up relevant infrastructure geared toward capacity. This could be achieved by tax holiday and similar NNPC initiatives. However, obstacles or challenges could be:

- Political instability
- Political unwill
- Funding (adequacy)
- Patronage

Nigeria should also allow reasonable level of premium for effective technology for industrial setups with demonstrated ability and commitment to long term investment.

The nation and the industry have to be realistic about where the local content policy has most potential for realisation. The technology assessment carried out by this project identified critical technology areas with characteristics that make them suitable for local deliveries.

For example it would be very ambitious to aim at proficiency in sub sea technology, whilst services such as logging and cementing can be expanded by local contractors from today's knowledge and experience.

Obstacles or challenges:

- Funding
- Not applying lessons learned
- Unnecessary low-bid strategy
- Avoid being “commission agents”

Work packages should be split so that local suppliers can compete on preferential terms where they can supply goods and services with acceptable quality. Such measures will need enforcement by legislation.

As a general rule of thumb, the short term ambitions must not go beyond ‘doability’ and ‘implementability’, i.e. keep the local content requirements in areas of proven delivery. Give the opportunity, the contractors will over time progress to new levels of capability.

A temporary arrangement is deemed necessary in the early phases. This may not be in the spirit of liberal market economy, but may help serious actors to enter into critical work, as main contractor or as co-partner to gain experience, in order to make investments in long term capacity.

The clearing central for contracts must be owned by the industry and can be linked to the industry forum. Organise as one branch per supply unit, i.e. one for fabrication, one for well services, one for supply services, etc.

The function ensures that local suppliers are included in bid rounds, and assists in mobilising a local constellation that is fit for the job, either with candidate single vendors or as joint ventures constellations.

Can Nigeria be a vital E&P player in the West African region?

The function can act as an initial promotion board for service export; Nigeria is the largest industrialised nation in West Africa with the longest history of petroleum activity. Qualified E&P expertise and capacity should be considered for export to other West Africa nations. Nigeria is a low cost nation and, given reputation for quality and reliability, Nigeria could in the short term be highly competitive in areas like fabrication and yard services.

Nigeria should enable funding for indigenous capacity building. Lenders need guarantees to offer loans, and with no contract awarded; the contractor will not receive funding. If waiting until after contract award, the funds arrive too late for the required investments for the particular job.

In order to aid smaller contractors to invest in necessary infrastructure, various (transition) models were mentioned as supplement to banking services.

When the climate for longer term lending is there, the next hurdle will be *willingness* to invest in local capacity. This is related to ‘incentives’ which is discussed in a separate paragraph.

The experts recommend promoting equipment leasing by lessening the capital investment issue by educating contractors on leasing arrangements, as opposed to sole ownership of equipment and facilities. Establish a private fund, possibly under custodianship of the coordinating body referred previously, to lend capital to entrepreneurs. Sign-on fees for

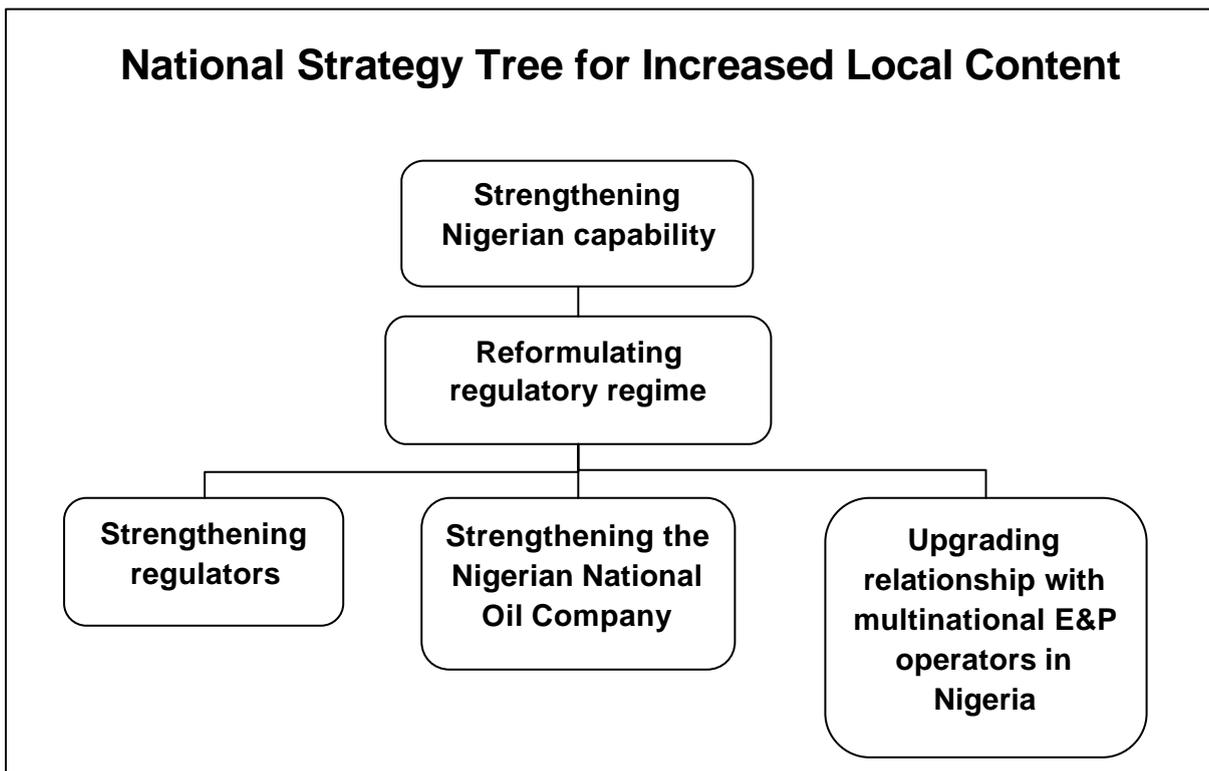
exploration concessions could be one source of income for the fund. Shell in Nigeria at one point started a fund to assist contractors in their start up phase. Is there any similar experience to build upon?

A move from major milestone payments to payment for work done will ease contractor’s cash flow, but require more resources for progress measurements. This will have cost impact, and such measures must be dictated through a law and implemented through contract award obligations. This could also be combined with up front payments, which will aid mobilisation activities.

However, neither of these options will support the building of capital intensive infrastructure, and is as such limited to enable service category assignments, the experts claim.

6.2 The national strategy tree

Summing up; actions conducive to increased local content needs a clear main strategy starting with the strengthening of the national capability as depicted in the figure below.



The figure depicts a hierarchisation of the five main strategies chosen by the experts into one single relevance tree. The most prominent and important strategy is to enable the Nigerian (private-public) petroleum cluster to plan, respond and deliver according to the demand of the international market. To ensure success, both carrot and stick must be applied in order to update and modernise the regulatory regime.

On the basis of such upgrading, the regulators must be given institutional and organisational muscles, thus securing sufficient credibility towards the market players. At the same time, a

process of strengthening the autonomy and commercial attitude of the national oil company must be initiated. Finally, a new platform of interaction with the majors, including JIP and R&D centres as well as novel financial schemes must be implemented.

For short term gains, one should focus and strengthen areas where Nigeria's capacity is good and competitive. Fabrication may offer a short term potential with some upgrading of dock capacities. For longer term gains, both the reshaping of the regulatory regime and the various measures to secure the Nigerian indigenous players a more powerful position are prerequisites for a successful development of both the oil and the natural gas reserves.

References

Kyvik Nordås, H., P. Heum, E. Vatne (2002) Local Content in the Upstream Oil Industry – a Comparative Study. Bergen: SNF working paper.

NNPC (2002) Nigeria: The Oil & Gas Industry. Investment Opportunities. Abuja, 2002.

Ogiemwonyi, C. O. (2002) “Domesticating E&P Operational Activities – The Local Content Focus”. Key note address at “Workshop on Oilfield Services, Products and Equipments”, Lagos November 6, 2002.

Orife; J. & Y. Omoroghe (2002) “Local Content in Nigeria: Law, Policy and Practice.” Paper, Kragha & Associates, October 21, 2002.

NAPIMS (2002) Report of the National Committee on Local Content Development in the Upstream Sector of the Nigerian Petroleum Industry. Abuja: Napims Report, January 2002.

Uzoigwe, A.C. (2002) “The Role Operating Companies can Play in the Domestication of Oil and Gas Technologies in a Developing Economy”: Paper presented at “Workshop on Oilfield Services, Products and Equipments”, Lagos November 6, 2002.

Abbreviations

DPR – Department of Petroleum Resources

FES - Frontier Exploration Service

NAPIMS – National Petroleum Investment and Management Services

NNPC – Nigerian National Petroleum Corporation

NOC - Nigerian Oil Company

NPDC – Nigerian Production Development Company

PTI - Petroleum Training Institute

Appendices

A.1 List of participants E & P Policy Expert Panel

Charles Omoeia	Institute of Directors
C. J. Ikelionwu	Tinomek Ent. Nig (Representing NMGS)
M. M. Yusuf	NNPC - NAPIMS
G. S. Ihetu	GIS Consulting
W. A. Akinsipe	DPR
M. J. Orife	Versa-Tech Nig Ltd
F. A. Ogaree	NNPC-NAPIMS
Dr. O. A. Lalude	Omega Petroleum Ltd
O. Olaosebikan	NNPC-NAPIMS
U. J. Otokpa	NNPC-NAPIMS
T. M. Gbugu	NNPC-NAPIMS
A. G. Amino	PTDF
Dr. Igho F. Ogbera	NESG
Chief Akinlaja Joseph	NUPENG
Dapo Oshinusi	Mansfield/Reslink
M. M. Ibrahim	Equatorial Petroleum

A.2 Working mode

Workshop participants were urged to follow a checklist while assessing the E&P policy gaps:

- Brainstorm what the E&P focused companies need
- Prioritise ideas based on their potential impact on the industry
- Document potential objectives for a new E&P regime
- Present, discuss and agree on the final objectives
- Determine critical success factors, prerequisites and obstacles for the objectives to be met
- Create action plan
- Gain group consensus
- Disseminate results

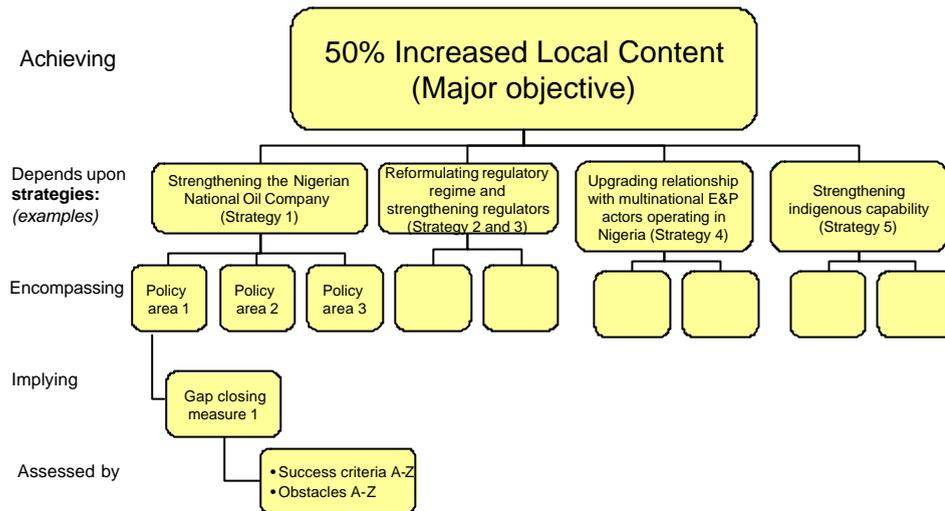
Pay attention to:

Performance:	Costs: History and future
Measures:	Generic/specific
Barriers:	Technological, institutional, environmental etc - Short/medium/long term
Challenges:	National, regional, industry sector Particular SME challenges
Benefits of a new regime:	Quantification of benefits: Success criteria?

B.1 E & P Policy Relevance Tree

It was foreseen as a challenge to structure and anchor policy areas to a manageable number of main strategies, and to facilitate the expert panel’s development of implementation activities or measures. In order to aid this process the workshop was presented with the structure of the Policy Relevance Tree.

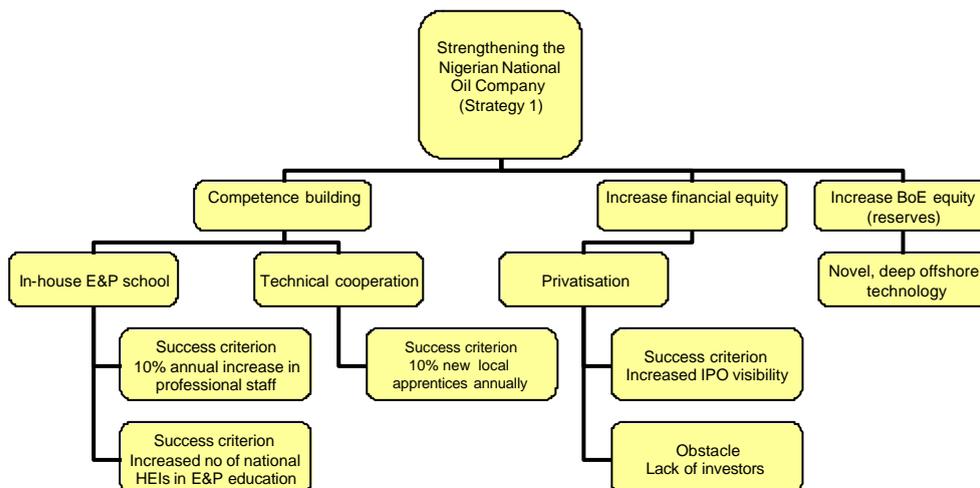
E&P Policy Relevance Tree



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A worked out example of the application was also introduced. This seemed to fit the purpose and guided the participants into a productive process.

Strategy 1 path

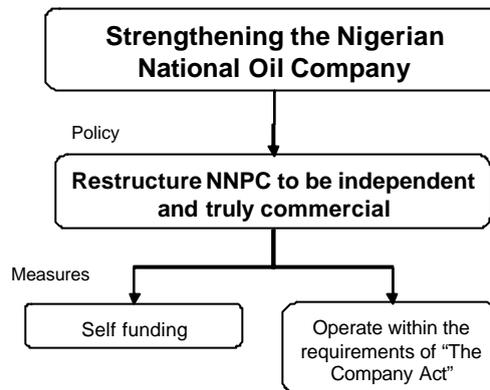


C.1 Summary of policy workshop group presentations

Below is a consolidation from the presentations made by the three work groups at the end of the policy workshop.

Elements which were not covered by the participants are indicated with N/A, which in this context should be read as ‘Not Addressed’.

Strategy 1: Strengthening the Nigerian National Oil Company



Policy: RESTRUCTURE NNPC TO BE INDEPENDENT AND TRULY COMMERCIAL

Measures:

Self funding

Success criteria:

N/A

Obstacles or challenges:

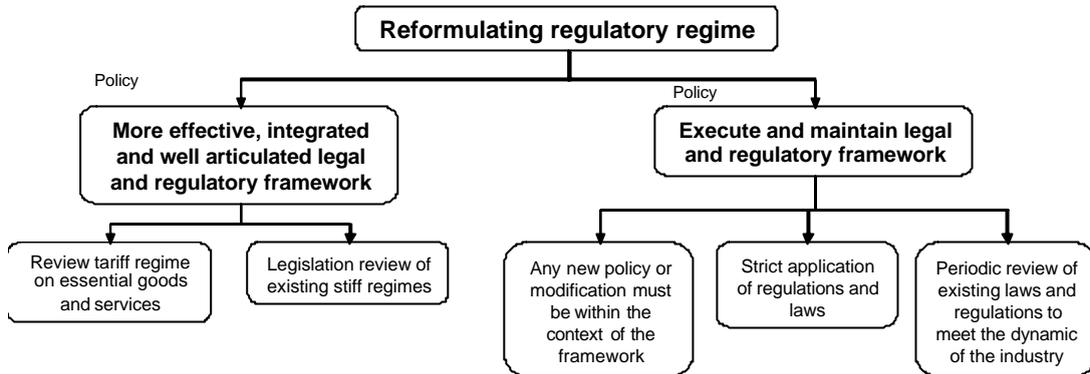
N/A

Operate within the requirements of “The Company Act”

N/A

N/A

Strategy 2: Reformulating regulatory regime



Policy: MORE EFFECTIVE, INTEGRATED AND WELL ARTICULATED LEGAL AND REGULATORY FRAMEWORK

Measures:

Success criteria:

Obstacles or challenges:

Review tariff regime on essential goods and services

N/A

N/A

Legislation review of existing stiff regimes

- Short term (3 years): Acceptance, and work progress on draft
- Long term (7-10 years): Enactment

- Long process involved in review and enactment
- Political will

Policy: EXECUTE AND MAINTAIN LEGAL AND REGULATORY FRAMEWORK

Measures:

Success criteria:

Obstacles or challenges:

Any new policy or modifications must be within the context of the framework

N/A

N/A

Strict application of regulations and laws

- Strict compliance with laws by all companies / operators
- Absence of recourse to higher authority protestations

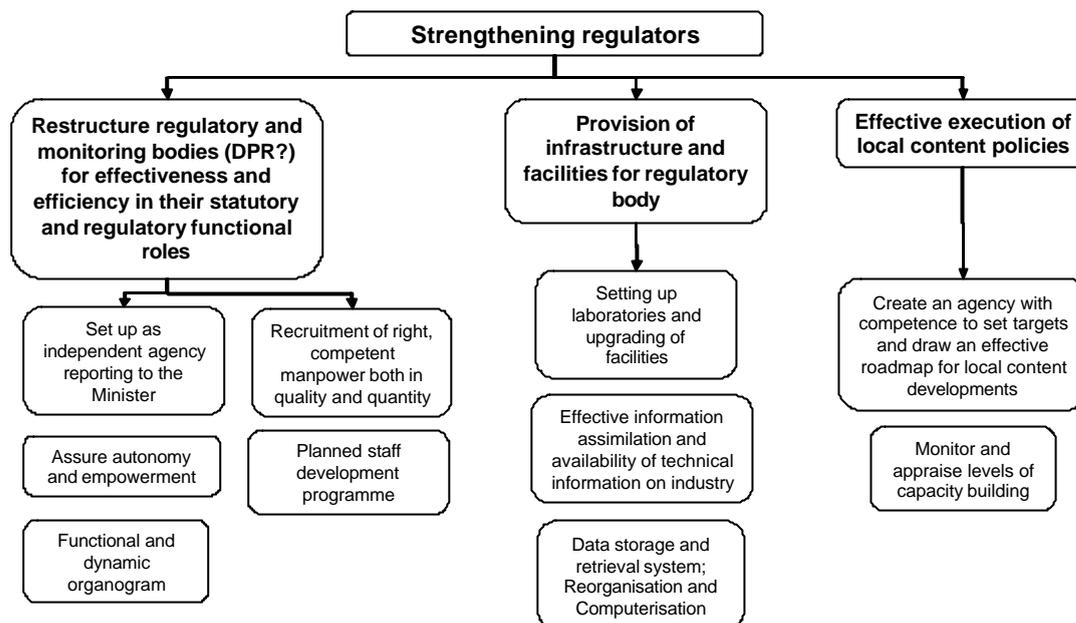
N/A

Periodic review of existing laws and regulations to meet the dynamic of the industry

- Periodic comparison with international practice and review
- Periodic compliance review of all companies and operators

N/A

Strategy 3: Strengthening regulators



Policy: RESTRUCTURE REGULATORY AND MONITORING BODIES (DPR?) FOR EFFECTIVENESS AND EFFICIENCY IN THEIR STATUTORY AND REGULATORY FUNCTIONAL ROLES

<u>Measures:</u>	<u>Success criteria:</u>	<u>Obstacles or challenges:</u>
Set up as independent agency reporting to the Minister	N/A	N/A
Assure autonomy and empowerment	N/A	o Interference
Arrange adequate funding	N/A	N/A
Functional and dynamic organogram	N/A	N/A
Recruitment of right, competent manpower both in quality and quantity	<ul style="list-style-type: none"> o Should attain full staff requirement within 2 years o Prepare succession career plans for critical areas 	<ul style="list-style-type: none"> o Inadequate funds o Proficiency
Planned staff development programme	<ul style="list-style-type: none"> o Provide funding for training of staff on comparable level with international operators, commencing within 6 months o Establish state of the art energy library within 2 years. 	N/A

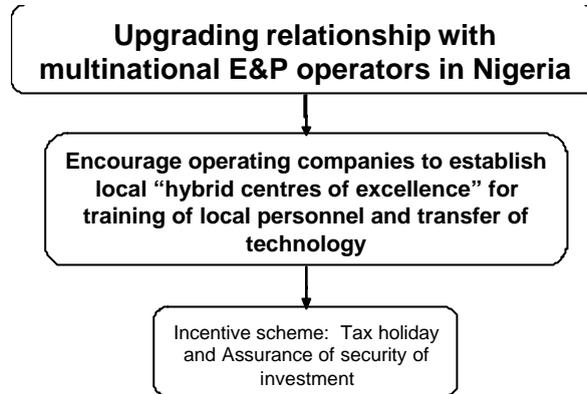
Policy: PROVISION OF INFRASTRUCTURE AND FACILITIES FOR REGULATORY BODY

<u>Measures:</u>	<u>Success criteria:</u>	<u>Obstacles or challenges:</u>
Setting up laboratories and upgrading of facilities	<ul style="list-style-type: none"> ○ Laboratories in all depot / refineries / terminals / .thrukparms (?) within 2 years. ○ Crude assay facilities within 2 years 	N/A
Effective information assimilation and availability of technical information on industry.	<ul style="list-style-type: none"> ○ Regular publications and press enlightenment; Education on DPR functions / activities ○ Regular interactive sessions with other relevant government agencies 	N/A
Data storage and retrieval system; Reorganisation and Computerisation	<ul style="list-style-type: none"> ○ Ability to provide required and correct information within one week ○ Collection, collation and analysis of all existing and outstanding data within 1 year. ○ Provision of stored data to prospective operators within 2 weeks ○ A fully automated archival system 	N/A

Policy: EFFECTIVE EXECUTION OF LOCAL CONTENT POLICIES

<u>Measures:</u>	<u>Success criteria:</u>	<u>Obstacles or challenges:</u>
Create an agency with competence to set targets and draw an effective roadmap for local content developments	<ul style="list-style-type: none"> ○ Headed by CEO with appropriate know-how ○ Non-governmental. ○ Funded by operators by percentage of award contracts amounts 	N/A
Monitor and appraise levels of capacity building	N/A	N/A

Strategy 4: Upgrading relationship with multinational E&P operators in Nigeria



Policy: ENCOURAGE OPERATING COMPANIES TO ESTABLISH LOCAL “HYBRID CENTRES OF EXCELLENCE” FOR TRAINING OF LOCAL PERSONNEL AND TRANSFER OF TECHNOLOGY

Measures:

Incentive scheme: Tax holiday and Assurance of security of investment

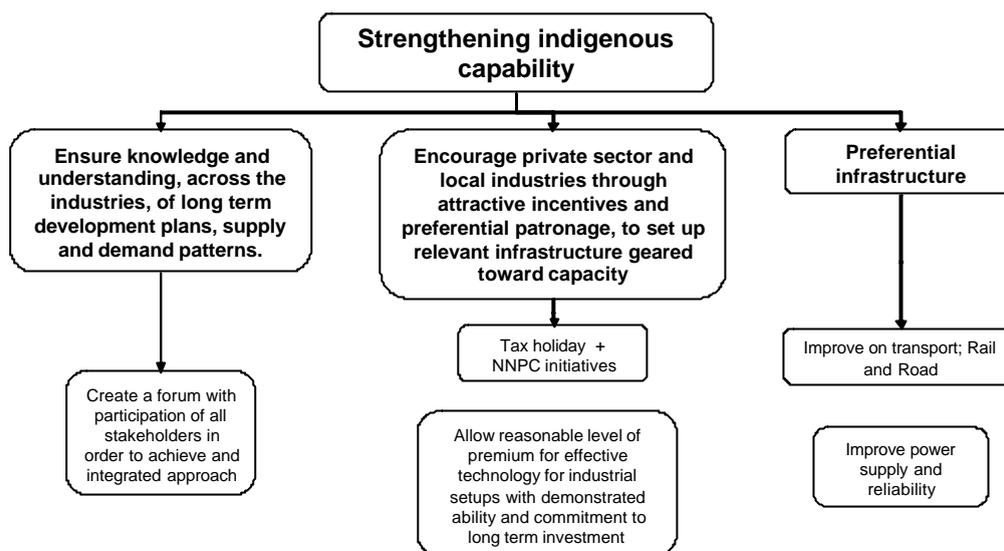
Success criteria:

- Short term (3 years): 20-25% of plan
- Long term (7-10 years): 50-60% of plan

Obstacles or challenges:

- Political instability
- Funds deployment

Strategy 5: Strengthening indigenous capability



Policy: ENSURE KNOWLEDGE AND UNDERSTANDING, ACROSS THE INDUSTRIES, OF LONG TERM DEVELOPMENT PLANS, SUPPLY AND DEMAND PATTERNS.

Measures:

Create a forum with participation of all stakeholders in order to achieve and integrated approach

Success criteria:

N/A

Obstacles or challenges:

- Not allowed to operate independently
- Not supported by all major stakeholders

Policy: ENCOURAGE PRIVATE SECTOR AND LOCAL INDUSTRIES THROUGH ATTRACTIVE INCENTIVES AND PREFERENTIAL PATRONAGE, TO SET UP RELEVANT INFRASTRUCTURE GEARED TOWARD CAPACITY

Measures:

Tax holiday + NNPC initiatives

Success criteria:

- Short term (3 years): 10-15% of plan
- Long term (7-10 years): 30-40% of plan
- Improved performance

Obstacles or challenges:

- Political instability
- Political unwill
- Funding (adequacy)
- Patronage

Allow reasonable level of premium for effective technology for industrial setups with demonstrated ability and commitment to long term investment

- Short term (3 years): 10-15% of plan
- Long term (7-10 years): 30-40% of plan

- Funding
- Not applying lessons learned
- Unnecessary low-bid strategy
- Avoid being “commission agents”

Policy: PREFERENTIAL INFRASTRUCTURE

Measures:

Improve on transport; Rail and Road

Success criteria:

N/A

Obstacles or challenges:

N/A

Improve power supply and reliability

N/A

N/A