Gains from the Natural Gas: Local Content and Tanzania’s Industrial Development
1 The Case for a Local Content Unit

One of the most urgent questions in relation to Tanzania’s offshore gas industry is: how can this activity open the door to expanding and deepening the country’s own business sector? How can the jobs created directly by this activity be complemented by indirectly created jobs, that come about through the opportunities afforded to existing and newly formed Tanzanian companies that slot into the supply chain of the multinational gas companies? And how can this ‘indirect’ effect be harnessed in order to advance the capabilities of Tanzania’s industrial sector? In other words, the challenge now confronting Tanzania is: how many good, stable jobs can be generated for Tanzanians as the gas industry grows and matures?

Much thought is being given to these issues by the Government of Tanzania, which has already established a high level Expert Group to provide a lead on issues relating to the Offshore Gas industry. What concerns me in this lecture is one particular aspect of the agenda: the setting up and operation of a Local Content Unit and an associated Enterprise Development Centre. In other words, my focus in this talk is not on high level policy formulation; rather, I want to direct attention to issues of practical implementation. The Local Content Unit I describe in what follows is an administrative body, reporting to the Government’s Expert Group, whose responsibilities encompass the twin functions of negotiating with multinational companies on local content, and bringing forward the capabilities of potential domestic suppliers via an Enterprise Development Centre.

There is no substitute for a well-organized and effective Local Content Unit. Crude measures such as an ‘x% local content rule’ are ineffective: rules of this kind are too easily circumvented, and may generate an unfortunate bias in the supplier base towards those activities that contribute little to the development of the host country’s industrial capabilities. Only a well-informed Local Content Unit that enjoys the full support of the Expert Group and the backing of the relevant Minister, and the Prime Minister, can achieve the kind of broad-based involvement of local companies that will maximize the long term benefit to the Tanzanian economy.
What a well-designed Local Content Office (LCU) can do, in acting with and on behalf of the Expert Group and the Minister, is to engage in an on-going dialogue with the lead MNCs and their first tier international suppliers, in order to arrive at a pattern of involvement by local firms that is feasible, practical and achievable over an agreed timescale. To do this, the LCU needs to be staffed by high calibre executives who are well prepared in terms of having a deep knowledge of the capabilities of existing Tanzanian companies across the full range of productive activity. This small group will play a crucial role in underpinning, implementing and developing the content of understandings, agreements and contracts between the government and the Gas multinationals. It is the design and operation of such a unit that is the subject of this lecture.

The issue is urgent. Tanzania is now at the stage when the measures described here need to be put in place. Other countries have in many cases failed to reap the full benefit from the integration of local firms in the supply chain because they have waited until too late in the process to initiate the measures recommended below. This is the right time for Tanzania to move forward in getting these structures into place.

So what are the practical steps that need to be taken? The first step is to establish a Local Content Unit, consisting in the first instance of some half dozen highly capable and motivated members drawn from the appropriate ministries. The Expert Group and/or the Minister may also wish to consider recruiting a further two members who have relevant experience in the domestic private sector, and with relevant technical expertise. Finally, it is advisable to recruit from abroad some two members who have experience in negotiating such issues with Oil and Gas multinationals in their home countries. This will lead to a group of about 10 professional staff; and they should be supported by a small but effective group of administrators. The group’s first task will be to acquaint themselves with the range of firms in Tanzania that are potential participants in the supply chain, either in the short run or in the medium term (Section 5b below). The second task of the unit is to work with the Expert Group and the Minister to establish an Enterprise Development Centre (Section 5b below). Early decisions will
relate to the outside partners that will be invited to assist in the formation of this Unit (Section 5c below).
2 Background: Current Capabilities in Tanzanian Industry

In ‘An Enterprise Map of Tanzania’,\(^1\) John Sutton and DonathOlomi survey the full range of Tanzania’s current industrial capabilities. Similar volumes are available for Ethiopia, Ghana, Zambia, and Mozambique. What these five countries have in common is that they have all experienced a decade of rapid economic growth, and this growth has been based in part on a substantial expansion in industrial output. In all four countries, there is a huge interest in asking, how can this growth be sustained?

Now a large part of the growth of the past decade has come from agriculture, including agribusiness, and this will continue to be a key source of growth in the future. Another growth component has come from extractive industries, and it is of course clear that the direct gain to Tanzania from offshore gas activity will be of great importance. But the focus I want to take here is on the level of industrial activity, and on the way the growth of the offshore gas industry can be used as a springboard for new industrial activity – for it is here that Tanzania has the opportunity to hugely increase the payoff the country stands to gain from offshore gas activities.

So what kinds of industrial capabilities does Tanzania currently have? The answer is, that there are very solid capabilities already in place across a substantial range of basic manufacturing activities. The industries in question include Food Processing, Cement and Building Materials, and a number of specific areas of Metals and Plastics. This is exactly the same profile that exists in Ethiopia, Ghana, Zambia and Mozambique. Across this set of industries, the best companies currently in operation are achieving high levels of quality.

So if we look across this set of industries, the picture looks bright. But there is another side to the story.

The minus side is that the range of industrial activity remains very narrow – and the driving argument behind the present report is that a broadening of the range of industrial activity is a

\(^1\) Downloadable at http://personal.lse.ac.uk/sutton/
necessary component of any coherent economic plan that aims to maintain the high growth rates of the next decade. Much can be achieved by raising productivity in existing agricultural and manufacturing activities – but to maintain the rapid growth rates of the past decade will be very difficult unless a broadening of the range of industrial activities can be achieved.

What the offshore gas industry provides is a once-in-a-lifetime opportunity to broaden the country’s industrial capabilities by integrating domestic companies into the supply chains of multinational firms. The benefits that can be gained from this are widely underestimated: few countries have fully exploited their opportunities, for they have failed to see how widely these opportunities are spread. By thinking too narrowly, they miss the target. For example: the typical policy maker’s response to this opportunity is to ask: can some of our local firms be involved in building rigs and terminals? Even when the answer to this is yes, the focus is wrong. For by looking to the most immediately visible gains, the majority of opportunities are simply let slip. It is essential to begin from the big picture, by first examining the full range of potential opportunities.
3 The Big Picture: where gains come from

One of the most dangerous misconceptions in this area lies in underestimating the range of firms and activities that can be developed as part of the process. There is a tendency to focus on the engineering side alone, and to miss the fact that this is only one of three major areas of opportunity. It is important to begin with a different, broader perspective if the full potential benefits are to be realized. This broader perspective focuses, not on specific products or activities, but rather on the country’s stock of efficient, well-functioning mid-size firms.

For Tanzania, this is a crucial point: the Enterprise Map volume shows that every industry has a few large, relatively well run companies. But the number of well run mid-size companies is in every case fairly modest, and one of the most central engines of Tanzania’s drive to become a middle-income country lies in raising the number of well functioning mid-size companies.

When I refer here to a mid-size company, I have in mind a firm employing 30 or more people – up to say 100 or so. Companies of this size pay wages that are many times those earned by workers in small firms employing 10 or fewer people. (Figures for Tanzania are unavailable, but a useful point of comparison is provided by Ethiopia, where manufacturing firms employing 50 or more people pay wages almost 4 times higher than small firms with 10 or fewer employees.)

The central role of these mid-size firms in Tanzania’s future growth should not be underestimated. One of the most important channels of growth lies in the migration of individuals from low paid jobs in agriculture, and from small industrial firms, into well functioning mid-size enterprises that generate much higher levels of value added.

Now if we begin from this picture, the whole question of benefiting from the Offshore Gas industry’s integration into the Tanzanian economy begins to look different. Instead of thinking narrowly about ‘what can we make/provide’, it suggests thinking instead of ‘where can we begin to develop new local firms, or expand the activities of existing small companies, through widening the range of business opportunities open to them?"
Once we ask the question in this way, two pictures emerge immediately. The first picture illustrates a time-line, or sequence of events (Figure 1)

![Figure 1: A Timeline in Three Phases](image)

The first phase, which is easily forgotten in this kind of discussion, and is therefore under-exploited, concerns the immediate opportunities available to local individuals and firms from the very outset of the construction phase. No picture illustrates this issue better than the Takoradi port in Ghana. The exploitation of offshore Oil or Gas involves a huge and dramatic transformation of a port from its traditional form to a modern world-class industrial facility. The huge investments that pour into this process generate enormous immediate opportunities for local businesses. It is the sheer range and variety of such opportunities that need to be appreciated.

To put this in perspective, consider how much even a very small project can do: take for example a single small construction project in Uganda, where Tullow Oil built a road across a rural area to allow access to a lake. Within eighteen months, hitherto sleepy villages between which little communication occurred were thriving, as villagers acquired bicycles, the road buzzed with cycle traffic, the lake’s fishermen had moved from fishing for their families to trucking commercial quantities to an urban market, and new retail businesses (from grocery
stores to bicycle repair shops) had sprung up in the villages along the road. If the construction of a single rural road can catalyse this range of activity, perhaps it is easier to understand the dramatic effects that flowed from the building of Ghana’s Takoradi port.

The point I want to emphasise here is the broad range of business opportunities that appear for local firms at this very first construction stage of the process (Figure 1). Enterprising local firms will appreciate the huge new demand for:

- cafés, restaurants etc.
- retail outlets offering a wide range of international brands.
- car hire services, trucking services, and helicopter rental and leasing companies.
- construction business of all kinds: residential, civil engineering, and the full gamut of general sub-contracting.

The list could be continued indefinitely, but these few examples serve to illustrate the point.

So what are the key steps that need to be taken in order to allow local firms and individuals to achieve the maximum benefit in this phase? There are two key points:

1. Review immediately the regulations around firm formation and entry: there will be a sudden surge in new firm formation, and this must be facilitated.
2. Begin an active dialogue with the Offshore Gas Multinationals with a view to scoping their vision of needs and opportunities and understanding the specific factors that will encourage them to source and purchase goods and services of all categories locally. One useful preparatory action would be to send a local team of officials to visit Takoradi port with a very specific remit, viz. to pin down the details of measures taken and opportunities missed in Ghana’s development of domestic activity around the construction of the port.

As the construction phase progresses, Tanzania should already be preparing for Phase 2 (Figure 1). This is the central phase, and the one that tends to be at the forefront of people’s mind when supply chain issues are discussed. It involves the integration of local companies into the
production supply chain where gas comes online. Now this is a huge and complex area, and it is best understood by beginning with some simple considerations.

The first consideration relates to the typical structure of such a supply chain. This will involve, in each of several areas of activity, a lead sub-contractor who will in turn sub-contract to a handful of sub-contractors, each of whom will in turn employ many mid-size firms for specific tasks.

The key tension that must be addressed, as described in section 2 above, lies in bringing in a lead local contractor to spearhead the local content pyramid.

The importance of starting from this picture lies in getting away from the common notion that “we’ll have an open tender process to which a large number of local companies can apply.” It is crucial to realize from the outset that we are talking in the first instance of a very small number of local firms that can play a leading role in any area of activity – and it is here that a deep understanding of current capabilities of domestic firms on the part of both the Local Content Unit and the Gas Multinational is crucial. The tension that must be addressed is between the tendency for the MNC to assume from the outset that it will operate almost exclusively with foreign lead sub-contractors, assuming that no adequate local capabilities are in place, as against the government’s view that the role of lead local subcontractors is essential and achievable. Neither extreme view is tenable: what is true is that capabilities, both those in place now and those that can be enhanced and developed over a 2-year period, are adequate to permit a reasonable degree of integration of local companies: but this will require a carefully managed process, that respects that priorities and concerns of both the MNCs and the government.
4 The Process: Approaches, Objections and Pitfalls

Objections, and Responses

The single biggest barrier to the successful integration of local firms into the supply chain is: “Local firms do not exist that can meet our standards of safety. It is essential to our operation that we bring in our customary international subcontractors who understand our operating standards and can meet our requirements”.

Now this is half true. It is indeed the case that certain operations are safety critical. It is also true that there are probably few if any domestic firms that can meet requirements from the outset. It is essential to concede this, if a useful discussion is to ensure. But it is equally important to insist on the other half of the story. Those countries, and companies, that have set out to invest in the building up of capabilities in potential domestic partners, have succeeded in achieving a deep integration of local firms into the supply chain.

5 Achieving the Gains

a. Understanding Local Companies

The first task for the members of a newly formed Local Content Unit is to develop a deep understanding of the existing capabilities of the country’s firms. In the case of Tanzania, a good point of departure is provided in the *Enterprise Map of Tanzania* volume. This volume sets out, industry by industry, the various clusters of firms engaged within every industry (across agribusiness, manufacturing and construction). The first training task for members of the LCU should be to visit a cross-section of suitable firms, in order to understand just how far their current activities have prepared them for possible involvement as suppliers to the new offshore gas industry. These visits can also be used to explore channels of engagement with local firms; to inform local firms of the broad nature of the selection process and screening criteria for
applicants to training at the Enterprise Development Unit; and so to communicate both directly and indirectly to the Tanzanian business community the mode of operation of the Local Content Unit.

b. An Enterprise Development Centre

At the heart of any good process for the integration of local firms into the supply chain of multinational oil and gas companies is the Enterprise Development Centre (EDC).

The role of the Enterprise Development Centre is to provide training and capability building for local mid-size enterprises that will allow them to become ‘approved vendors’ to the oil and gas multinationals, and to the first tier subcontractors to those multinationals.

The EDC needs to be put in place at a very early stage – essentially, once it is determined that oil and gas will certainly be produced in large volumes. The reason for early action is two-fold. First, the lead time from initiating the formation of the EDC to its commissioning may be well over a year. Second, the typical training period for local firm is 18 months to 2 years. So what does the EDC do? And how does it do it?

The EDC needs to have two divisions: a ‘business’ division and a ‘technical’ division. The role of the business division is to bring local mid-size firms up to speed in financial reporting, health and safety management, process management, procurement and sales, and related areas. The importance of the business division needs emphasis: in the early stages of the work of the EDC, this division is likely to have substantially more firms to deal with than the technical division. Its work is fundamental in equipping local mid-size firms to qualify for ‘approved vendor’ status. But its importance goes beyond this: local firms that achieve the standards required by the EDC for ‘approved vendor status’ will have graduated to a level where they will be well-equipped to do business with any multinational companies based in Tanzania, outside the oil and gas sector. In other words, what is worth emphasising here is the general nature of the skills involved here. In contrast to the ‘technical’ division, whose work is more narrowly focussed on the oil and gas sector, the work of the business division is concerned with general business practices.
The importance of the work of the technical section is obvious, but it is less obvious why the work of the business division is crucial. What needs to be at the centre of thinking in this respect is that there is always a substantial gap between the practices that serve a midsize firm operating in a familiar local environment, and the practices that are standard in the international business community. It is not that this gap is a particularly difficult one to bridge, but rather that it takes time to carry out the necessary changes in procedures and practices at various levels in the company – and this is where the work of the EDC is of central importance.

So how does the business division actually carry out its task? There are two models, which can both play a role, operating in parallel. The first model involves a group of professional staff based at the EDC’s premises, who give one or two day courses to personnel from participant firms. The second model is one in which a single professional from the EDC or appointed through the EDC is seconded to a single participant company for a period of several months, and who works with the management of the firm to put in place the required changes.

The ‘technical’ division of the EDC works to the same model, with two potential modes of operation: ‘in-house courses’ and ‘secondment of (technical) personnel’. For the technical section, however, the client firms are of course split into a number of groups depending on their areas of interest. There may be half a dozen such groups, ranging across a wide area, from ‘engineering services’ at one end of the spectrum, to ‘hygiene in the food delivery systems’ at the other end. The setting up of these separate technical areas, and the provision of qualified technical staff to lead the operations of each unit, is one of the first tasks of the newly established EDC.

So how do local firms become attached to the EDC? The answer is, that the most efficient and effective way forward is to proceed in two stages. In the first, the Local Content Unit is proactive in drawing up a list of potential candidate firms, and recruiting them to the EDC. In the second, an ‘open door’ is offered to any (existing or newly-formed) local firms to apply for places at the EDC. Achieving efficiency and transparency in this process is important, an issue to which we return in Section 6 below.
c. Partners in the Process

One of the earliest ministerial decisions will relate to the choice of partners to be used in the setting up of the Enterprise Development Centre. Here, it is likely that the partners will include one or more private sector firms, as well as one or more international agencies. For example, in the case of Ghana, one likely lead partner is the African Development Bank via the Fund for Africa Private Sector Development (FAPA). Another likely lead partner is the Ernst and Whinney company, which is a member of Invest in Africa, via its Cape Town-based Africa Business Section. FAPA’s potential role is worth emphasising, as it is now building up considerable experience in the relevant area through, for example, its recent pilot scheme with 700 SMEs in Zambia. The modus operandi of Ernst and Whinney is also worth noting, in that it is focussed or the ‘secondment’ model, in which an E&W employee spends a lengthy period within a candidate local firm.

d. Shadowing Schemes

In a shadowing scheme, qualified local individuals are recruited to positions within the multinational Oil and Gas company. Their duties involve working alongside (‘shadowing’) a specific regular employee of the company for a period of one or more years. The aim to this exercise is to ‘learn the job by seeing it done’.

Schemes of this kind have to be managed with great care if they are to be successful, but the rewards from putting a well-designed scheme in place can be enormous.

The Do’s and Don’ts of shadowing schemes are summarized in Box 1. Here, we look at how to put a scheme in place.

The process begins with a dialogue between the LCU (or another government agency) with the MCN involved. The organization and financing of the scheme needs to be negotiated. If this is to be handled well, there needs to be a realistic shared view of the broad parameters of the scheme: how many shadowing positions should be created? For people with what kind of initial technical background? In what areas of activity?
The answers to these questions turn on the availability of Tanzanian citizens with appropriate education and training. This is an area where a preliminary examination of the stock of Tanzanian engineering graduates, both those working within the country and those currently working abroad, needs to be undertaken as a matter of urgency.

In order to provide a feel for the likely scale of a well-designed shadowing operation, it is useful to look at the Ghanaian experience (Box 1). Ghana was particularly fortunate in having a substantial number of very able engineering graduates, many employed in engineering firms in other countries, who could be attracted into its shadowing scheme. The Ghanaian scheme, which took place with Tullow Oil, involved 80 Ghanaian ‘shadows’. This is a very large scheme, and it would be ambitious for Tanzania to aim at this many shadows, given the likely availability of suitable candidates.

Where should the ‘shadows’ be placed? They should in all cases be placed in the ‘majors’, not among sub-contractors. Among the majors, some will be more amenable than others operating a scheme. Moreover, the mix of backgrounds among Tanzanian recruits will make some kinds of role within a firm more suitable than others. So it is sensible to think of sharing the shadowing scheme across two, or even three, MNCs.

**The Benefits of Shadowing Schemes**

The benefits of a successful shadowing scheme are very substantial, and they are of two kinds. The first is that individual Tanzanians can build a career within the industry, not just with their original ‘host’ MNC, but in any firm within or outside Tanzania. But the second benefit is that ex-shadows have proved, in other countries, to be highly entrepreneurial in setting up new sub-contracting companies of their own that feed into the industry supply chain (Box 2).
Box 1. Shadowing Schemes: DOs and DON’Ts

Shadowing Schemes are one of the most powerful devices in the Local Content agenda. Yet such schemes can easily go wrong, and a huge opportunity is then missed. What are the rules to follow in order to get good results?

Rule 1: Act Early: Get Tanzanian shadows in place from the very outset, prior to going offshore.

Rule 2: Hands off recruiting. Let the multinational operator control the recruitment of young Tanzanian engineers. Do not allow the process to be ‘politicised’. Allow it to be a business decision.

Rule 3: Do not involve subcontractors: they are not interested and will not be committed. Focus on the majors.

Of these 3 rules, Rule 1 is the most urgent: An example of excellent practice is provided by Tullow Oil in Ghana: even prior to Tullow’s ‘undersea’ team of 80 people leaving London for Ghana, each one of these 80 people already had a Ghanaian shadow in place.

So who pays the bill? Running a shadow scheme is costly. The Oil and Gas multinationals do not want to pay, after negotiations are complete, for such activities, so it must be built into the contract from the outset. Only in rare cases will it be possible to obtain support from this source in the absence of an advance contractual undertaking.
Box 2. Shadows and Spin-offs: A Columbian Tale

The most striking example of a successful shadowing scheme comes from Columbia, where various engineers originally engaged as shadows formed new small firms that entered the industry's supply chain, displacing former international suppliers. Example of this are:

- The newly formed Columbian firm Equipo took over plant maintenance from the UK based multinational Wood Group. The individuals who set up Equipo had all been shadows within the Wood Group. Some 85-90% of Equipo’s employees are domestic citizens.
- The PTS company is involved in the highly technical area of ‘Well Testing’. It took over an operation that had previously been outsourced to the multinational leader, Haliburton. Again, the founders of PTS were domestic nationals who had been trained by Haliburton during the period when it was responsible for Well Testing.
One of the most important elements in a good plan lies in meshing the training and education of young Tanzanian engineers who can find positions of responsibility in the offshore gas industry. Different countries, and different multinationals, have approached this problem in different ways. One common element in good plans, however, stands out: it is vital to build, at the earliest possible stage, a partnership between one or more faculties of engineering at Tanzanian universities, with Petroleum Engineering departments at leading international universities. Such partnership would typically involve a handful of foreign academics spending a year or more at a Tanzanian university, working with local faculty to develop new courses and put degree programs in place that can be self-sustaining in the medium term. In other words, it is crucial to develop local expertise that will be a long run asset to Tanzania’s university system.

The funding of this kind of venture is often possible via donor financing. The British Council, and its counterparts in other countries, has in the past played a key role in such initiatives. The multinational gas companies can be contributors in two equally important ways: in contributing to the costs, and in providing teachers for specialist modules. So a complex partnership needs to be put in place – and since this kind of venture takes a couple of years to mature, initiating this kind of activity should be seen as a matter of urgency in Tanzania now.
Practicalities: Achieving both Transparency and Effectiveness in the company recruitment process

One of the most important considerations in the process of involving local firms in the multinationals’ supply chains relates to finding a way to achieve both transparency and effectiveness in the recruitment process.

The ‘transparency’ issue is easily understood. Many countries that have discovered new sources of oil and gas have been told by international organizations that the recruitment of local companies into the multinationals’ supply chain must be open and fair. Now this is a valid concern: the problems of nepotism and potential corruption must not be overlooked. Yet the advocates of such processes are too often inadequately informed of the level and dispersion of local industrial capabilities, and wrongly imagine that there are many similar local candidates that might compete to be included. This is rarely the case – and the problem is how to maintain transparency and fairness in an environment where the number of suitably qualified local candidates is initially low.

To be specific: In Tanzania, just as in Ghana or Zambia, the number of well-functioning mid-size or larger firms in steel fabrication can be counted on the fingers of one hand. If firms of this kind are to be recruited, then a process needs to be put in place that recognizes the paucity of candidates.

To combine transparency and efficiency, the line of attack that has been developed internationally goes as follows:

1. The multinational firm, in consultation with government, selects one local firm as a lead or first-tier supplier in a given area of operations. In the engineering area, for example, there is often just one local firm with the breadth and depth of local expertise to fill this role.
2. The ‘lead local contractor’ then proceeds to bring mid-size local firms into the supply chain by employing them as sub-contractors. Initially, there will be few suitable
candidates. But by introducing the requirement of achieving ‘Approved Vendor Status’ through involvement in training at the Enterprise Development Unit, a larger number of local firms can be brought into play.

3. One a local firms has achieved ‘Approved Vendor Status’, it enters an open and competitive tendering process, with the ‘lead local supplier’ as the principal.

4. This means that the key step in regard to transparency becomes the recruitment of local firms to the Enterprise Development Centre. Here, the best process is one that (a) allows any local firm to apply, and (b) specifies in advance a set of objective relevant criteria that will be used in selecting applicants for training. For example, in the engineering area, a set of criteria can be set out, which are ‘relevant but not all essential’. One such criterion, for example, might be ‘proven commercial success in large scale metal fabrication’. This criterion would weed out a quite small number of local firms that would be able to enter the very large and lucrative business of supplying ‘tank farms’ (sets of very large cylindrical steel tanks). The point of this example is to show what kind of requirement constitutes an ‘objective relevant criterion’. There are many such criteria that can be pre-specified, and there can be different lists for different sectors (for example, firms from the food and drink sector aiming to build up catering businesses would face requirements relevant to hygiene and to established distribution and storage channels).

The general principle, however, is simple: make application open to all, but apply pre-stated, objective, relevant criteria in selection.
7 Decisions and Actions: First Steps

The above description of the process of setting up a Local Content Unit and an associated Enterprise Development Centre is, of course, just an outline scheme. Practical experience, as the process unfolds, will lead to many specific decisions that will mould Tanzania’s own approach to these challenges. But what is clear is that it is now important to take some initial steps:

1. Form a Local Content Unit (LCU) with an initial staff of about 10 highly able and motivated members. Some 6 or so will be drawn from the relevant ministries. Another two will be local professionals with relevant experience in the private sector and/or relevant technical expertise. Finally, there should be two members from abroad, who have experience of negotiating local content with Oil and Gas multinationals in their own countries. (Section 1 above)

2. The Expert Group and the Minister, together with the head of the newly-formed LCU, will need to approach potential partners that will work with the LCU to establish an Enterprise Development Centre (EDC). (Section 5c).

3. A premises will need to be found for the LCU and EDC, and a decision will be needed as to whether there should be two bases, one in the capital and one in the port area.

4. The members of the LCU should immediately embark on a programme of visits to Tanzanian firms in order both to build up knowledge within the LCU of the current capabilities of local firms, and in order to acquaint local firms with the planned work of the LCU and the EDC.

I remarked, at the outset of this lecture, that my focus would be on practical steps towards implementation of policy, rather than on the wide range of high level policy issues. It will be clear from what I have said that my focus is a narrow one. But the specific issues that I have chosen to focus on are both important and urgent, and the gains made by Tanzania from its Offshore Gas industry will depend to a substantial degree on the effectiveness with which these issues are addressed.