

**REQUEST FOR PROPOSALS**

**PRE-FEASIBILITY STUDY FOR THE**

**GAS-BASED INDUSTRIAL COMPLEX**

Submission Deadline: **5:00 PM**  
**LOCAL (LAGOS) TIME**  
**May 2, 2014**

Submission Place: Mr. Obafolajimi Otudeko  
Team Lead, Group Resources  
Honeywell Group Limited  
6B Mekunwen Road, Off Oyikan Abayomi Drive  
Ikoyi, Lagos  
  
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**SEALED PROPOSALS SHALL BE CLEARLY MARKED AND RECEIVED PRIOR TO THE TIME AND DATE SPECIFIED ABOVE. PROPOSALS RECEIVED AFTER SAID TIME AND DATE WILL NOT BE ACCEPTED OR CONSIDERED.**

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## **Section 1: INTRODUCTION**

The U.S. Trade and Development Agency (USTDA) has provided a grant in the amount of US\$257,000 to Honeywell Group Limited (the “Grantee”) to partially fund a pre-feasibility study (“Study”) that will evaluate and develop plans for a proposed Gas-Based Industrial Complex (“Project”) in Nigeria. In accordance with a grant agreement dated March 20, 2014, (the “Grant Agreement”) the Grantee will provide an additional cash cost share of US\$257,000 (“Grantee Cost Share), bringing the total of the Study budget to US\$514,000.

### **1.1 BACKGROUND SUMMARY**

As Nigeria’s middle class flourishes, the demand for fertilizers and petrochemical products is increasing in Nigeria. In this context, USTDA is supporting the Grantee with grant funding to support the early-stage development of the Project as a means to connect with U.S. expertise and to facilitate the Grantee’s entry into the fertilizer and petrochemical sector.

The Study shall evaluate various types of facilities which could produce different chemical outputs, including: (1) methanol (2) fertilizer chemicals such as urea and ammonia, and (3) petrochemicals such as ethylene, propylene, and/or benzene products. The Study shall also develop a simulation model(s) that shall provide the Grantee with recommendations on which of these facilities should be included in the Project, the size/scale of these facilities, the sources of feedstock for the facilities, and a site location for the Project. In addition, the Study shall include a market survey on the current demand of the different chemical outputs which could result from the Project. The market survey shall assess the domestic and international markets for the potential chemical outputs of the facilities, as well as the capital costs required, potential U.S. suppliers, and any potential barriers to the Project.

The Study shall also develop and deliver at least one training session for a minimum of three days in the United States to cover topics of high interest to the Grantee. The training, which shall be developed in close cooperation with the Grantee, shall provide hands-on human capacity building related to fertilizer and petrochemical industry planning, technologies, and international business practices to the Grantee’s staff. As a part of the training, the Contractor shall introduce the Grantee to U.S. stakeholders in the U.S. fertilizer and petrochemical sector. The training shall also assist the Grantee in developing the human resources that will be needed for the Grantee’s development of the Project. Please refer to Annex I, Task 10 for a list of topics to be included in the training course.

Portions of a background Desk Study are provided for reference in Annex 2.

### **1.2 OBJECTIVE**

The purpose of this Study is to evaluate and develop plans in support of the Grantee for the proposed gas-based industrial complex project in Nigeria.

### **1.3 PROPOSALS TO BE SUBMITTED**

Technical proposals are solicited from interested and qualified U.S. firms. The administrative and technical requirements as detailed throughout the Request for Proposals (RFP) will apply. Specific proposal format and content requirements are detailed in Section 3.

The amount for the contract has been established at US\$514,000. USTDA is contributing US\$257,000 and the Grantee is contributing US\$257,000, for a total of US\$514,000. **The contract amount of US\$514,000 is a fixed amount. Accordingly, COST will not be a factor in the evaluation and therefore, cost proposals should not be submitted.** Upon detailed evaluation of technical proposals, the Grantee shall select one firm for contract negotiations.

#### **1.4 CONTRACT FUNDED BY USTDA**

In accordance with the terms and conditions of the Grant Agreement, USTDA has provided a grant in the amount of US\$257,000 to the Grantee. In addition to the USTDA funding provided under this Grant Agreement, the Grantee shall cover US\$257,000 of costs to complete the full Terms of Reference (“Grantee Cost Share”). The Grantee shall pay the Grantee Cost Share to the Contractor in cash in proportion to the funding provided by USTDA and the Grantee, respectively (USTDA US\$257,000, Grantee US\$257,000). The contract must include certain USTDA Mandatory Contract Clauses relating to nationality, taxes, payment, reporting, and other matters. The USTDA nationality requirements and the USTDA Mandatory Contract Clauses are attached at Annexes 3 and 4, respectively, for reference.

### **Section 2: INSTRUCTIONS TO OFFERORS**

#### **2.1 PROJECT TITLE**

The project is called the Gas-Based Industrial Complex.

#### **2.2 DEFINITIONS**

Please note the following definitions of terms as used in this RFP.

The term "Request for Proposals" means this solicitation of a formal technical proposal, including qualifications statement.

The term "Offeror" means the U.S. firm, including any and all subcontractors, which responds to the RFP and submits a formal proposal and which may or may not be successful in being awarded this procurement.

#### **2.3 DESK STUDY**

USTDA sponsored a Desk Study to address technical, financial, sociopolitical, environmental and other aspects of the proposed project. Portions of the report are attached at Annex 2 for background information only. Please note that the TOR referenced in the report are included in this RFP as Annex 5.

## **2.4 EXAMINATION OF DOCUMENTS**

Offerors should carefully examine this RFP. It will be assumed that Offerors have done such inspection and that through examinations, inquiries and investigation they have become familiarized with local conditions and the nature of problems to be solved during the execution of the pre-Feasibility Study.

Offerors shall address all items as specified in this RFP. Failure to adhere to this format may disqualify an Offeror from further consideration.

Submission of a proposal shall constitute evidence that the Offeror has made all the above mentioned examinations and investigations, and is free of any uncertainty with respect to conditions which would affect the execution and completion of the pre-Feasibility Study.

## **2.5 PROJECT FUNDING SOURCE**

The pre-Feasibility Study will be funded under a grant from USTDA and a Grantee Cost Share. The total amount of the USTDA grant is not to exceed US\$257,000. The Grantee has agreed to provide an additional US\$257,000, bringing the total budget of the Study to US\$514,000.

## **2.6 RESPONSIBILITY FOR COSTS**

Offeror shall be fully responsible for all costs incurred in the development and submission of the proposal. Neither USTDA nor the Grantee assumes any obligation as a result of the issuance of this RFP, the preparation or submission of a proposal by an Offeror, the evaluation of proposals, final selection or negotiation of a contract.

## **2.7 TAXES**

Offerors should submit proposals that note that in accordance with the USTDA Mandatory Contract Clauses, USTDA grant funds shall not be used to pay any taxes, tariffs, duties, fees or other levies imposed under laws in effect in the Host Country.

## **2.8 CONFIDENTIALITY**

The Grantee will preserve the confidentiality of any business proprietary or confidential information submitted by the Offeror, which is clearly designated as such by the Offeror, to the extent permitted by the laws of the Host Country.

## **2.9 ECONOMY OF PROPOSALS**

Proposal documents should be prepared simply and economically, providing a comprehensive yet concise description of the Offeror's capabilities to satisfy the requirements of the RFP. Emphasis should be placed on completeness and clarity of content.

## **2.10 OFFEROR CERTIFICATIONS**

The Offeror shall certify (a) that its proposal is genuine and is not made in the interest of, or on behalf of, any undisclosed person, firm, or corporation, and is not submitted in conformity with, and agreement of, any undisclosed group, association, organization, or corporation; (b) that it has not directly or indirectly induced or solicited any other Offeror to put in a false proposal; (c) that it has not solicited or induced any other person, firm, or corporation to refrain from submitting a proposal; and (d) that it has not sought by collusion to obtain for itself any advantage over any other Offeror or over the Grantee or USTDA or any employee thereof.

## **2.11 CONDITIONS REQUIRED FOR PARTICIPATION**

Only U.S. firms are eligible to participate in this tender. However, U.S. firms may utilize subcontractors from the Host Country for up to 20 percent of the amount of the USTDA grant for specific services from the TOR identified in the subcontract. USTDA's nationality requirements, including definitions, are detailed in Annex 3. Refer to Section 1.4 of this RFP for additional information on the applicability of USTDA's Nationality Requirements.

## **2.12 LANGUAGE OF PROPOSAL**

All proposal documents shall be prepared and submitted in English, and only English.

## **2.13 PROPOSAL SUBMISSION REQUIREMENTS**

The **Cover Letter** in the proposal must be addressed to:

Mr. Obafolajimi Otudeko  
Team Lead, Group Resources  
Honeywell Group Limited  
6B Mekunwen Road, Off Oyikan Abayomi Drive  
Ikoyi, Lagos

Email: [Obafolajimi.otudeko@honeywellgroup.com](mailto:Obafolajimi.otudeko@honeywellgroup.com)

**If sent by mail, overnight courier, or hand delivered, an original and eight (8) copies of your proposal must be received at the above mailing address. If sent by email, a pdf copy of your proposal must be received at the above email address. Either format, emailed pdf or hard-copy, will be accepted.**

**Proposals must be received no later than 5:00 PM Local (Lagos) Time, on May 2, 2014.**

Proposals may be either sent by mail, overnight courier, hand-delivered, or by email. Whether the proposal is sent by mail, courier, hand-delivered, or email, the Offeror shall be responsible for actual delivery of the proposal to the above mailing or email address before the deadline. If proposal is sent electronically, please maintain a record of receipt from Grantee if provided or a record of sent email. Any proposal received after the deadline will be returned unopened. The Grantee will promptly notify any Offeror if its proposal was received late.

Upon timely receipt, all proposals become the property of the Grantee.

## **2.14 PACKAGING**

If sent by mail, overnight courier, or hand-delivered, the original and each copy of the proposal must be sealed to ensure confidentiality of the information. The proposals should be individually wrapped and sealed, and labeled for content including the name of the project and designation of "original" or "copy number x." The original and eight (8) copies should be collectively wrapped and sealed, and clearly labeled, including the contact name and the name of the project.

Neither USTDA nor the Grantee will be responsible for premature opening of proposals not properly wrapped, sealed and labeled.

If sent via email, a pdf version of the proposal must be received by the following email address: Obafolajimi.otudeko@honeywellgroup.com.

## **2.15 OFFEROR'S AUTHORIZED NEGOTIATOR**

The Offeror must provide the name, title, address, telephone number, e-mail address and fax number of the Offeror's authorized negotiator. The person cited shall be empowered to make binding commitments for the Offeror and its subcontractors, if any.

## **2.16 AUTHORIZED SIGNATURE**

The proposal must contain the signature of a duly authorized officer or agent of the Offeror empowered with the right to bind the Offeror.

## **2.17 EFFECTIVE PERIOD OF PROPOSAL**

The proposal shall be binding upon the Offeror for 90 days after the proposal due date, and Offeror may withdraw or modify this proposal at any time prior to the due date upon written request, signed in the same manner and by the same person who signed the original proposal.

## **2.18 EXCEPTIONS**

All Offerors agree by their response to this RFP announcement to abide by the procedures set forth herein. No exceptions shall be permitted.

## **2.19 OFFEROR QUALIFICATIONS**

As provided in Section 3, Offerors shall submit evidence that they have relevant past experience and have previously delivered advisory, feasibility study and/or other services similar to those required in the TOR, as applicable.

## **2.20 RIGHT TO REJECT PROPOSALS**

The Grantee reserves the right to reject any and all proposals.

## **2.21 PRIME CONTRACTOR RESPONSIBILITY**

Offerors have the option of subcontracting parts of the services they propose. The Offeror's proposal must include a description of any anticipated subcontracting arrangements, including the name, address, and qualifications of any subcontractors. USTDA nationality provisions apply to the use of subcontractors and are set forth in detail in Annex 3. The successful Offeror shall cause appropriate provisions of its contract, including all of the applicable USTDA Mandatory Contract Clauses, to be inserted in any subcontract funded or partially funded by USTDA grant funds.

## **2.22 AWARD**

The Grantee shall make an award resulting from this RFP to the best qualified Offeror, on the basis of the evaluation factors set forth herein. The Grantee reserves the right to reject any and all proposals received.

## **2.23 COMPLETE SERVICES**

The successful Offeror shall be required to (a) provide local transportation, office space and secretarial support required to perform the TOR if such support is not provided by the Grantee; (b) provide and perform all necessary labor, supervision and services; and (c) in accordance with best technical and business practice, and in accordance with the requirements, stipulations, provisions and conditions of this RFP and the resultant contract, execute and complete the TOR to the satisfaction of the Grantee and USTDA.

## **2.24 INVOICING AND PAYMENT**

Deliverables under the contract shall be delivered on a schedule to be agreed upon in a contract with the Grantee. The Contractor may submit invoices to the designated Grantee Project Director in accordance with a schedule to be negotiated and included in the contract. After the Grantee's approval of each invoice, the Grantee will forward the invoice to USTDA. If all of the requirements of USTDA's Mandatory Contract Clauses are met, USTDA shall make its respective disbursement of the grant funds directly to the U.S. firm in the United States. All

payments by USTDA under the Grant Agreement will be made in U.S. currency. Detailed provisions with respect to invoicing and disbursement of grant funds are set forth in the USTDA Mandatory Contract Clauses attached in Annex 4.

### **Section 3: PROPOSAL FORMAT AND CONTENT**

To expedite proposal review and evaluation, and to assure that each proposal receives the same orderly review, all proposals must follow the format described in this section.

Proposal sections and pages shall be appropriately numbered and the proposal shall include a Table of Contents. Offerors are encouraged to submit concise and clear responses to the RFP. Proposals shall contain all elements of information requested without exception. Instructions regarding the required scope and content are given in this section. The Grantee reserves the right to include any part of the selected proposal in the final contract.

The proposal shall consist of a technical proposal only. A cost proposal is NOT required because the amount for the contract has been established at US\$514,000, which is a fixed amount. In addition to the USTDA funding (US\$257,000) provided under the Grant Agreement, the Grantee shall cover at least US\$257,000 of costs to complete the full TOR, per the Grantee Cost Share Agreement.

If sent by mail, overnight courier, or hand-delivered, offerors shall submit one (1) original and eight (8) copies of the proposal. Proposals received by fax cannot be accepted. If sent via email, a pdf copy of the proposal must be received at the following email address: Obafolajimi.otudeko@honeywellgroup.com.

Each proposal must include the following:

- Transmittal Letter,
- Cover/Title Page,
- Table of Contents,
- Executive Summary,
- Firm Background Information,
- Completed U.S. Firm Information Form,
- Organizational Structure, Management Plan, and Key Personnel,
- Technical Approach and Work Plan, and
- Experience and Qualifications.

Detailed requirements and directions for the preparation of the proposal are presented below.

#### **3.1 EXECUTIVE SUMMARY**

An Executive Summary should be prepared describing the major elements of the proposal, including any conclusions, assumptions, and general recommendations the Offeror desires to

make. Offerors are requested to make every effort to limit the length of the Executive Summary to no more than five (5) pages.

### **3.2 U.S. FIRM INFORMATION**

A U.S. Firm Information Form in .pdf fillable format is attached at the end of this RFP in Annex 6. The Offeror must complete the U.S. Firm Information Form and include the completed U.S. Firm Information Form with its proposal.

### **3.3 ORGANIZATIONAL STRUCTURE, MANAGEMENT, AND KEY PERSONNEL**

Describe the Offeror's proposed project organizational structure. Discuss how the project will be managed including the principal and key staff assignments for this pre-Feasibility Study. Identify the Project Manager who will be the individual responsible for this project. The Project Manager shall have the responsibility and authority to act on behalf of the Offeror in all matters related to the pre-Feasibility Study.

Provide a listing of personnel (including subcontractors) to be engaged in the project, including both U.S. and local subcontractors, with the following information for key staff: position in the project; pertinent experience, curriculum vitae; other relevant information. If subcontractors are to be used, the Offeror shall describe the organizational relationship, if any, between the Offeror and the subcontractor.

A manpower schedule and the level of effort for the project period, by activities and tasks, as detailed under the Technical Approach and Work Plan shall be submitted. A statement confirming the availability of the proposed project manager and key staff over the duration of the project must be included in the proposal.

### **3.4 TECHNICAL APPROACH AND WORK PLAN**

Describe in detail the proposed Technical Approach and Work Plan (the “Work Plan”). Discuss the Offeror’s methodology for completing the project requirements. Include a brief narrative of the Offeror’s methodology for completing the tasks within each activity series. Begin with the information gathering phase and continue through delivery and approval of all required reports.

Prepare a detailed schedule of performance that describes all activities and tasks within the Work Plan, including periodic reporting or review points, incremental delivery dates, and other project milestones. **The grantee expects the full terms of reference to be completed within 3-4 months of the Contract Agreement being signed. Offerors are strongly recommended to factor in this timeline to their Work Plans.**

Based on the Work Plan, and previous project experience, describe any support that the Offeror will require from the Grantee. Detail the amount of staff time required by the Grantee or other participating agencies and any work space or facilities needed to complete the pre- Feasibility Study.

### 3.5 EXPERIENCE AND QUALIFICATIONS

Provide a discussion of the Offeror's experience and qualifications that are relevant to the objectives and TOR for the pre-Feasibility Study. If a subcontractor(s) is being used, similar information must be provided for the prime and each subcontractor firm proposed for the project. The Offeror shall provide information with respect to relevant experience and qualifications of key staff proposed. The Offeror shall include letters of commitment from the individuals proposed confirming their availability for contract performance.

As many as possible but not more than six (6) relevant and verifiable project references must be provided for each of the Offeror and any subcontractor, including the following information:

- Project name,
- Name and address of client (indicate if joint venture),
- Client contact person (name/ position/ current phone and fax numbers),
- Period of Contract,
- Description of services provided,
- Dollar amount of Contract, and
- Status and comments.

Offerors are strongly encouraged to include in their experience summary primarily those projects that are similar to the pre-Feasibility Study as described in this RFP.

### Section 4: AWARD CRITERIA

Individual proposals will be initially evaluated by a Procurement Selection Committee of representatives from the Grantee. The Committee will then conduct a final evaluation and completion of ranking of qualified Offerors. The Grantee will notify USTDA of the best qualified Offeror, and upon receipt of USTDA's no-objection letter, the Grantee shall promptly notify all Offerors of the award and negotiate a contract with the best qualified Offeror. If a satisfactory contract cannot be negotiated with the best qualified Offeror, negotiations will be formally terminated. Negotiations may then be undertaken with the second most qualified Offeror and so forth.

The selection of the Contractor will be based on the following criteria:

	<b>Qualification</b>	<b>Ranking</b>
1	<b><u>Refining and Chemicals Processing Technology</u></b> The Contractor shall be an expert in the currently available refining and chemical processing technologies, preferably processing technologies for methanol, fertilizer chemicals and petrochemicals production	25
2	<b><u>International Chemicals Markets</u></b> The Contractor shall have an up-to-date knowledge of world methanol, fertilizer chemicals and petrochemicals markets and economics	30

3	<p><b><u>Chemicals Plant Implementation</u></b>  The Contractor should demonstrate experience with the implementation of large-scale energy infrastructure projects (preferably methanol, fertilizer chemicals and petrochemicals projects) in developing countries, preferably in Africa and specifically in Nigeria</p>	30
4	<p><b><u>Personnel</u></b>  The Contractor shall have the availability of skills to work effectively in Nigeria – familiarity with institutions and regulatory policies</p>	15

Proposals that do not include all requested information may be considered non-responsive.

Price will not be a factor in contractor selection.

## **ANNEX 1**

Mr. Obafolajimi Otudeko  
Team Lead, Group Resources  
Honeywell Group Limited  
6B Mekunwen Road, Off Oyikan Abayomi Drive  
Ikoyi, Lagos

Email: [Obafolajimi.otudeko@honeywellgroup.com](mailto:Obafolajimi.otudeko@honeywellgroup.com)

\*Proposals shall be clearly marked “Gas-Based Industrial Complex”

U.S. Trade and Development Agency (USTDA) Activity Number 2014-11010A:  
Gas-Based Industrial Complex

POC: Jennifer Van Renterghem, USTDA, 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901, Tel: (703) 875-4357, Fax: (703) 875-4009, Email: [RFPQuestions@ustda.gov](mailto:RFPQuestions@ustda.gov). Gas-Based Industrial Complex. The Grantee invites submission of qualifications and proposal data (collectively referred to as the "Proposal") from interested U.S. firms that are qualified on the basis of experience and capability to develop a pre-Feasibility Study (“Study”) to assess the various types of fertilizer and petrochemical facilities that could be included in Honeywell Group Limited’s (“Grantee”) proposed gas-based industrial complex (“Project”) in Nigeria.

As Nigeria’s middle class flourishes, the demand for fertilizers and petrochemical products is increasing in Nigeria. In this context, USTDA is supporting the Grantee with grant funding to support the early-stage development of the Project as a means to connect with U.S. expertise and to facilitate the Grantee’s entry into the fertilizer and petrochemical sector.

The Study will evaluate various types of facilities which could produce different chemical outputs, including: (1) methanol (2) fertilizer chemicals such as urea and ammonia, and (3) petrochemicals such as ethylene, propylene, and/or benzene products. The Study will also develop a simulation model(s) that will provide the Grantee with recommendations on which of these facilities should be included in the Project, the size/scale of these facilities, the sources of feedstock for the facilities, and a site location for the Project. In addition, the Study will include a market survey on the current demand of the different chemical outputs which could result from the Project. The market survey will assess the domestic and international markets for the potential chemical outputs of the facilities, as well as the capital costs required, potential U.S. suppliers, and any potential barriers to the Project. The Study will also include at least one training session for a minimum of three days in the United States to cover topics of high interest to the Grantee. The training will provide hands-on human capacity building related to fertilizer and petrochemical industry planning, technologies, and international business practices to the Grantee’s staff.

The U.S. firm selected will be paid in U.S. dollars from a combination of a US\$257,000 grant to the Grantee from USTDA and a US\$257,000 cash cost share from the Grantee, bringing the total budget of the Study to US\$514,000.

A detailed Request for Proposals (RFP), which includes requirements for the Proposal, the Terms of Reference, and portions of a background desk study report are available from USTDA, at 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901. To request the RFP in PDF format, please go to: <https://www.ustda.gov/businessopps/rfpform.asp>. Requests for a mailed hardcopy version of the RFP may also be faxed to the IRC, USTDA at 703-875-4009. In the fax, please include your firm's name, contact person, address, and telephone number. Some firms have found that RFP materials sent by U.S. mail do not reach them in time for preparation of an adequate response. Firms that want USTDA to use an overnight delivery service should include the name of the delivery service and your firm's account number in the request for the RFP. Firms that want to send a courier to USTDA to retrieve the RFP should allow one hour after faxing the request to USTDA before scheduling a pick-up. Please note that no telephone requests for the RFP will be honored. Please check your internal fax verification receipt. Because of the large number of RFP requests, USTDA cannot respond to requests for fax verification. Requests for RFPs received before 4:00 PM will be mailed the same day. Requests received after 4:00 PM will be mailed the following day. Please check with your courier and/or mail room before calling USTDA.

Only U.S. firms and individuals may bid on this USTDA financed activity. Interested firms, their subcontractors and employees of all participants must qualify under USTDA's nationality requirements as of the due date for submission of qualifications and proposals and, if selected to carry out the USTDA-financed activity, must continue to meet such requirements throughout the duration of the USTDA-financed activity. All goods and services to be provided by the selected firm shall have their nationality, source and origin in the U.S. or host country. The U.S. firm may use subcontractors from the host country for up to 20 percent of the USTDA grant amount. Details of USTDA's nationality requirements and mandatory contract clauses are also included in the RFP.

Interested U.S. firms should submit their Proposal directly to the Grantee by 5:00 PM (Lagos Time), May 2, 2014 at the above address. Evaluation criteria for the Proposal are included in the RFP. Price will not be a factor in contractor selection, and therefore, cost proposals should NOT be submitted. The Grantee reserves the right to reject any and/or all Proposals. The Grantee also reserves the right to contract with the selected firm for subsequent work related to the project. The Grantee is not bound to pay for any costs associated with the preparation and submission of Proposals.

## ANNEX 2

***INTRATECH inc.***

**Desk Study: Honeywell Gas Based Industrial Project - Nigeria**

**Contract Number: TDA-PO201311295**

**U.S. TRADE AND DEVELOPMENT AGENCY**

***PUBLIC MARKET REPORT***

*February 24, 2014*

**Submitted by**

***INTRATECH inc.***

**1350 Beverly Road Suite 115/320**

**McLean VA. 22101**

**(703) 680-2192**



This report was funded by the U.S. Trade and Development Agency (USTDA), an agency of the U.S. Government. The opinions, findings, conclusions, or recommendations expressed in this document are those of the author(s) and do not necessarily represent the official position or policies of USTDA. USTDA makes no representation about, nor does it accept responsibility for, the accuracy or completeness of the information contained in this report.



## **The U.S. Trade and Development Agency**

The U.S. Trade and Development Agency helps companies create U.S. jobs through the export of U.S. goods and services for priority development projects in emerging economies. USTDA links U.S. businesses to export opportunities by funding project planning activities, pilot projects, and reverse trade missions while creating sustainable infrastructure and economic growth in partner countries.

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# Honeywell Gas Based Industrial Project- Nigeria

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## A. Executive Summary.

While Nigeria has amply oil and gas feedstocks and has a large potential market of 180 million people it has in the past been unable to develop a petrochemical sector commensurate with its potential and needs. Meanwhile growth in the petrochemicals sector and particularly in the chemicals and manufacturing segments is something the country desperately needs for its industrial development. Similarly agricultural fertilizers and chemicals are also in great need since increasing population together with a rapidly rising middle class will put pressure on improving the productivity of Nigeria's agricultural sector.

In the past, the lack of development of a petrochemical sector in Nigeria can be attributed to a number of factors, the main being:

- While Nigeria has had ample natural gas, it lacked the will and infrastructure to gather this gas and transport it to where it is needed. This has been a problem for both the power and petrochemical sectors;
- Nigeria has three petrochemical plants and one fertilizer plant, all of which until recently were subsidiaries of Nigerian National Petroleum Corporation (NNPC). In the past these plants have suffered serious operations and maintenance problems resulting in extensive shutdowns and low output.

A number of recent changes in Nigeria point to a turnaround in the outlook for the petrochemical sector. Firstly, the highly successful privatization of the Eleme Petrochemical Company Ltd, EPCL, (olefins production) and the NAFCON fertilizer plant, awoke the Government to the true potential of the petrochemical sector in Nigeria.

As a result an industrial investment program 'The Gas Revolution, Rebirth of Nigeria's Industrialization' was launched by President Goodluck Jonathan, in March 2011. President Jonathan said the gas project is meant to fast-track Nigeria's industrial rebirth, which would see domestic gas supply rising to over 10 billion cubic feet per day by 2020 from the current level of 1 billion cubic feet per day. Based on the agenda, it is the expectation that by 2014, Nigeria would be positioned as the regional hub for gas-based industries of fertilizers, petrochemicals and methanol.

The Federal Government expects that the full implementation of the entire Gas Master Plan will result in about \$25 billion worth of investments in gas processing, transmission and downstream gas utilization projects. This includes the establishment of one major petrochemical plant, two fertilizer plants, five fertilizer blending plants, a methanol plant and a liquefied petroleum gas distribution plant.

The response to this initiative by the private sector has been the announcement of three fertilizer plants, and a major grass roots refinery with a total investment of over \$12 billion. This Project will look at defining potential investments in: a) an olefins based petrochemical complex, b) an ammonia/urea production facility, and/or c) a grass roots methanol plant. Total capital investment in these facilities could range between \$700 million and \$5 billion which would translate into between \$250 million to \$1.5 billion of potential U.S. Exports.

# Honeywell Gas Based Industrial Project- Nigeria

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## **B. Market in the Sector and Host Country**

### *Current market conditions*

For any country, having a large indigenous petrochemical-producing industry leads to raised prosperity, improved average standard-of-living for the population and the introduction of associated modern-technology locally. For a successful petrochemical industry to develop however, there are three basic requirements: a) a large market; b) inexpensive feedstock; and c) competent enterprise to link the two and operate a complex technological installations. While Nigeria has amply oil and gas feedstocks and has a potential large market of 180 million people it has in the past been unable to develop a petrochemical sector commensurate with its potential and needs.

Growth in the petrochemicals sector and particularly in the chemicals and manufacturing segments of the business is something the country really needs for its industrial development. Similarly agricultural fertilizers and chemicals are also in great need. Agriculture represents over 40 percent of Nigeria's economic activity, and is the country's largest employer. According to the World Bank/IFC, the sector has suffered from a lack of investment, resulting in yields of less than half its potential. Agriculture is expected to continue to be the main driver of growth in the short to medium term, especially through agricultural transformation. Nigeria is a net importer of agricultural produce with a food import bill of about \$6.25 billion annually. Increasing population together with a rapidly rising middle class will put pressure on improving the productivity of Nigeria's agricultural sector as well as petrochemical demand for industrial development.

### *Identification of the major stakeholders,*

Nigeria has three petrochemical plants and one fertilizer plant, all of which were until recently subsidiaries of Nigerian National Petroleum Corporation, NNPC,

- Eleme Petrochemical Company Ltd, EPCL, located in Port Harcourt;
- Warri Refining and Petrochemical Company Ltd, WRPC;
- Kaduna Refining and Petrochemical Company Ltd, KRPC;
- Notore Chemical Industries Limited (previously NAFCON a NNPC subsidiary).

Reportedly all three plants have suffered problems with operations and low output in the past. The Eleme Petrochemical Plant for example was reported to have been shut down for two years being unable to carry out proper maintenance. The Warri and Kaduna are also reported to have serious operational problems and shutdowns. Another problem has been problems with the supply of natural gas and natural gas liquids feedstock to the existing Eleme facilities and lack of infrastructure for gathering and supplying feedstock for new facilities.

In 2006, the Eleme Petrochemical Company, previously owned and operated by NNPC, was privatized with a group of investors led by Indorama - an Indonesian company - have a 75% stake in the company, the balance still owned by NNPC. The privatization is considered to be Nigeria's most successful. According to the company EPCL is now running at 100% capacity and is an illustration what the Nigerian petrochemical industry is capable off and has shown Nigeria to be a potential producer and exporter of petrochemicals. NAFCOM was privatized in 2005.

# Honeywell Gas Based Industrial Project- Nigeria

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## *Projected investments in the sector*

One of the problems that Nigeria has had was that while Nigeria has had ample natural gas, but it has lacked the will and infrastructure to gather this gas and transport it to where it is needed. This has been a problem for both the power and petrochemical sectors. This is now been remedied under an industrial investment program ‘The Gas Revolution, Rebirth of Nigeria’s Industrialization’ launched by President Goodluck Jonathan, in March 2011. The Federal Government expects \$10 billion of foreign investment in new plants in the petrochemical and fertilizer industries. The full implementation of the entire Gas Master Plan will also result in about \$25 billion worth of investments in gas processing, transmission and downstream gas utilization projects. This will facilitate the establishment of one major petrochemical plant, two fertilizer plants, five fertilizer blending plants, a methanol plant and a Liquefied Petroleum Gas distribution plant.

President Jonathan said the gas project is meant to fast-track Nigeria’s industrial rebirth, which would see domestic gas supply rising to over 10 billion cubic feet per day by 2020 from the current level of 1 billion cubic feet per day. “Based on the agenda, it is our expectation that by 2014, we would have positioned Nigeria as the regional hub for gas-based industries of fertilizers, petrochemicals and methanol,” Jonathan stated.

The combination the Gas Plan and the demonstration by the Indorama-Eleme Petrochemical Company of what can be done by the private sector, has given rise to a flurry of interest by the private sector in participating in this potential petrochemical expansion. A number of plants have recently been announced, including:

- The African Development Bank (AfDB) has approved a senior loan of \$100 million to Indorama Eleme Fertilizer & Chemicals Limited (IEFCL) to build and operate a gas to urea fertilizer plant located in Port Harcourt, Nigeria, that will serve markets in Benin, Brazil, Ghana, India, Nigeria, South Africa;
- Indian firm, Nagarjuna Fertilizers and Chemicals Limited (NFCL) has signed an agreement with the Nigerian Government to set up petrochemical fertilizer plants in the country. NFCL will team up with US oil major Chevron Nigeria Limited to construct five fertilizer blending factories in different geopolitical zones of the country;
- Supporting agribusiness is a key priority for IFC in Africa as it generates employment and promotes economic development. IFC will help Saro AgroSciences, implement environmental and social standards in the crop protection sector and reduce the country's food import bill, which is one of the highest in Africa.
- The Dangote Group signed a combined \$ 9.05 billion facility agreement with a consortium of local banks and international investors for the establishment of a refinery, and petrochemicals cum fertilizer complex in Nigeria. The complex to be located at the OK-LNG Free Trade Zone, between Ogun and Ondo states, as the largest industrial complex in Nigeria’s history. (Project had effectively started with the award of the Engineering, Procurement and Construction, EPC, contract to Saipem of Italy for the fertilizer plant).

# Honeywell Gas Based Industrial Project- Nigeria

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## *Existing or expected sector regulations,*

The major regulatory requirements that could act as a hurdle to this project are the acquisition of the necessary feedstock – natural gas and/or natural gas liquids. There is currently some uncertainty in the upstream industry due to the delay in passing a bill that will set out the new commercial/regulatory parameters - the Petroleum Industry Bill (PIB). However, it should be noted that deals are still being done under the current arrangement.

The fragmented nature of supply has implications for gas gathering costs, and impacts the long-term availability of gas required to support large gas based complexes. This distribution of gas resources, which is characteristic of gas reserves in Nigeria, has largely been the root cause of the low level of gas based industrial development domestically.

The advent of a Gas Aggregator, in the form of the Gas Aggregator Company of Nigeria (GACN), with responsibility for gathering gas from numerous producers, and reselling same to large end users such as petrochemical facilities is a welcome development. This is greatly expected to simplify the gas contractual negotiations and agreements process. For one, the gas consumer now has only one entity to deal with for off take, as opposed to numerous individual producers with their own corporate cultures and processes.

Up till now, GACN has allocated gas for power projects and is also believed to have allocated gas for the Eleme and proposed Nagarjuna fertilizer projects. At present there is no particular timeline for petrochemical facilities. While the agglomeration and possible transportation of natural gas per se is clearly in the GACN's mandate, the agglomeration of feedstocks such as ethane and/or condensates for chemical may not be covered by the GACN.

## **C. U.S. Export Potential.**

The current Nigerian expansion plans call for the construction of at least three fertilizer plants (Eleme-Indorama, Nagarjuna Fertilizers, and Dangote). In addition the expansion plans call for the construction of a major grass roots oil refinery (Dangote Group). Based on the GON's announced ambitions, they are envisaging the further construction of an olefins complex and possible domestic production of methanol. Should these two facilities go ahead the potential U.S. export of equipment and services could amount to between \$700 million and \$2 billion. A rough estimates of the type of services goods and services that would be needed are shown below:

## Honeywell Gas Based Industrial Project- Nigeria

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<b>Steam Cracker – Ethylene Unit</b>	
Equipment Category	US\$ Million
Furnaces	\$232.4
Shell & Tube Exchangers	\$86.3
Towers, Reactors, Vessels	\$212.5
Compressors	\$132.8
Engineering, Procurement Services, Project & Construction Management, License Fees	\$428.0
<b>Estimated U.S. Exports</b>	<b>\$1,092.0</b>

<b>Methanol Plant 3000MTPD</b>	
Equipment Category	US\$ Million
Furnaces	\$58.5
Shell & Tube Exchangers	\$21.7
Towers, Reactors, Vessels	\$53.5
Compressors	\$33.4
Engineering, Procurement Services, Project & Construction Management, License Fees	\$107.7
<b>Estimated US Exports</b>	<b>\$274.8</b>

### **E. Foreign Competition and Market Entry Issues.**

It is anticipated that U.S. firms will face strong competition for the expansion of the petrochemical sector in Nigeria, as European companies have strong trading ties with Nigeria and have previous experience in the Nigerian refining and petrochemical industry. For process technology, the primary competition would come from European firms. European (Lurgi, HaldoTopsoe, Saipem), Japanese (Toyo, JGC), Indian, and Korean engineering/construction firms (Daewoo would likely be the strongest competitors to U.S. firms for the engineering/construction and material supply.

## Honeywell Gas Based Industrial Project- Nigeria

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The Italian EPC companies (Snam Progetti, Technimont) have been especially evident, e.g. having been chosen for the recently announced Dangote refinery petrochemical project. It is anticipated that U.S. exports would be weak in certain equipment and services, such as:

- Electrical distribution and equipment
- Structural steel
- Piping
- Other bulk materials
- Construction labor

### **Equipment**

As far as equipment supply, the majority of the equipment can be supplied from non-U.S. sources. During the last decade the rapid expansion of the refining and petrochemical industry worldwide has kept the global equipment manufacturing market operating at full capacity. With the tight supply market, U.S. suppliers were able to compete successfully, even sometimes at higher cost than their European and Asian competitors. This was based on quality and assured delivery times rather than on cost. This is now expected to change with the current global economic downturn and foreign competition to American manufacturers will become more intense. For both ammonia/urea and ethylene units a major export items will be rotating equipment and especially compressors and associated turbines. Both types of units use very large compressors (GE, Dresser,). Apart from that pumps instrumentation and controls and in the case of ethylene the cracking furnaces are a major specialized component. So primarily technology licenses, furnaces and compressors, instrumentation and controls would be the most likely components.

## **ANNEX 3**



**U.S. TRADE AND DEVELOPMENT AGENCY  
Arlington, VA 22209-3901**

**NATIONALITY, SOURCE, AND ORIGIN REQUIREMENTS**

The purpose of USTDA's nationality, source, and origin requirements is to ensure the maximum practicable participation of American contractors, technology, equipment and materials in the prefeasibility, feasibility, and implementation stages of a project.

**USTDA STANDARD RULE (GRANT AGREEMENT STANDARD LANGUAGE):**

Except as USTDA may otherwise agree, the following provisions shall govern the delivery of goods and professional services funded by USTDA under the Grant Agreement:

- (a) the Contractor must be a U.S. firm;
- (b) the Contractor may use U.S. subcontractors without limitation;
- (c) employees of U.S. Contractor or U.S. subcontractor firms shall be U.S. citizens, non-U.S. citizens lawfully admitted for permanent residence in the United States or non-U.S. citizens lawfully admitted to work in the United States, except as provided pursuant to subpart (d) below;
- (d) up to twenty percent (20%) of the USTDA Grant amount may be used to pay for services performed by (i) Host Country subcontractors, and/or (ii) Host Country nationals who are employees of the Contractor;
- (e) a Host Country subcontractor may only be used for specific services from the Terms of Reference identified in the subcontract;
- (f) subcontractors from countries other than the United States or Host Country may not be used;
- (g) goods purchased for performance of the Study and associated delivery services (e.g., international transportation and insurance) must have their nationality, source and origin in the United States; and
- (h) goods and services incidental to Study support (e.g., local lodging, food, and transportation) in Host Country are not subject to the above restrictions.

## **NATIONALITY:**

### 1) Application

A U.S. firm that submits a proposal must meet USTDA's nationality requirements as of the date of submission of the proposal and, if selected, must continue to meet such requirements throughout the duration of the USTDA-funded activity. These nationality provisions apply to all portions of the Terms of Reference that are funded with the USTDA grant.

### 2) Definitions

A "U.S. firm" is a privately owned firm that is incorporated in the U.S., with its principal place of business in the U.S., and which is either (a) more than 50% owned by U.S. citizens and/or non-U.S. citizens lawfully admitted for permanent residence in the United States, or (b) has been incorporated in the U.S. for more than three (3) years prior to the issuance date of the request for proposals; has performed similar services in the U.S. for that three (3) year period; employs U.S. citizens in more than half of its permanent full-time positions in the U.S.; and has the existing capability in the U.S. to perform the work in question.

A partnership that is organized in the U.S., has its principal place of business in the U.S., and is more than 50% owned by U.S. citizens and/or permanent residents, qualifies as a "U.S. firm".

A nonprofit organization, such as an educational institution, foundation, or association, also qualifies as a "U.S. firm" if it is incorporated in the U.S. and managed by a governing body, a majority of whose members are U.S. citizens and/or permanent residents.

## **SOURCE AND ORIGIN:**

### Definitions

"Source" means the country from which shipment is made.

"Origin" means the place of production, through manufacturing, assembly or otherwise.

*Questions regarding these nationality, source and origin requirements may be addressed to the USTDA Office of General Counsel.*

*Version 01.17.2014*

## **ANNEX 4**



## GRANT AGREEMENT

This Grant Agreement is entered into between the Government of the United States of America, acting through the U.S. Trade and Development Agency (“USTDA”) and Honeywell Group Limited (“Grantee”). USTDA agrees to provide the Grantee under the terms of this Grant Agreement US\$257,000 (“USTDA Grant”) to fund the cost of goods and services required for a pre-feasibility study (“Study”) on the proposed gas-based industrial complex (“Project”) in Nigeria (“Host Country”).

### 1. USTDA Funding

The USTDA Grant to be provided under this Grant Agreement shall be used to fund the costs of a contract between the Grantee and the U.S. firm selected by the Grantee (“Contractor”) under which the Contractor will perform the Study (“Contract”). Payment to the Contractor will be made directly by USTDA on behalf of the Grantee with the USTDA Grant funds provided under this Grant Agreement.

### 2. Terms of Reference

The terms of reference for the Study (“Terms of Reference”) are attached as Annex I and are hereby incorporated by reference into this Grant Agreement. The Study will examine the technical, financial, environmental, and other critical aspects of the proposed Project. The Terms of Reference for the Study shall also be included in the Contract.

### 3. Standards of Conduct

USTDA and the Grantee recognize the existence of standards of conduct for public officials and commercial entities in their respective countries. Therefore, USTDA, the Grantee, and the Contractor shall not directly or indirectly provide, offer or promise to provide money or anything of value to any public official in violation of any United States or Host Country laws relating to corruption or bribery.

### 4. Grantee Responsibilities

- (A) The Grantee shall undertake its best efforts to provide reasonable support for the Contractor, such as local transportation, office space, and secretarial support.
- (B) In addition to the support provided for by Article 4(A) above and the USTDA funding provided under this Grant Agreement, the Grantee shall cover at least US\$257,000 of costs to complete the full Terms of Reference in Annex I of this Grant Agreement (“Grantee Cost Share”). The Grantee shall pay the Grantee Cost Share to the Contractor in cash in U.S. dollars in proportion to the funding being provided by USTDA and the Grantee, respectively (USTDA US \$257,000 : Grantee US \$257,000) and in accordance

with the procedures set forth in the Payment Schedule Requirements in Clause G(2) of the USTDA Mandatory Contract Clauses in Annex II of this Grant Agreement.

- (C) In addition to the support provided for by Articles 4(A) and 4(B) above, the Grantee shall be solely responsible for all costs relating to the travel costs, hotel costs, meal costs, and any other incidental costs of any Grantee training participants and all costs relating to the logistics regarding the Grantee training (as detailed in Task 10 of the Terms of Reference).

## **5. Contract Matters and USTDA's Rights as Financier**

### **(A) Grantee Competitive Selection Procedures**

Selection of the U.S. Contractor shall be carried out by the Grantee according to its established procedures for the competitive selection of contractors with advance notice of the procurement published online through *Federal Business Opportunities* ([www.fedbizopps.gov](http://www.fedbizopps.gov)). Upon request, the Grantee will submit these contracting procedures and related documents to USTDA for information and/or approval.

### **(B) USTDA's Right to Approve Contractor Selection**

The Grantee shall notify USTDA at the address of record set forth in Article 16 below upon selection of the Contractor to perform the Study. USTDA then shall notify the Grantee whether or not USTDA approves the Grantee's Contractor selection. Upon USTDA approval of the Grantee's Contractor selection, the Grantee shall notify in writing the U.S. firms that submitted unsuccessful proposals to perform the Study that they were not selected. The Grantee and the Contractor then shall enter into a Contract for performance of the Study.

### **(C) USTDA's Right to Approve Contract Between Grantee and Contractor**

#### **(1) Contract**

The Grantee and the Contractor shall enter into a Contract for performance of the Study. The Grantee (or the Contractor on the Grantee's behalf) shall transmit to USTDA, at the address set forth in Article 16 below, a photocopy of an English language version of the signed Contract or a final negotiated draft version of the Contract. USTDA then shall notify the Grantee and the Contractor whether or not USTDA approves the Contract.

#### **(2) Amendments and Assignments**

The Grantee or the Contractor may submit any proposed amendment to the Contract, including any proposed amendment to any annex thereto, or any proposed assignment of the Contract, to USTDA at the address set forth in Article 16 below. USTDA then shall notify the Grantee and the Contractor whether or not USTDA approves the proposed amendment or assignment.

**(D) USTDA Not a Party to the Contract**

It is understood by the parties that USTDA has reserved certain rights such as, but not limited to, the right to approve the terms of the Contract and any amendments thereto, including assignments, the selection of all contractors, the Terms of Reference, the Final Report, and any and all documents related to any Contract funded under the Grant Agreement. The parties hereto further understand and agree that USTDA, in reserving any or all of the foregoing approval rights, has acted solely as a financing entity to assure the proper use of U.S. Government funds, and that any decision by USTDA to exercise or refrain from exercising these approval rights shall be made as a financier in the course of funding the Study and shall not be construed as making USTDA a party to the Contract. The parties hereto understand and agree that USTDA may, from time to time, exercise the foregoing approval rights, or discuss matters related to these rights and the Project with the parties to the Contract or any subcontract, jointly or separately, without thereby incurring any responsibility or liability to such parties. Any approval or failure to approve by USTDA shall not bar the Grantee or USTDA from asserting any right they might have against the Contractor, or relieve the Contractor of any liability which the Contractor might otherwise have to the Grantee or USTDA.

**(E) Grant Agreement Controlling**

Regardless of USTDA approval, the rights and obligations of any party to the Contract or any subcontract thereunder must be consistent with this Grant Agreement. In the event of any inconsistency between the Grant Agreement and the Contract or any subcontract funded by the Grant Agreement, the Grant Agreement shall control.

**6. Disbursement Procedures**

**(A) USTDA Approval of Contract Required**

USTDA will make disbursements of USTDA Grant funds directly to the Contractor only after USTDA approves the Grantee's Contract with the Contractor.

**(B) Contractor Invoice Requirements**

The Grantee should request disbursement of funds by USTDA to the Contractor for performance of the Study by submitting invoices in accordance with the procedures set forth in the USTDA Mandatory Contract Clauses in Annex II.

**7. Effective Date**

The effective date of this Grant Agreement ("Effective Date") shall be the date of signature by both parties or, if the parties sign on different dates, the date of the last signature. In the event that only one signature is dated, such date shall constitute the Effective Date.

## **8. Study Schedule**

### **(A) Study Completion Date**

The completion date for the Study, which is September 30, 2014, is the date by which the parties estimate that the Study will have been completed.

### **(B) Time Limitation on Disbursement of USTDA Grant Funds**

Except as USTDA may otherwise agree, (i) no USTDA funds may be disbursed under this Grant Agreement for goods and services which are provided prior to the Effective Date of the Grant Agreement; and (ii) no USTDA funds may be disbursed more than four (4) years after the Effective Date of the Grant Agreement.

## **9. USTDA Mandatory Contract Clauses**

All contracts funded under this Grant Agreement shall include the USTDA Mandatory Contract Clauses set forth in Annex II to this Grant Agreement. All subcontracts funded or partially funded with USTDA Grant funds shall include the USTDA Mandatory Contract Clauses, except for Clauses B(1), G, H, I, and S.

## **10. Use of U.S. Carriers**

### **(A) Air**

Transportation by air of persons or property funded under this Grant Agreement shall be on U.S. flag carriers in accordance with the Fly America Act, 49 U.S.C. 40118, to the extent service by such carriers is available, as provided under applicable U.S. Government regulations.

### **(B) Marine**

Transportation by sea of property funded under this Grant Agreement shall be on U.S. carriers in accordance with U.S. cargo preference law.

## **11. Nationality, Source and Origin**

Except as USTDA may otherwise agree, the following provisions shall govern the delivery of goods and professional services funded by USTDA under the Grant Agreement:

- (a) the Contractor must be a U.S. firm;
- (b) the Contractor may use U.S. subcontractors without limitation;
- (c) employees of U.S. Contractor or U.S. subcontractor firms shall be U.S. citizens, non-U.S. citizens lawfully admitted for permanent residence in the United States or non-U.S. citizens lawfully admitted to work in the United States, except as provided pursuant to subpart (d) below;
- (d) up to twenty percent (20%) of the USTDA Grant amount may be used to pay for services performed by (i) Host Country subcontractors, and/or (ii) Host Country nationals who are employees of the Contractor;
- (e) a Host Country subcontractor may only be used for specific services from the Terms of Reference identified in the subcontract;
- (f) subcontractors from countries other than the United States or Host Country may not be used;
- (g) goods purchased for performance of the Study and associated delivery services (e.g., international transportation and insurance) must have their nationality, source and origin in the United States; and
- (h) goods and services incidental to Study support (e.g., local lodging, food, and transportation) in Host Country are not subject to the above restrictions.

USTDA will make available further details concerning these provisions upon request.

## **12. Taxes**

USTDA funds provided under this Grant Agreement shall not be used to pay any taxes, tariffs, duties, fees or other levies imposed under laws in effect in Host Country, except for taxes of a de minimis nature imposed on local lodging, food, transportation, or airport arrivals or departures. Neither the Grantee nor the Contractor will seek reimbursement from USTDA for taxes, tariffs, duties, fees or other levies, except for taxes of a de minimis nature referenced above.

## **13. USTDA Project Evaluation**

The parties will cooperate to assure that the purposes of the Grant Agreement are accomplished. For five (5) years following receipt by USTDA of the Final Report, the Grantee agrees to respond to any reasonable inquiries from USTDA about the status of the Project. Inquiries will include, but not be limited to, whether the Final Report recommendations have been or will be used to implement the Project, anticipated Project implementation timeline, and likely source of

financing. In addition, the Grantee agrees to notify USTDA any time the Grantee selects a new primary contact person for this Project during the five-year period referenced above.

#### **14. Recordkeeping and Audit**

The Grantee agrees to maintain books, records, and other documents relating to the Study and this Grant Agreement adequate to demonstrate implementation of its responsibilities under this Grant Agreement, including the selection of contractors, receipt and approval of Contract deliverables, and approval or disapproval of Contractor invoices for payment by USTDA. Such books, records, and other documents shall be separately maintained for three (3) years after the date of the final disbursement by USTDA. The Grantee shall afford USTDA or its authorized representatives the opportunity at reasonable times to review books, records, and other documents relating to the Study and the Grant Agreement.

#### **15. Representation of Parties**

For all purposes relevant to this Grant Agreement, the Government of the United States of America will be represented by the U. S. Ambassador to Host Country or USTDA and Grantee will be represented by its Chairman. The parties hereto may, by written notice, designate additional representatives for all purposes under this Grant Agreement.

#### **16. Addresses of Record for Parties**

Any notice, request, document, or other communication submitted by either party to the other under the Grant Agreement shall be in writing or through an electronic medium that produces a tangible record of the transmission, such as a facsimile or e-mail message, and will be deemed duly given or sent when delivered to such party at the following:

To: Mr. Obafolajimi Otudeko  
Team Lead, Group Resources  
6B Mekuwen Road  
Off Oyinkan Abayomi Drive  
Ikoyi, Lagos, Nigeria

Phone: 234-1-290-0525  
E-Mail: [obafolajimi.otudeko@honeywellgroup.com](mailto:obafolajimi.otudeko@honeywellgroup.com)

To: U.S. Trade and Development Agency  
1000 Wilson Boulevard, Suite 1600  
Arlington, Virginia 22209-3901  
USA

Phone: (703) 875-4357  
Fax: (703) 875-4009  
E-Mail: [africa@ustda.gov](mailto:africa@ustda.gov)

All such communications shall be in English, unless the parties otherwise agree in writing. In addition, the Grantee shall provide the Commercial or Economic Section of the U.S. Embassy in Host Country with a copy of each communication sent to USTDA.

Any communication relating to this Grant Agreement shall include the following fiscal data:

Appropriation No.:	11 14/15 1001
Activity No.:	2014-11010A
Reservation No.:	2014102
Grant No.:	GH201411102

### **17. Implementation Letters**

To assist the Grantee in the implementation of the Study, USTDA may, from time to time, issue implementation letters that will provide additional information about matters covered by this Grant Agreement. USTDA may also issue implementation letters to (i) extend the estimated completion date set forth in Article 8(A) above, or (ii) change the fiscal data set forth in Article 16 above. The parties may also use jointly agreed upon implementation letters to confirm and record their mutual understanding of matters covered by this Grant Agreement.

### **18. Grant Agreement Amendments**

Either party may submit to the other party at any time a proposed amendment to the Grant Agreement. A Grant Agreement amendment shall be effective only if it has been signed by both parties.

### **19. Termination Clause**

Either party may terminate this Grant Agreement by giving the other party written notice thereof. The termination of the Grant Agreement will end any obligations of the parties to provide financial or other resources for the Study, except for payments that may be made pursuant to Clause H of the USTDA Mandatory Contract Clauses set forth in Annex II to this Grant Agreement. This article and Articles 5, 12, 13, 14, and 21 of the Grant Agreement shall survive termination of the Grant Agreement.

### **20. Non-waiver of Rights and Remedies**

No delay in exercising any right or remedy accruing to either party in connection with the Grant Agreement shall be construed as a waiver of such right or remedy.

### **21. U.S. Technology and Equipment**

By funding this Study, USTDA seeks to promote the project objectives of the Host Country through the use of U.S. technology, goods, and services. In recognition of this purpose, the

Grantee agrees that it will allow U.S. suppliers to compete in the procurement of technology, goods and services needed for Project implementation.

## **22. Governing Law**

This Grant Agreement shall be governed by, and construed in accordance with, the applicable laws of the United States of America. In the absence of federal law, the laws of the State of New York shall apply.

## **23. Counterparts**

This Grant Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same agreement. Counterparts may be delivered via electronic mail or other transmission method and any counterpart so delivered shall be deemed to be valid and effective for all purposes.

**[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK]**

**IN WITNESS WHEREOF, the Government of the United States of America and Honeywell Group Limited, each acting through its duly authorized representative, have caused this Grant Agreement to be signed in the English language in their names and delivered as of the day and year written below. In the event that this Grant Agreement is signed in more than one language, the English language version shall govern.**

**For the Government of the  
United States of America**

By: 

Date: 3/20/2014

Witnessed:

By: 

**For  
Honeywell Group Limited**

By: 

Date: 20 March 2014.

Witnessed:

By: 

**Annex I -- Terms of Reference**

**Annex II -- USTDA Mandatory Contract Clauses**

## Annex I

### **Terms of Reference**

The purpose of this pre-feasibility study ("Study") is to evaluate and develop plans in support of Honeywell Group Limited ("Grantee") for the proposed gas-based industrial complex project in Nigeria ("Project"). The Study shall evaluate various types of facilities which could produce different chemical outputs, including: (1) methanol (2) fertilizer chemicals such as urea and ammonia, and (3) petrochemicals such as ethylene, propylene, and/or benzene products. The Study shall also develop a simulation model(s) that shall provide the Grantee with recommendations on which of these facilities should be included in the Project, the size/scale of these facilities, the sources of feedstock for the facilities, and a site location for the Project. In addition, the Study shall include a market survey on the current demand of the different chemical outputs which could result from the Project. The market survey shall assess the domestic and international markets for the potential chemical outputs of the facilities, as well as the capital costs required, potential U.S. suppliers, and any potential barriers to the Project. The Study shall provide the Grantee with training related to the international fertilizer and petrochemical industry and the economics of fertilizer and petrochemical production, including, but not limited to investment requirements, costs of production, and the pricing of these outputs.

Key components of the Study include, but are not limited to, the following:

1. An evaluation of the economic and technical feasibility operating facilities in Nigeria that produce methanol, fertilizer chemicals such as ammonia and urea, and/or petrochemicals;
2. An evaluation of the supply and demand for fertilizer and/or petrochemical outputs in the domestic and regional markets and other identified international markets for the Project;
3. The development of an short-term and long-term strategy for the production and sale of methanol, fertilizer chemicals such as ammonia and urea, and/or petrochemicals by the Grantee in Nigeria; and
4. Grantee training to enhance the level of understanding by the Grantee's staff of fertilizer and petrochemical strategic planning activities to support the Project.

The Contractor shall perform the following tasks:

#### **Task 1 – Document Review, Kickoff Meeting, Stakeholder Consultations and Work Plan**

The Contractor shall travel to Nigeria to meet with the Grantee to (a) review, discuss, and refine overall strategy, scope, objectives, and deliverables of the Study, (b) define and clarify the Grantee's and Contractor's roles and responsibilities with respect to the Study, and (c) discuss the Grantee's short- and long-term objectives for the Project.

The Contractor and the Grantee shall also review the following components of the Study: the Contractor's approach and methodology for specific tasks under this Terms of Reference; the

Contractor's documentation and project management reporting requirements under this Terms of Reference; and the Contractor's complete work plan for the Study.

The Grantee shall provide the Contractor with any data, which (a) is readily accessible or in the possession of the Grantee and (b) could affect decision-making for the Project. The Contractor shall review the data received from the Grantee regarding the Project and determine the extent such data can be utilized in subsequent tasks of the Study. The Contractor shall also identify any gaps in the data provided by the Grantee and determine if the collection of additional data shall be required. The Contractor shall make recommendations on the procedures and timeframe for addressing such gaps. Subject to the Grantee's consent, the Contractor shall proceed with collecting the additional data required. The Contractor's data collection shall include, but not be limited to the following:

- Current petroleum, methanol, fertilizer, and petrochemical activities in Nigeria;
- Current plans for any gas- and oil-based processing facilities including, but not limited to liquefied natural gas ("LNG") and gas-to-liquids ("GTL") gas processing facilities, and petrochemical and refining facility developments in Nigeria that could provide feedstock for the Project;
- Any special considerations (e.g. incentives or disincentives) in Nigeria regarding the development of facilities that produce methanol, fertilizer and petrochemical (e.g. taxes, tariffs, subsidies);
- Availability of current and future sources of feedstock, including the potential for feedstock to be supplied by the Government of Nigeria, international oil companies, and other independent sources;
- Potential Project site locations; and
- Technologies to be considered under the Study in methanol, fertilizer, and/or petrochemical production.

Based on a review of the collected data, the Contractor shall make recommendations to the Grantee on the following:

- The geographical area(s) in Nigeria to be considered as Nigeria's domestic markets ("Domestic Markets");
- The geographical area(s) in Africa to be considered as Nigeria's regional markets under the Study ("Regional Markets"); and
- The international area(s) beyond the Domestic Markets and Regional Markets to be considered as potential markets for export for Nigeria's fertilizer and petrochemical chemical outputs under the Study ("International Markets").

*Task 1 Deliverable:* The Contractor shall prepare a report including all work performed under Task 1, including, but not limited to any identified gaps in data and the Contractor's recommendations for addressing such gaps, the Contractor's collection of additional data required, and the Contractor recommendations regarding target markets. The Task 1 Deliverable shall be included in the Final Report.

## **Task 2 - Market Research and Analysis**

*Subtask 2a: Market Research and Analysis*

The Contractor shall perform market research and analysis for the Domestic Markets, Regional Markets, and International Markets for the Project, including, but not limited to the following components:

- An assessment of the demand and supply of relevant products, including, but not limited to methanol, ammonia, urea, ethylene, propylene, and/or benzene products for the Project;
- An assessment of the current level of market saturation for fertilizer and petrochemical chemical outputs, including, but not limited to methanol, ammonia, urea, ethylene, propylene, and/or benzene products, in the Domestic Markets, Regional Markets, and International Markets; and
- A determination of the level of unfulfilled demand for fertilizer and petrochemical chemical outputs, including, but not limited to methanol, ammonia, urea, ethylene, propylene, and/or benzene products, in the Domestic Markets, Regional Markets, and International Markets.

In addition, the Contractor shall analyze the current and potential competition in the Domestic Market, the Regional Markets and the International Markets in the fertilizer and petrochemical sector. The Contractor's analysis shall include, but not be limited to the following:

- Any major competitors (e.g. current operators or developers in the fertilizer and/or petrochemical sector in the Domestic Markets, the Regional Markets, and/or the International Markets);
- The key facilities and assets in operation or under development by any competitors discussed above; and
- Any relevant strengths and weaknesses of the competitors and facilities discussed above in comparison to the Grantee's proposed Project and chemical outputs.

*Subtask 2b: Market Forecast*

Based on the market research and analysis, the Contractor shall prepare a short-term (five-year period) and long-term (ten-year period) market forecast for the relevant products, including, but not limited to the following components:

- Price patterns of the relevant products including, but not limited to methanol, ammonia, urea, ethylene, propylene, and/or benzene products, for the Project;
- Projection of the future supply of relevant products outside of the Project, including, but not limited to methanol, ammonia, urea, ethylene, propylene, and/or benzene products, in the Domestic Markets, Regional Markets, and International Markets, which could affect the demand for the Project; and
- Demand projection of relevant products, including, but not limited to methanol, ammonia, urea, ethylene, propylene, and/or benzene products, in the Domestic Markets, Regional Markets, and International Markets.

In addition, the Contractor shall assess how the Project could displace any imports of fertilizer and/or petrochemical products into Nigeria and the development of the local market over five to 10 years, and how this could affect the Project.

Based on the above market research and analysis and the market forecast, the Contractor shall provide a recommendation to the Grantee that shall include:

- The type of facility that should be built for the Project; and
- A ranking of the chemical outputs that could be produced for the Project such as methanol, ammonia, urea, ethylene, propylene, and/or benzene products. Among other factors, the ranking should take into account, but not be limited to, market saturation, unfulfilled demand, major competitors, price patterns, future supply projections, and future demand projections.

The Contractor shall also develop a strategy for Grantee's entry into the Domestic Markets, Regional Markets, and International Markets to meet unsatisfied demand previously identified by the Contractor.

*Task 2 Deliverable:* The Contractor shall prepare a report including all work performed under Task 2, including, but not limited to the market research and analysis, the market forecast, and the Contractor's recommendation for the facility for the Project based on the Contractor's market research and analysis, and the market forecast. The Task 2 Deliverable shall be included in the Final Report.

### **Task 3 - Feedstock Analysis**

The Contractor shall review oil and gas feedstock sources in Nigeria. Based on this information, the Contractor shall provide the Grantee with a list of all relevant oil and gas feedstock sources in Nigeria. The Contractor shall determine the current, short-term (five-year period) and long-term (ten-year period) feedstock requirements for the Project. The Contractor shall also determine what feedstock is currently available for the Project and the extent such feedstock will meet the requirements of the Project.

The Contractor shall review and analyze the current status of any relevant Federal Government of Nigeria, independent oil company ("IOC") and any other independent initiatives to (a) agglomerate, gather, transport, price, administer, and make available dry natural gas and potential natural gas liquids, including, but not limited to ethane and propane, and (b) condense these products in commercial quantities that would be needed to support the production of the proposed products to be manufactured under this Project.

The Contractor's analysis shall include natural gas and crude oil derived feedstock from direct petroleum production, LNG, GTL, other refined oil and gas products, and any other relevant feedstock production operations in Nigeria.

Based on the above feedstock analysis, the Contractor shall provide a recommendation to the Grantee that shall include:

- The type of facility that should be built for the Project; and
- A ranking of the chemical outputs that could be produced for the Project such as such as methanol, ammonia, urea, ethylene, propylene, and/or benzene products. Among other factors, the ranking should take into account, but not be limited to, currently available feedstock, and any initiatives to agglomerate, gather, transport, price, administer, and make available feedstock that could meet the requirements of the Project.

*Task 3 Deliverable:* The Contractor shall prepare a report including all work performed under Task 3, including, but not limited to the Contractor's recommendation for the type of facility for the Project based on the Contractor's feedstock analysis. The Task 3 Deliverable shall be included in the Final Report.

#### **Task 4 - Site Location**

Based on Tasks 1-3, the Contractor shall visit, inspect, and analyze the Grantee's proposed site location(s). In addition, the Contractor shall identify, visit, inspect, and analyze other relevant and viable potential site locations. After completing visits, inspections, and analysis all of the relevant and viable potential site locations, the Contractor shall prepare a list of up to three suitable site locations. The Contractor's selection of such suitable site locations shall, at a minimum, take into account the site(s) proximity to feedstock sources; the likely chemical outputs that could be produced at the site(s); any security concerns for the feedstock, chemical outputs, or Grantee personnel at the site(s); any relevant environmental or social factors which could affect the Project at the site(s); any particular regulatory factors which could affect the Project at the site(s); and the cost of the site(s).

Upon completion of all analysis regarding site locations proposed by both the Grantee and Contractor, the Contractor shall rank the site locations in order of desirability, and provide a recommendation of the optimal site location to the Grantee. The Contractor's ranking shall be based on several factors, including, but not limited to:

- General evaluation of the advantages and disadvantages of each of the site locations;
- Proximity to feedstock sources;
- The likely chemical outputs that could be produced at the site;
- Any security concerns for Grantee personnel, feedstock, facility, or chemical outputs, including, but not limited to the potential for theft, vandalism, and destruction of property;
- Any relevant environmental factors;
- Any relevant social factors, including, but not limited to the displacement of individuals and communities;
- Any particular regulatory issues that may impact the site; and
- The cost of the site location.

Based on the Contractor's recommendation, the Grantee shall select a specific site location for the Project.

*Task 4 Deliverable:* The Contractor shall prepare a report including all work performed under Task 4, including, but not limited to, the Contractor's recommendation for the site location for the facility for the Project based on the Contractor's visits, inspections, and analysis of various proposed site locations. The Task 4 Deliverable shall be included in the Final Report.

#### **Task 5 - Logistical Consideration**

Based on Task 3 and Task 4, the Contractor shall calculate and provide the Grantee with the estimated transportation costs associated with transporting the potential feedstock to the site location selected by the Grantee in Task 4. Further, the Contractor shall calculate and provide the Grantee with the estimated transportation costs associated with transporting the potential chemical outputs to be produced under the Project to the Domestic Market, to the Regional Markets and to the International Markets. The Contractor shall account for various forms of transportation, including, but not limited to pipeline, rail, road, and ship. The Contractor shall recommend the optimal mode of feedstock transportation to the Grantee.

The Contractor shall also consider and determine if any logistical infrastructure may be necessary to link the Project to the feedstock source options. If logistical infrastructure is necessary, the Contractor shall identify what infrastructure needs to be in place for the Project and provide a recommendation to the Grantee as to how the logistical infrastructure should be implemented. The Contractor shall also identify and recommend to the Grantee any relationships that may need to be developed with relevant parties, including, but not limited to depots, brokers, distributors, offtakers, etc. for the Project.

*Task 5 Deliverable:* The Contractor shall prepare a report including all work performed under Task 5, including, but not limited to the Contractor's calculations for transportation costs associated with the potential feedstock and potential chemical outputs, the Contractor's recommendation for logistical infrastructure, and the Contractor's recommendation for potential relationships for the Grantee. The Task 5 Deliverable shall be included in the Final Report.

#### **Task 6 - Local Investment and Operational Factors**

The Contractor shall review any recent and/or relevant projects in Nigeria such as the Indorama Eleme fertilizer facility, the Dangote Industries petroleum refinery and petrochemical facilities, the Escravos GTL plant, and other similar projects. The Contractor's review shall include, but not be limited to factors such as the projects' relative capital cost requirements, the projects' financing arrangements, the availability of skills for construction and subsequent operation for these projects, reasons for project execution delays and cost overruns, any social government regulatory delays in implementation for the projects, and any security and/or political factors in the locations for the projects.

Based on the Contractor's review of recent and/or relevant projects in Nigeria, the Contractor shall outline any relevant issues that could affect the development of the Project. The Contractor shall provide the Grantee with a roadmap outlining ways that these issues can be addressed, circumvented, and/or mitigated.

*Task 6 Deliverable:* The Contractor shall prepare a report including all work performed under Task 6, including, but not limited to the Contractor's review of any potential issues determined by other recent and/or relevant projects in Nigeria. The Task 6 Deliverable shall be included in the Final Report.

### **Task 7 – Petrochemical Sector Simulation of Proposed Facilities**

Based on the data collected in Tasks 1 – 6, the Contractor shall prepare a fertilizer and petrochemical industry computer simulation model(s), subject to the Grantee's approval, which simulates the Project at the site location selected by the Grantee under Task 4. In the computer simulation model(s), the Contractor shall take into account all data collected in previous tasks such as:

- The technical requirements and economic implications of a facility that produces (1) methanol (2) fertilizer chemicals such as urea and ammonia, and/or (3) petrochemicals such as ethylene, propylene, and/or benzene products in Nigeria;
- The requirements needed for the facility to produce the optimal quantity of chemical outputs to meet the demand of the Domestic Markets, Regional Markets and International Markets;
- The requirements needed for the facility to utilize feedstock inputs, including, but not limited to currently available feedstock, and any initiatives to agglomerate, gather, transport, price, administer, and make available feedstock that could meet the requirements of the Project;
- The requirements for necessary logistical infrastructure for potential feedstock and potential chemical outputs; and
- Any potential issues determined by other recent and/or relevant projects in Nigeria.

The Contractor shall carry out simulations to assess the various types of fertilizer and petrochemical facilities that could be included in the Grantee's Project, including facilities that could produce: (1) methanol, (2) fertilizer chemicals such as urea and ammonia, and (3) petrochemical such as ethylene, propylene, and/or benzene products.

The Contractor shall consider at a minimum the following options in the simulation model:

1. Construction of a gas-based industrial complex to produce methanol;
2. Construction of a gas-based industrial complex to produce fertilizers such as ammonia and urea;
3. Construction of olefins and aromatics petrochemical complexes; and
4. Any other relevant options recommended by the Contractor and approved by the Grantee.

The simulation model shall determine for the Grantee the optimum size of the facility, site location(s), feedstock selections, chemical output mix, technical configuration of the facility, process flow schemes,<sup>1</sup> and projected revenue forecast for a period of twenty-five years for the

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<sup>1</sup> The process flow scheme outlines the transformation process of the feedstock to the chemical outputs.

Project. The simulation model shall also have the capability to determine investment requirements, production cost economics, infrastructure requirements and costs, and other factors needed to optimize the implementation of the Project.

The Contractor shall provide a copy of the simulation model(s) and all source documents to the Grantee.

*Task 7 Deliverable:* The Contractor shall prepare a report including all work performed under Task 7, including, but not limited to the simulation model(s). The Task 7 Deliverable shall be included in the Final Report.

### **Task 8 – Early Environmental Assessment**

The Contractor shall prepare an early environmental assessment on the various fertilizer and petrochemical facilities that could be developed under the Project that would be located at the site selected by the Grantee in Task 4. The Contractor shall identify the Project's impact on the environment and provide a roadmap to the Grantee outlining ways that any potential negative environmental impacts can be mitigated. The early environmental assessment shall consider international standards required by international financial institutions including the World Bank Group and the African Development Bank.

*Task 8 Deliverable:* The Contractor shall prepare a report including all work performed under Task 8, including, but not limited to the Contractor's roadmap as to how to mitigate potential negative environmental impacts. The Task 8 Deliverable shall be included in the Final Report.

### **Task 9 - Policy and Regulatory Issues**

Based on Tasks 1-8, the Contractor shall outline the current regulatory environment and requirements in Nigeria for the fertilizer and petrochemical sectors. The Contractor shall identify policy and/or legislative actions that could either act as potential barriers to the implementation of the Project or would be necessary for implementation of the Project. The Contractor's analysis shall include all pertinent documents that deal with import taxes, duties and fees, corporate and personal income taxes, and property and other taxes related to the implementation of the Project. The Contractor's analysis shall also include all permitting requirements, foreign participation regulations, regulations that impact environmental requirements, and any other regulatory issues that may have a significant impact on the Project, as well as reporting on the quality of service and supply standards required by the regulators.

The Contractor shall outline international standards for the fertilizer and petrochemical sectors and assess any disparities between the international standards and Nigeria's current regulatory environment. The Contractor shall determine if the disparities may become impediments to the Project and provide the Grantee with a roadmap outlining ways that these disparities can be mitigated.

*Task 9 Deliverable:* The Contractor shall prepare a report including all work performed under Task 9, including, but not limited to the Contractor's roadmap on regulatory issues. The Task 9 Deliverable shall be included in the Final Report.

### **Task 10 – Grantee Training**

Based on Tasks 1-9, and in consultation with the Grantee, the Contractor shall develop and deliver at least one training session for a minimum of three days in the United States to cover topics of high interest to the Grantee. The training, which shall be developed in close cooperation with the Grantee, shall provide hands-on human capacity building related to fertilizer and petrochemical industry planning, technologies, and international business practices to the Grantee's staff. As a part of the training, the Contractor shall introduce the Grantee to U.S. stakeholders in the U.S. fertilizer and petrochemical sector. The training shall also assist the Grantee in developing the human resources that will be needed for the Grantee's development of the Project.

The training course topics shall include, but are not limited to the following:

- Overview of the U.S. petrochemical sector;
- Overview of the U.S. fertilizer sector;
- Overview of the international fertilizer and petrochemical industry, the structure of the international fertilizer and petrochemical industry, and major players in the international fertilizer and petrochemical industry;
- Economics of fertilizer and petrochemical production, including investment requirements, costs of production, pricing, and rate of return;
- Major influencing factors, including, but not limited to feedstocks, technologies, and market considerations; and
- Review of simulation/modeling tools and data sources developed in Task 7, which includes the source documents from the simulation for the Grantee.

The Contractor shall develop and provide all course materials, provide training to the Grantee, and arrange any relevant meetings with U.S. companies in the United States in connection with the training. The Contractor shall also provide the Grantee with the list of contacts for these U.S. companies. The business name, point of contact, address, telephone number, and e-mail address shall be included for each identified party.

The Grantee shall be solely responsible for any travel costs, hotel costs, meal costs, and any other incidental costs of any training participants. The Grantee shall be solely responsible for all logistics regarding the training, including, but not limited to the provision of facilities for the training.<sup>2</sup>

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<sup>2</sup> All costs relating to the travel costs, hotel costs, meal costs, and any other incidental costs of any training participants and all costs relating to the logistics regarding the training will not be covered under the USTDA Grant funds or Grantee Cost Share. The Grantee shall be solely responsible for such costs.

*Task 10 Deliverable:* The Contractor shall prepare a report including all work performed under Task 10, including, but not limited to any training course materials. The Task 10 Deliverable shall be included in the Final Report.

### **Task 11 – Strategic Development Plan Analysis and Recommendations**

Based on Tasks 1-10, the Contractor shall perform economic, financial and technical analyses for the Project using an internationally acceptable methodology for such analyses. The Contractor's financial analyses of the Project shall be based on a standard methodology used by donors, such as the World Bank, the African Development Bank, and any other relevant investors as determined by the Contractor, and approved by the Grantee, for appraising investment projects. The Contractor shall calculate both the economic and financial internal rates of return for the recommended investments under a variety of different assumptions such as different interest rates, depreciation, licensing fees, import duties, etc. Based on this analysis, the Contractor shall recommend to the Grantee the optimal option(s) from the simulation model(s) in Task 7 for developing the Project, such as the optimum size and type of the facility, site location(s), feedstock selections, chemical output mix, technical configuration of the facility, process flow schemes, and projected revenue forecast.

The Contractor's recommendation and Project implementation strategy shall address potential opportunities and hurdles, including, but not limited to the identification of regional competition, potential foreign partners, alternative technologies, and other possibilities that could enhance/accelerate the fertilizer and petrochemicals sector in Nigeria and maximize the monetization of Nigeria's petroleum and human resources. This shall include an assessment of the strengths and weaknesses of Nigeria as a fertilizer and petrochemicals manufacturing center.

The Contractor shall provide the Grantee with an outline of the Contractor's recommendations for the Project's implementation strategy which may include:

- A recommended schedule for Project implementation, including recommendations for phasing, milestones, and prioritization of investments;
- An outline of all the steps the Grantee will need to take subsequent to the Study's completion and prior to project implementation, such as:
  - Environmental and social impact assessments that comply with local environmental and social requirements and those of multilateral lending agencies such as the World Bank and the African Development Bank;
  - Licensing, permitting, and other relevant legal and regulatory requirements;
  - Financial arrangements;
  - Procurements of goods and services;
  - Systems integration;
  - Operations and maintenance; and
  - Short- and long-term training requirements.
- An assessment of how the implementation of the Project will impact the Grantee's operations;
- Annual budget requirement for the Project;
- Technical and training needs to implement the Project;

- Any relevant changes to the Grantee's corporate structure that could bolster the implementation of the Project; and
- Any recommendations for a joint venture or partnership for the Grantee which may include a potential feedstock supplier, or operator in the fertilizer and petrochemical sector.

*Task 11 Deliverable:* The Contractor shall prepare a report including all work performed under Task 11, including, but not limited to the Contractor's outline of recommendations for the Project's implementation strategy. The Task 11 Deliverable shall be included in the Final Report.

### **Task 12 – U.S. Licensors, Major Equipment Suppliers, Operators and Service Companies**

The Contractor shall develop a detailed list of U.S. companies that could provide equipment, services, and technology to the Project. This shall include at a minimum:

- U.S. companies which can provide technology licenses for the individual components of the facility for the Project;
- Potential U.S. engineering and construction companies which can provide design, engineering, and construction services;
- U.S. project management and oversight companies;
- U.S. suppliers of equipment such as reactors, vessels, rotating equipment (compressors, turbines, pumps), instrumentation, and controls;
- U.S. suppliers and operators of safety facilities for the fertilizer and petrochemical sectors; and
- U.S. suppliers of environmental protection and compliance equipment.

The Contractor shall also prepare a detailed list of potential U.S. sources of services that the Grantee may need for the successful technical and commercial operations of the final installations in areas such as operating management, maintenance management, product quality control, and product marketing assistance.

These lists shall include (i) the possible U.S. sources of supply and/or services for the Project, (ii) a detailed description of relevant products, solutions and/or services to be provided, and (iii) contact information for the party or parties responsible for marketing/sales in Nigeria. The business name, point of contact, address, telephone number, and e-mail address shall be included for each identified party.

*Task 12 Deliverable:* The Contractor shall prepare a report including all work performed under Task 12, including, but not limited to the detailed list of U.S. companies that could provide equipment, services, and technology to the Project. The Task 12 Deliverable shall be included in the Final Report.

### **Task 13 – Final Report**

The Contractor shall prepare and deliver to the Grantee and USTDA a substantive and comprehensive final report of all work performed under these Terms of Reference ("Final

Report”). The Final Report shall be organized according to order of this Terms of Reference, and shall include all deliverables and documents that have been provided to the Grantee. The Final Report shall be prepared in accordance with Clause I of Annex II of the Grant Agreement.

## Annex II

### USTDA Mandatory Contract Clauses

#### A. USTDA Mandatory Clauses Controlling

The parties to this Contract acknowledge that this Contract is funded in whole or in part by the U.S. Trade and Development Agency ("USTDA") under the Grant Agreement between the Government of the United States of America acting through USTDA and Honeywell Group Limited ("Client"), dated \_\_\_\_\_ ("Grant Agreement"). The Client has selected \_\_\_\_\_ ("Contractor") to perform the pre-feasibility study ("Study") for the gas-based industrial complex ("Project") in Nigeria ("Host Country"). The Client and the Contractor are the parties to this Contract, and they hereinafter are referred to collectively as the "Contract Parties." Notwithstanding any other provisions of this Contract, the following USTDA Mandatory Contract Clauses shall govern. All subcontracts entered into by Contractor funded or partially funded with USTDA Grant funds shall include these USTDA Mandatory Contract Clauses, except for Clauses B(1), G, H, I, and S. In addition, in the event of any inconsistency between the Grant Agreement and the Contract or any subcontract thereunder, the Grant Agreement shall be controlling.

#### B. USTDA as Financier

##### (1) USTDA Approval of Contract

This Contract, and any amendment thereto, including any amendment to any annex thereto, and any proposed assignment of this Contract, must be approved by USTDA in writing in order to be effective with respect to the expenditure of USTDA Grant funds. USTDA will not authorize the disbursement of USTDA Grant funds until the Contract conforms to modifications required by USTDA during the Contract review process and the Contract has been formally approved by USTDA. To make this review in a timely fashion, USTDA must receive from either the Client or the Contractor an English language version of a final negotiated draft Contract or a signed Contract to the attention of the General Counsel's office at USTDA's address listed in Clause M below.

##### (2) USTDA Not a Party to the Contract

It is understood by the Contract Parties that USTDA has reserved certain rights such as, but not limited to, the right to approve the terms of this Contract and amendments thereto, including assignments, the selection of all contractors, the Terms of Reference, the Final Report, and any and all documents related to any contract funded under the Grant Agreement. The Contract Parties hereto further understand and agree that USTDA, in reserving any or all of the foregoing approval rights, has acted solely as a financing entity to assure the proper use of United States Government funds, and that any decision by USTDA to exercise or refrain from exercising these approval rights shall be made as a financier in the course of financing the Study and shall not be construed as making USTDA a party to the Contract. The Contract Parties hereto understand and agree that USTDA may, from time to

time, exercise the foregoing approval rights, or discuss matters related to these rights and the Project with the Contract Parties or the parties to any subcontract, jointly or separately; and in consideration of USTDA's role as financier, the Contract Parties further agree that USTDA's rights may be exercised without thereby incurring any responsibility or liability, in contract, tort, or otherwise, to the Contract Parties or the parties to any subcontract. Any approval or failure to approve by USTDA shall not bar the Client or USTDA from asserting any right they might have against the Contractor, or relieve the Contractor of any liability which the Contractor might otherwise have to the Client or USTDA.

### **C. Nationality, Source and Origin**

Except as USTDA may otherwise agree, the following provisions shall govern the delivery of goods and professional services funded by USTDA under the Grant Agreement:

- (a) the Contractor must be a U.S. firm;
- (b) the Contractor may use U.S. subcontractors without limitation;
- (c) employees of U.S. Contractor or U.S. subcontractor firms shall be U.S. citizens, non-U.S. citizens lawfully admitted for permanent residence in the United States or non-U.S. citizens lawfully admitted to work in the United States, except as provided pursuant to subpart (d) below;
- (d) up to twenty percent (20%) of the USTDA Grant amount may be used to pay for services performed by (i) Host Country subcontractors, and/or (ii) Host Country nationals who are employees of the Contractor;
- (e) a Host Country subcontractor may only be used for specific services from the Terms of Reference identified in the subcontract;
- (f) subcontractors from countries other than the United States or Host Country may not be used;
- (g) goods purchased for performance of the Study and associated delivery services (e.g., international transportation and insurance) must have their nationality, source and origin in the United States; and
- (h) goods and services incidental to Study support (e.g., local lodging, food, and transportation) in Host Country are not subject to the above restrictions.

USTDA will make available further details concerning these provisions upon request.

### **D. Recordkeeping and Audit**

The Contractor and subcontractors funded under the Grant Agreement shall maintain, in accordance with generally accepted accounting procedures, books, records, and other documents, sufficient to reflect properly all transactions under or in connection with the Contract. These books, records, and other documents shall clearly identify and track the use and expenditure of

USTDA funds, separately from other funding sources. Such books, records, and documents shall be maintained during the period of performance of work provided for by this Contract, and for a period of three (3) years after final disbursement by USTDA. The Contractor and subcontractors shall afford USTDA, or its authorized representatives, the opportunity at reasonable times for inspection and audit of such books, records, and other documentation.

#### **E. U.S. Carriers**

##### **(1) Air**

Transportation by air of persons or property funded under the Grant Agreement shall be on U.S. flag carriers in accordance with the Fly America Act, 49 U.S.C. 40118, to the extent service by such carriers is available, as provided under applicable U.S. Government regulations.

##### **(2) Marine**

Transportation by sea of property funded under the Grant Agreement shall be on U.S. carriers in accordance with U.S. cargo preference law.

#### **F. Workman's Compensation Insurance**

The Contractor shall provide adequate Workman's Compensation Insurance coverage for work performed under this Contract.

#### **G. Disbursement Procedures**

##### **(1) USTDA Approval of Contract**

Disbursement of Grant funds will be made only after USTDA approval of this Contract.

##### **(2) Payment Schedule Requirements**

A payment schedule for disbursement of Grant funds to the Contractor shall be included in this Contract. For each payment under the payment schedule, the Grantee shall pay the Grantee Cost Share directly to the Contractor in proportion to the funding being provided by USTDA and the Grantee, respectively (USTDA US \$257,000; Grantee US \$257,000). Such payment schedule must conform to the following USTDA requirements: (1) up to twenty percent (20%) of the total USTDA Grant amount may be used as a mobilization payment; (2) all other payments, with the exception of the final payment, shall be based upon Contract performance milestones; and (3) the final payment may be no less than fifteen percent (15%) of the total USTDA Grant amount, payable upon approval by USTDA of a Final Report that has been (i) prepared and submitted in accordance with the requirements set forth in Clause I below, and (ii) approved in writing by the Client in the manner provided for by Clause G(3)(b)(iii) below. Invoicing procedures for all payments are described below.

### **(3) Contractor Invoice Requirements**

USTDA will make all disbursements of USTDA Grant funds directly to the Contractor. The Contractor must provide USTDA with an ACH Vendor Enrollment Form (available from USTDA) with the first invoice. The Client shall request disbursement of funds by USTDA to the Contractor for performance of the Contract by submitting the following to USTDA:

#### **(a) Contractor's Invoice**

The Contractor's invoice shall include reference to an item listed in the Contract payment schedule, the requested payment amount, and an appropriate certification by the Contractor, as follows:

##### **(i) For a mobilization payment (if any):**

“As a condition for this mobilization payment, the Contractor certifies that it will perform all work in accordance with the terms of its Contract with the Client. The Contractor has received the *pro rata* payment due to the Contractor from the Client under this invoice, in accordance with the applicable Contract provisions and the terms and conditions of the USTDA Grant Agreement. To the extent that the Contractor does not comply with the terms and conditions of the Contract, including the USTDA Mandatory Contract Clauses contained therein, it will, upon USTDA’s request, make an appropriate refund to USTDA.”

##### **(ii) For Contract performance milestone payments:**

“The Contractor has performed the work described in this invoice in accordance with the terms of its Contract with the Client and is entitled to payment thereunder. The Contractor has received the *pro rata* payment due to the Contractor from the Client under this invoice, in accordance with the applicable Contract provisions and the terms and conditions of the USTDA Grant Agreement. To the extent the Contractor has not complied with the terms and conditions of the Contract, including the USTDA Mandatory Contract Clauses contained therein, it will, upon USTDA's request, make an appropriate refund to USTDA.”

##### **(iii) For final payment:**

“The Contractor has performed the work described in this invoice in accordance with the terms of its Contract with the Client and is entitled to payment thereunder. Specifically, the Contractor has submitted the Final Report to the Client, as required by the Contract, and received the Client’s approval of the Final Report. The Contractor has received the *pro rata* payment due to the Contractor from the Client under this invoice, in accordance with the applicable Contract provisions and the terms and conditions of the USTDA Grant Agreement. To the extent the Contractor has not complied with the terms and conditions of the Contract, including the USTDA Mandatory Contract Clauses contained therein, it will, upon USTDA’s request, make an appropriate refund to USTDA.”

**(b) Client's Approval of the Contractor's Invoice**

- (i) The invoice for a mobilization payment must be approved in writing by the Client.
- (ii) For Contract performance milestone payments, the following certification by the Client must be provided on the invoice or separately:

“The services for which disbursement is requested by the Contractor have been performed satisfactorily, in accordance with applicable Contract provisions and the terms and conditions of the USTDA Grant Agreement. The Client has disbursed the *pro rata* payment due to the Contractor under this invoice in accordance with the applicable Contract provisions and the terms and conditions of the USTDA Grant Agreement.”

- (iii) For final payment, the following certification by the Client must be provided on the invoice or separately:

“The services for which disbursement is requested by the Contractor have been performed satisfactorily, in accordance with applicable Contract provisions and the terms and conditions of the USTDA Grant Agreement. The Final Report submitted by the Contractor has been reviewed and approved by the Client. The Client has disbursed the *pro rata* payment due to the Contractor under this invoice in accordance with the applicable Contract provisions and the terms and conditions of the USTDA Grant Agreement.”

**(c) USTDA Address for Disbursement Requests**

Requests for disbursement shall be submitted to the attention of the Finance Department at USTDA's address listed in Clause M below, or by e-mail to [invoices@ustda.gov](mailto:invoices@ustda.gov).

**H. Termination**

**(1) Method of Termination**

Either Contract Party may terminate this Contract upon giving written notice to the other party and USTDA. This notice shall be effective after either 30 days, or any other period set forth elsewhere in this Contract. Furthermore, this Contract shall terminate immediately upon notification of USTDA's termination of the Grant Agreement or the term of availability of any funds thereunder.

**(2) Ramifications of Termination**

In the event that this Contract is terminated prior to completion, the Contractor will be eligible, subject to USTDA approval, for payment for the value of the work performed pursuant to the terms of this Contract. Likewise, in the event of such termination, USTDA is entitled to receive from the Contractor all USTDA Grant funds previously

disbursed to the Contractor (including but not limited to mobilization payments) which exceed the value of the work performed pursuant to the terms of this Contract.

**(3) Survivability**

Clauses B, D, G, H, N and S of the USTDA Mandatory Contract Clauses shall survive the termination of this Contract.

## **I. USTDA Final Report**

### **(1) Definition**

“Final Report” shall mean the Final Report described in the attached Annex I Terms of Reference or, if no such “Final Report” is described therein, “Final Report” shall mean a substantive and comprehensive report of work performed in accordance with the attached Annex I Terms of Reference, including any documents delivered to the Client.

### **(2) Final Report Submission Requirements**

The Contractor shall provide the following to USTDA:

(a) One (1) complete hard copy of the Final Report for USTDA's records. This version shall have been approved by the Client in writing and must be in the English language. It is the responsibility of the Contractor to ensure that confidential information, if any, contained in this version be clearly marked. USTDA will maintain the confidentiality of such information in accordance with applicable law.

and

(b) One (1) hard copy of the Final Report suitable for public distribution (“Public Version”). The Public Version shall have been approved by the Client in writing and must be in the English language. As this version will be available for public distribution, it must not contain any confidential information. If the report in (a) above contains no confidential information, it may be used as the Public Version. In any event, the Public Version must be informative and contain sufficient Project detail to be useful to prospective equipment and service providers.

and

(c) Two (2) CD-ROMs, each containing a complete copy of the Public Version of the Final Report. The electronic files on the CD-ROMs shall be submitted in a commonly accessible read-only format. As these CD-ROMs will be available for public distribution, they must not contain any confidential information. It is the responsibility of the Contractor to ensure that no confidential information is contained on the CD-ROMs.

The Contractor shall also provide one (1) hard copy of the Public Version of the Final Report to the Commercial or Economic Section of the U.S. Embassy in Host Country for informational purposes.

### **(3) Final Report Presentation**

All Final Reports submitted to USTDA must be paginated and include the following:

**(a)** The front cover of every Final Report shall contain the name of the Client, the name of the Contractor who prepared the report, a report title, USTDA's logo, and USTDA's address. If the complete version of the Final Report contains confidential information, the Contractor shall be responsible for labeling the front cover of that version of the Final Report with the term "Confidential Version". The Contractor shall be responsible for labeling the front cover of the Public Version of the Final Report with the term "Public Version". The front cover of every Final Report shall also contain the following disclaimer:

"This report was funded by the U.S. Trade and Development Agency (USTDA), an agency of the U.S. Government. The opinions, findings, conclusions or recommendations expressed in this document are those of the author(s) and do not necessarily represent the official position or policies of USTDA. USTDA makes no representation about, nor does it accept responsibility for, the accuracy or completeness of the information contained in this report."

**(b)** The inside front cover of every Final Report shall contain USTDA's logo, USTDA's address, and USTDA's mission statement. Camera-ready copy of USTDA Final Report specifications will be available from USTDA upon request.

**(c)** The Contractor shall affix to the front of the CD-ROM a label identifying the Host Country, USTDA Activity Number, the name of the Client, the name of the Contractor who prepared the report, a report title, and the following language:

"The Contractor certifies that this CD-ROM contains the Public Version of the Final Report and that all contents are suitable for public distribution."

**(d)** The Contractor and any subcontractors that perform work pursuant to the Grant Agreement must be clearly identified in the Final Report. Business name, point of contact, address, telephone and fax numbers, and e-mail address shall be included for Contractor and each subcontractor.

**(e)** The Final Report, while aiming at optimum specifications and characteristics for the Project, shall identify the availability of prospective U.S. sources of supply. Business name, point of contact, address, telephone and fax numbers, and e-mail address shall be included for each commercial source.

**(f)** The Final Report shall be accompanied by a letter or other notation by the Client which states that the Client approves the Final Report. A certification by the Client to this effect provided on or with the invoice for final payment will meet this requirement.

(g) The Client, USTDA, and the Commercial and/or Economic Section(s) of the U.S. Embassy in Host Country shall have irrevocable, worldwide, royalty-free, non-exclusive rights to use and distribute the Final Report.

#### **J. Modifications**

All changes, modifications, assignments or amendments to this Contract, including the appendices, shall be made only by written agreement by the Contract Parties hereto, subject to written USTDA approval.

#### **K. Study Schedule**

##### **(1) Study Completion Date**

The completion date for the Study, which is September 30, 2014, is the date by which the Contract Parties estimate that the Study will have been completed.

##### **(2) Time Limitation on Disbursement of USTDA Grant Funds**

Except as USTDA may otherwise agree, (a) no USTDA funds may be disbursed under this Contract for goods and services which are provided prior to the Effective Date of the Grant Agreement; and (b) no USTDA funds may be disbursed more than four (4) years after the Effective Date of the Grant Agreement.

#### **L. Business Practices**

The Contract Parties recognize the existence of standards of conduct for public officials and commercial entities in their respective countries. Therefore, the Contract Parties shall fully comply with all United States and Host Country laws relating to corruption or bribery. For example, the Contractor and its subcontractors shall fully comply with the requirements of the Foreign Corrupt Practices Act, as amended (15 U.S.C. §§ 78dd-1 et seq.). Each Contract Party agrees that it shall require that any agent or representative hired to represent it in connection with the Study will comply with this paragraph and all laws which apply to activities and obligations of that Contract Party, including, but not limited to, those laws and obligations referenced above.

#### **M. USTDA Address and Fiscal Data**

Any communication with USTDA regarding this Contract shall be sent to the following address and include the fiscal data listed below:

U.S. Trade and Development Agency  
1000 Wilson Boulevard, Suite 1600  
Arlington, Virginia 22209-3901  
USA

Phone: (703) 875-4357

Fax: (703) 875-4009

Fiscal Data:

Appropriation No.: 11 14/15 1001  
Activity No.: 2014-11010A  
Reservation No.: 2014102  
Grant No.: GH201411102

**N. Taxes**

USTDA funds provided under the Grant Agreement shall not be used to pay any taxes, tariffs, duties, fees or other levies imposed under laws in effect in Host Country, except for taxes of a de minimis nature imposed on local lodging, food, transportation, or airport arrivals or departures. Neither the Client nor the Contractor will seek reimbursement from USTDA for taxes, tariffs, duties, fees or other levies, except for taxes of a de minimis nature referenced above.

**O. Export Licensing**

The Contractor and all subcontractors are responsible for compliance with U.S. export licensing requirements, if applicable, in the performance of the Terms of Reference.

**P. Contact Persons**

The Client designates the following person as the contact person for matters concerning this Contract:

Name: Mr. Obafolajimi Otudeko  
Title: Team Lead, Group Resources  
Phone: 234-1-290-0525  
E-Mail: [obafolajimi.otudeko@honeywellgroup.com](mailto:obafolajimi.otudeko@honeywellgroup.com)

The Contractor designates the following person as the contact person for matters concerning this Contract:

Name:  
Title:  
Phone:  
Fax:  
E-Mail:

If anyone designated by a Contract Party as a contact person ceases service as a contact person at any point during the ten-year period following the date of signing of this Contract, the Contract Party that had designated that contact person shall provide USTDA and the other Contract Party with the name and contact information of a replacement contact person.

## **Q. Liability**

This Contract may include a clause that limits the liability of the Contract Parties, provided that such a clause does not (i) disclaim liability for special, incidental, general, or punitive damages, or (ii) limit the total amount of damages recoverable to an amount less than the total amount disbursed to the Contractor pursuant to this Contract.

## **R. Arbitration**

If the Contract Parties submit any dispute arising under this Contract for arbitration, the scope of any such arbitration shall be limited to the Contract Parties' rights and/or obligations under this Contract and may not extend to any right or obligation of USTDA. The arbitrator(s) shall not arbitrate issues directly affecting the rights or obligations of USTDA.

## **S. Reporting Requirements** *[Note: This Clause is not applicable if there is a cost share agreement with the U.S. Contractor.]*

The Contractor shall advise USTDA by letter as to the status of the Project on March 1st annually for a period of two (2) years after completion of the Study. In addition, if at any time the Contractor receives follow-on work from the Client, the Contractor shall so notify USTDA and designate the Contractor's contact point including name, telephone, fax number, and e-mail address. Since this information may be made publicly available by USTDA, any information which is confidential shall be designated as such by the Contractor and provided separately to USTDA. USTDA will maintain the confidentiality of such information in accordance with applicable law.

## **T. Cost Share** *[Note: This Clause is only applicable if there is a cost share agreement with the U.S. Contractor.]*

The Contractor agrees that, in addition to the funding provided by the USTDA Grant, it shall be responsible for ensuring that it and/or its subcontractors cover at least US\$ \_\_\_\_\_ of costs to complete the full Terms of Reference as set forth in Annex I to the Grant Agreement and this Contract. In order to receive final payment of USTDA Grant funds, a financial officer of the Contractor must provide a final invoice to USTDA accompanied by a cost share certification and a detailed breakdown of direct labor and/or other direct costs. If such certification and breakdown are not provided or are inaccurate, USTDA shall be entitled to a refund from Contractor of the total amount of the USTDA-disbursed Grant funds.

## **ANNEX 5**

## Annex I

### **Terms of Reference**

The purpose of this pre-feasibility study ("Study") is to evaluate and develop plans in support of Honeywell Group Limited ("Grantee") for the proposed gas-based industrial complex project in Nigeria ("Project"). The Study shall evaluate various types of facilities which could produce different chemical outputs, including: (1) methanol (2) fertilizer chemicals such as urea and ammonia, and (3) petrochemicals such as ethylene, propylene, and/or benzene products. The Study shall also develop a simulation model(s) that shall provide the Grantee with recommendations on which of these facilities should be included in the Project, the size/scale of these facilities, the sources of feedstock for the facilities, and a site location for the Project. In addition, the Study shall include a market survey on the current demand of the different chemical outputs which could result from the Project. The market survey shall assess the domestic and international markets for the potential chemical outputs of the facilities, as well as the capital costs required, potential U.S. suppliers, and any potential barriers to the Project. The Study shall provide the Grantee with training related to the international fertilizer and petrochemical industry and the economics of fertilizer and petrochemical production, including, but not limited to investment requirements, costs of production, and the pricing of these outputs.

Key components of the Study include, but are not limited to, the following:

1. An evaluation of the economic and technical feasibility operating facilities in Nigeria that produce methanol, fertilizer chemicals such as ammonia and urea, and/or petrochemicals;
2. An evaluation of the supply and demand for fertilizer and/or petrochemical outputs in the domestic and regional markets and other identified international markets for the Project;
3. The development of an short-term and long-term strategy for the production and sale of methanol, fertilizer chemicals such as ammonia and urea, and/or petrochemicals by the Grantee in Nigeria; and
4. Grantee training to enhance the level of understanding by the Grantee's staff of fertilizer and petrochemical strategic planning activities to support the Project.

The Contractor shall perform the following tasks:

#### **Task 1 – Document Review, Kickoff Meeting, Stakeholder Consultations and Work Plan**

The Contractor shall travel to Nigeria to meet with the Grantee to (a) review, discuss, and refine overall strategy, scope, objectives, and deliverables of the Study, (b) define and clarify the Grantee's and Contractor's roles and responsibilities with respect to the Study, and (c) discuss the Grantee's short- and long-term objectives for the Project.

The Contractor and the Grantee shall also review the following components of the Study: the Contractor's approach and methodology for specific tasks under this Terms of Reference; the

Contractor's documentation and project management reporting requirements under this Terms of Reference; and the Contractor's complete work plan for the Study.

The Grantee shall provide the Contractor with any data, which (a) is readily accessible or in the possession of the Grantee and (b) could affect decision-making for the Project. The Contractor shall review the data received from the Grantee regarding the Project and determine the extent such data can be utilized in subsequent tasks of the Study. The Contractor shall also identify any gaps in the data provided by the Grantee and determine if the collection of additional data shall be required. The Contractor shall make recommendations on the procedures and timeframe for addressing such gaps. Subject to the Grantee's consent, the Contractor shall proceed with collecting the additional data required. The Contractor's data collection shall include, but not be limited to the following:

- Current petroleum, methanol, fertilizer, and petrochemical activities in Nigeria;
- Current plans for any gas- and oil-based processing facilities including, but not limited to liquefied natural gas ("LNG") and gas-to-liquids ("GTL") gas processing facilities, and petrochemical and refining facility developments in Nigeria that could provide feedstock for the Project;
- Any special considerations (e.g. incentives or disincentives) in Nigeria regarding the development of facilities that produce methanol, fertilizer and petrochemical (e.g. taxes, tariffs, subsidies);
- Availability of current and future sources of feedstock, including the potential for feedstock to be supplied by the Government of Nigeria, international oil companies, and other independents sources;
- Potential Project site locations; and
- Technologies to be considered under the Study in methanol, fertilizer, and/or petrochemical production.

Based on a review of the collected data, the Contractor shall make recommendations to the Grantee on the following:

- The geographical area(s) in Nigeria to be considered as Nigeria's domestic markets ("Domestic Markets");
- The geographical area(s) in Africa to be considered as Nigeria's regional markets under the Study ("Regional Markets"); and
- The international area(s) beyond the Domestic Markets and Regional Markets to be considered as potential markets for export for Nigeria's fertilizer and petrochemical chemical outputs under the Study ("International Markets").

*Task 1 Deliverable:* The Contractor shall prepare a report including all work performed under Task 1, including, but not limited to any identified gaps in data and the Contractor's recommendations for addressing such gaps, the Contractor's collection of additional data required, and the Contractor recommendations regarding target markets. The Task 1 Deliverable shall be included in the Final Report.

## **Task 2 - Market Research and Analysis**

*Subtask 2a: Market Research and Analysis*

The Contractor shall perform market research and analysis for the Domestic Markets, Regional Markets, and International Markets for the Project, including, but not limited to the following components:

- An assessment of the demand and supply of relevant products, including, but not limited to methanol, ammonia, urea, ethylene, propylene, and/or benzene products for the Project;
- An assessment of the current level of market saturation for fertilizer and petrochemical chemical outputs, including, but not limited to methanol, ammonia, urea, ethylene, propylene, and/or benzene products, in the Domestic Markets, Regional Markets, and International Markets; and
- A determination of the level of unfulfilled demand for fertilizer and petrochemical chemical outputs, including, but not limited to methanol, ammonia, urea, ethylene, propylene, and/or benzene products, in the Domestic Markets, Regional Markets, and International Markets.

In addition, the Contractor shall analyze the current and potential competition in the Domestic Market, the Regional Markets and the International Markets in the fertilizer and petrochemical sector. The Contractor's analysis shall include, but not be limited to the following:

- Any major competitors (e.g. current operators or developers in the fertilizer and/or petrochemical sector in the Domestic Markets, the Regional Markets, and/or the International Markets);
- The key facilities and assets in operation or under development by any competitors discussed above; and
- Any relevant strengths and weaknesses of the competitors and facilities discussed above in comparison to the Grantee's proposed Project and chemical outputs.

*Subtask 2b: Market Forecast*

Based on the market research and analysis, the Contractor shall prepare a short-term (five-year period) and long-term (ten-year period) market forecast for the relevant products, including, but not limited to the following components:

- Price patterns of the relevant products including, but not limited to methanol, ammonia, urea, ethylene, propylene, and/or benzene products, for the Project;
- Projection of the future supply of relevant products outside of the Project, including, but not limited to methanol, ammonia, urea, ethylene, propylene, and/or benzene products, in the Domestic Markets, Regional Markets, and International Markets, which could affect the demand for the Project; and
- Demand projection of relevant products, including, but not limited to methanol, ammonia, urea, ethylene, propylene, and/or benzene products, in the Domestic Markets, Regional Markets, and International Markets.

In addition, the Contractor shall assess how the Project could displace any imports of fertilizer and/or petrochemical products into Nigeria and the development of the local market over five to 10 years, and how this could affect the Project.

Based on the above market research and analysis and the market forecast, the Contractor shall provide a recommendation to the Grantee that shall include:

- The type of facility that should be built for the Project; and
- A ranking of the chemical outputs that could be produced for the Project such as methanol, ammonia, urea, ethylene, propylene, and/or benzene products. Among other factors, the ranking should take into account, but not be limited to, market saturation, unfulfilled demand, major competitors, price patterns, future supply projections, and future demand projections.

The Contractor shall also develop a strategy for Grantee's entry into the Domestic Markets, Regional Markets, and International Markets to meet unsatisfied demand previously identified by the Contractor.

*Task 2 Deliverable:* The Contractor shall prepare a report including all work performed under Task 2, including, but not limited to the market research and analysis, the market forecast, and the Contractor's recommendation for the facility for the Project based on the Contractor's market research and analysis, and the market forecast. The Task 2 Deliverable shall be included in the Final Report.

### **Task 3 - Feedstock Analysis**

The Contractor shall review oil and gas feedstock sources in Nigeria. Based on this information, the Contractor shall provide the Grantee with a list of all relevant oil and gas feedstock sources in Nigeria. The Contractor shall determine the current, short-term (five-year period) and long-term (ten-year period) feedstock requirements for the Project. The Contractor shall also determine what feedstock is currently available for the Project and the extent such feedstock will meet the requirements of the Project.

The Contractor shall review and analyze the current status of any relevant Federal Government of Nigeria, independent oil company ("IOC") and any other independent initiatives to (a) agglomerate, gather, transport, price, administer, and make available dry natural gas and potential natural gas liquids, including, but not limited to ethane and propane, and (b) condense these products in commercial quantities that would be needed to support the production of the proposed products to be manufactured under this Project.

The Contractor's analysis shall include natural gas and crude oil derived feedstock from direct petroleum production, LNG, GTL, other refined oil and gas products, and any other relevant feedstock production operations in Nigeria.

Based on the above feedstock analysis, the Contractor shall provide a recommendation to the Grantee that shall include:

- The type of facility that should be built for the Project; and
- A ranking of the chemical outputs that could be produced for the Project such as such as methanol, ammonia, urea, ethylene, propylene, and/or benzene products. Among other factors, the ranking should take into account, but not be limited to, currently available feedstock, and any initiatives to agglomerate, gather, transport, price, administer, and make available feedstock that could meet the requirements of the Project.

*Task 3 Deliverable:* The Contractor shall prepare a report including all work performed under Task 3, including, but not limited to the Contractor's recommendation for the type of facility for the Project based on the Contractor's feedstock analysis. The Task 3 Deliverable shall be included in the Final Report.

#### **Task 4 - Site Location**

Based on Tasks 1-3, the Contractor shall visit, inspect, and analyze the Grantee's proposed site location(s). In addition, the Contractor shall identify, visit, inspect, and analyze other relevant and viable potential site locations. After completing visits, inspections, and analysis all of the relevant and viable potential site locations, the Contractor shall prepare a list of up to three suitable site locations. The Contractor's selection of such suitable site locations shall, at a minimum, take into account the site(s) proximity to feedstock sources; the likely chemical outputs that could be produced at the site(s); any security concerns for the feedstock, chemical outputs, or Grantee personnel at the site(s); any relevant environmental or social factors which could affect the Project at the site(s); any particular regulatory factors which could affect the Project at the site(s); and the cost of the site(s).

Upon completion of all analysis regarding site locations proposed by both the Grantee and Contractor, the Contractor shall rank the site locations in order of desirability, and provide a recommendation of the optimal site location to the Grantee. The Contractor's ranking shall be based on several factors, including, but not limited to:

- General evaluation of the advantages and disadvantages of each of the site locations;
- Proximity to feedstock sources;
- The likely chemical outputs that could be produced at the site;
- Any security concerns for Grantee personnel, feedstock, facility, or chemical outputs, including, but not limited to the potential for theft, vandalism, and destruction of property;
- Any relevant environmental factors;
- Any relevant social factors, including, but not limited to the displacement of individuals and communities;
- Any particular regulatory issues that may impact the site; and
- The cost of the site location.

Based on the Contractor's recommendation, the Grantee shall select a specific site location for the Project.

*Task 4 Deliverable:* The Contractor shall prepare a report including all work performed under Task 4, including, but not limited to, the Contractor's recommendation for the site location for the facility for the Project based on the Contractor's visits, inspections, and analysis of various proposed site locations. The Task 4 Deliverable shall be included in the Final Report.

#### **Task 5 - Logistical Consideration**

Based on Task 3 and Task 4, the Contractor shall calculate and provide the Grantee with the estimated transportation costs associated with transporting the potential feedstock to the site location selected by the Grantee in Task 4. Further, the Contractor shall calculate and provide the Grantee with the estimated transportation costs associated with transporting the potential chemical outputs to be produced under the Project to the Domestic Market, to the Regional Markets and to the International Markets. The Contractor shall account for various forms of transportation, including, but not limited to pipeline, rail, road, and ship. The Contractor shall recommend the optimal mode of feedstock transportation to the Grantee.

The Contractor shall also consider and determine if any logistical infrastructure may be necessary to link the Project to the feedstock source options. If logistical infrastructure is necessary, the Contractor shall identify what infrastructure needs to be in place for the Project and provide a recommendation to the Grantee as to how the logistical infrastructure should be implemented. The Contractor shall also identify and recommend to the Grantee any relationships that may need to be developed with relevant parties, including, but not limited to depots, brokers, distributors, offtakers, etc. for the Project.

*Task 5 Deliverable:* The Contractor shall prepare a report including all work performed under Task 5, including, but not limited to the Contractor's calculations for transportation costs associated with the potential feedstock and potential chemical outputs, the Contractor's recommendation for logistical infrastructure, and the Contractor's recommendation for potential relationships for the Grantee. The Task 5 Deliverable shall be included in the Final Report.

#### **Task 6 - Local Investment and Operational Factors**

The Contractor shall review any recent and/or relevant projects in Nigeria such as the Indorama Eleme fertilizer facility, the Dangote Industries petroleum refinery and petrochemical facilities, the Escravos GTL plant, and other similar projects. The Contractor's review shall include, but not be limited to factors such as the projects' relative capital cost requirements, the projects' financing arrangements, the availability of skills for construction and subsequent operation for these projects, reasons for project execution delays and cost overruns, any social government regulatory delays in implementation for the projects, and any security and/or political factors in the locations for the projects.

Based on the Contractor's review of recent and/or relevant projects in Nigeria, the Contractor shall outline any relevant issues that could affect the development of the Project. The Contractor shall provide the Grantee with a roadmap outlining ways that these issues can be addressed, circumvented, and/or mitigated.

*Task 6 Deliverable:* The Contractor shall prepare a report including all work performed under Task 6, including, but not limited to the Contractor's review of any potential issues determined by other recent and/or relevant projects in Nigeria. The Task 6 Deliverable shall be included in the Final Report.

### **Task 7 – Petrochemical Sector Simulation of Proposed Facilities**

Based on the data collected in Tasks 1 – 6, the Contractor shall prepare a fertilizer and petrochemical industry computer simulation model(s), subject to the Grantee's approval, which simulates the Project at the site location selected by the Grantee under Task 4. In the computer simulation model(s), the Contractor shall take into account all data collected in previous tasks such as:

- The technical requirements and economic implications of a facility that produces (1) methanol (2) fertilizer chemicals such as urea and ammonia, and/or (3) petrochemicals such as ethylene, propylene, and/or benzene products in Nigeria;
- The requirements needed for the facility to produce the optimal quantity of chemical outputs to meet the demand of the Domestic Markets, Regional Markets and International Markets;
- The requirements needed for the facility to utilize feedstock inputs, including, but not limited to currently available feedstock, and any initiatives to agglomerate, gather, transport, price, administer, and make available feedstock that could meet the requirements of the Project;
- The requirements for necessary logistical infrastructure for potential feedstock and potential chemical outputs; and
- Any potential issues determined by other recent and/or relevant projects in Nigeria.

The Contractor shall carry out simulations to assess the various types of fertilizer and petrochemical facilities that could be included in the Grantee's Project, including facilities that could produce: (1) methanol, (2) fertilizer chemicals such as urea and ammonia, and (3) petrochemical such as ethylene, propylene, and/or benzene products.

The Contractor shall consider at a minimum the following options in the simulation model:

1. Construction of a gas-based industrial complex to produce methanol;
2. Construction of a gas-based industrial complex to produce fertilizers such as ammonia and urea;
3. Construction of olefins and aromatics petrochemical complexes; and
4. Any other relevant options recommended by the Contractor and approved by the Grantee.

The simulation model shall determine for the Grantee the optimum size of the facility, site location(s), feedstock selections, chemical output mix, technical configuration of the facility, process flow schemes,<sup>1</sup> and projected revenue forecast for a period of twenty-five years for the

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<sup>1</sup> The process flow scheme outlines the transformation process of the feedstock to the chemical outputs.

Project. The simulation model shall also have the capability to determine investment requirements, production cost economics, infrastructure requirements and costs, and other factors needed to optimize the implementation of the Project.

The Contractor shall provide a copy of the simulation model(s) and all source documents to the Grantee.

*Task 7 Deliverable:* The Contractor shall prepare a report including all work performed under Task 7, including, but not limited to the simulation model(s). The Task 7 Deliverable shall be included in the Final Report.

### **Task 8 – Early Environmental Assessment**

The Contractor shall prepare an early environmental assessment on the various fertilizer and petrochemical facilities that could be developed under the Project that would be located at the site selected by the Grantee in Task 4. The Contractor shall identify the Project's impact on the environment and provide a roadmap to the Grantee outlining ways that any potential negative environmental impacts can be mitigated. The early environmental assessment shall consider international standards required by international financial institutions including the World Bank Group and the African Development Bank.

*Task 8 Deliverable:* The Contractor shall prepare a report including all work performed under Task 8, including, but not limited to the Contractor's roadmap as to how to mitigate potential negative environmental impacts. The Task 8 Deliverable shall be included in the Final Report.

### **Task 9 - Policy and Regulatory Issues**

Based on Tasks 1-8, the Contractor shall outline the current regulatory environment and requirements in Nigeria for the fertilizer and petrochemical sectors. The Contractor shall identify policy and/or legislative actions that could either act as potential barriers to the implementation of the Project or would be necessary for implementation of the Project. The Contractor's analysis shall include all pertinent documents that deal with import taxes, duties and fees, corporate and personal income taxes, and property and other taxes related to the implementation of the Project. The Contractor's analysis shall also include all permitting requirements, foreign participation regulations, regulations that impact environmental requirements, and any other regulatory issues that may have a significant impact on the Project, as well as reporting on the quality of service and supply standards required by the regulators.

The Contractor shall outline international standards for the fertilizer and petrochemical sectors and assess any disparities between the international standards and Nigeria's current regulatory environment. The Contractor shall determine if the disparities may become impediments to the Project and provide the Grantee with a roadmap outlining ways that these disparities can be mitigated.

*Task 9 Deliverable:* The Contractor shall prepare a report including all work performed under Task 9, including, but not limited to the Contractor's roadmap on regulatory issues. The Task 9 Deliverable shall be included in the Final Report.

### **Task 10 – Grantee Training**

Based on Tasks 1-9, and in consultation with the Grantee, the Contractor shall develop and deliver at least one training session for a minimum of three days in the United States to cover topics of high interest to the Grantee. The training, which shall be developed in close cooperation with the Grantee, shall provide hands-on human capacity building related to fertilizer and petrochemical industry planning, technologies, and international business practices to the Grantee's staff. As a part of the training, the Contractor shall introduce the Grantee to U.S. stakeholders in the U.S. fertilizer and petrochemical sector. The training shall also assist the Grantee in developing the human resources that will be needed for the Grantee's development of the Project.

The training course topics shall include, but are not limited to the following:

- Overview of the U.S. petrochemical sector;
- Overview of the U.S. fertilizer sector;
- Overview of the international fertilizer and petrochemical industry, the structure of the international fertilizer and petrochemical industry, and major players in the international fertilizer and petrochemical industry;
- Economics of fertilizer and petrochemical production, including investment requirements, costs of production, pricing, and rate of return;
- Major influencing factors, including, but not limited to feedstocks, technologies, and market considerations; and
- Review of simulation/modeling tools and data sources developed in Task 7, which includes the source documents from the simulation for the Grantee.

The Contractor shall develop and provide all course materials, provide training to the Grantee, and arrange any relevant meetings with U.S. companies in the United States in connection with the training. The Contractor shall also provide the Grantee with the list of contacts for these U.S. companies. The business name, point of contact, address, telephone number, and e-mail address shall be included for each identified party.

The Grantee shall be solely responsible for any travel costs, hotel costs, meal costs, and any other incidental costs of any training participants. The Grantee shall be solely responsible for all logistics regarding the training, including, but not limited to the provision of facilities for the training.<sup>2</sup>

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<sup>2</sup> All costs relating to the travel costs, hotel costs, meal costs, and any other incidental costs of any training participants and all costs relating to the logistics regarding the training will not be covered under the USTDA Grant funds or Grantee Cost Share. The Grantee shall be solely responsible for such costs.

*Task 10 Deliverable:* The Contractor shall prepare a report including all work performed under Task 10, including, but not limited to any training course materials. The Task 10 Deliverable shall be included in the Final Report.

### **Task 11 – Strategic Development Plan Analysis and Recommendations**

Based on Tasks 1-10, the Contractor shall perform economic, financial and technical analyses for the Project using an internationally acceptable methodology for such analyses. The Contractor's financial analyses of the Project shall be based on a standard methodology used by donors, such as the World Bank, the African Development Bank, and any other relevant investors as determined by the Contractor, and approved by the Grantee, for appraising investment projects. The Contractor shall calculate both the economic and financial internal rates of return for the recommended investments under a variety of different assumptions such as different interest rates, depreciation, licensing fees, import duties, etc. Based on this analysis, the Contractor shall recommend to the Grantee the optimal option(s) from the simulation model(s) in Task 7 for developing the Project, such as the optimum size and type of the facility, site location(s), feedstock selections, chemical output mix, technical configuration of the facility, process flow schemes, and projected revenue forecast.

The Contractor's recommendation and Project implementation strategy shall address potential opportunities and hurdles, including, but not limited to the identification of regional competition, potential foreign partners, alternative technologies, and other possibilities that could enhance/accelerate the fertilizer and petrochemicals sector in Nigeria and maximize the monetization of Nigeria's petroleum and human resources. This shall include an assessment of the strengths and weaknesses of Nigeria as a fertilizer and petrochemicals manufacturing center.

The Contractor shall provide the Grantee with an outline of the Contractor's recommendations for the Project's implementation strategy which may include:

- A recommended schedule for Project implementation, including recommendations for phasing, milestones, and prioritization of investments;
- An outline of all the steps the Grantee will need to take subsequent to the Study's completion and prior to project implementation, such as:
  - Environmental and social impact assessments that comply with local environmental and social requirements and those of multilateral lending agencies such as the World Bank and the African Development Bank;
  - Licensing, permitting, and other relevant legal and regulatory requirements;
  - Financial arrangements;
  - Procurements of goods and services;
  - Systems integration;
  - Operations and maintenance; and
  - Short- and long-term training requirements.
- An assessment of how the implementation of the Project will impact the Grantee's operations;
- Annual budget requirement for the Project;
- Technical and training needs to implement the Project;

- Any relevant changes to the Grantee's corporate structure that could bolster the implementation of the Project; and
- Any recommendations for a joint venture or partnership for the Grantee which may include a potential feedstock supplier, or operator in the fertilizer and petrochemical sector.

*Task 11 Deliverable:* The Contractor shall prepare a report including all work performed under Task 11, including, but not limited to the Contractor's outline of recommendations for the Project's implementation strategy. The Task 11 Deliverable shall be included in the Final Report.

### **Task 12 – U.S. Licensors, Major Equipment Suppliers, Operators and Service Companies**

The Contractor shall develop a detailed list of U.S. companies that could provide equipment, services, and technology to the Project. This shall include at a minimum:

- U.S. companies which can provide technology licenses for the individual components of the facility for the Project;
- Potential U.S. engineering and construction companies which can provide design, engineering, and construction services;
- U.S. project management and oversight companies;
- U.S. suppliers of equipment such as reactors, vessels, rotating equipment (compressors, turbines, pumps), instrumentation, and controls;
- U.S. suppliers and operators of safety facilities for the fertilizer and petrochemical sectors; and
- U.S. suppliers of environmental protection and compliance equipment.

The Contractor shall also prepare a detailed list of potential U.S. sources of services that the Grantee may need for the successful technical and commercial operations of the final installations in areas such as operating management, maintenance management, product quality control, and product marketing assistance.

These lists shall include (i) the possible U.S. sources of supply and/or services for the Project, (ii) a detailed description of relevant products, solutions and/or services to be provided, and (iii) contact information for the party or parties responsible for marketing/sales in Nigeria. The business name, point of contact, address, telephone number, and e-mail address shall be included for each identified party.

*Task 12 Deliverable:* The Contractor shall prepare a report including all work performed under Task 12, including, but not limited to the detailed list of U.S. companies that could provide equipment, services, and technology to the Project. The Task 12 Deliverable shall be included in the Final Report.

### **Task 13 – Final Report**

The Contractor shall prepare and deliver to the Grantee and USTDA a substantive and comprehensive final report of all work performed under these Terms of Reference ("Final

Report”). The Final Report shall be organized according to order of this Terms of Reference, and shall include all deliverables and documents that have been provided to the Grantee. The Final Report shall be prepared in accordance with Clause I of Annex II of the Grant Agreement.

## **ANNEX 6**



## USTDA-Funded Feasibility Study, Technical Assistance, or Training Grant

### U.S. Firm Information Form

This form is designed to enable the U.S. Trade and Development Agency ("USTDA") to obtain information about entities and individuals proposed for participation in USTDA-funded activities. Information in this form is used to conduct screening of entities and individuals to ensure compliance with legislative and executive branch prohibitions on providing support or resources to, or engaging in transactions with, certain individuals or entities with which USTDA must comply.

USTDA Activity Number [To be completed by USTDA]

Activity Type [To be completed by USTDA]	Feasibility Study	Technical Assistance	Other (specify)
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Activity Title [To be completed by USTDA]

Full Legal Name of U.S. Firm

Business Address (street address only)

Telephone		Fax		Website	
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Year Established (include any predecessor company(s) and year(s) established, if appropriate).  
Please attach additional pages as necessary.

Type of Ownership	Publicly Traded Company
	Private Company
	Other (please specify)

Please provide a list of directors and principal officers as detailed in Attachment A. Attached? (Not Applicable for U.S. Publicly Traded Company)	Yes
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If Private Company or Other (if applicable), provide a list of shareholders and the percentage of their ownership. In addition, for each shareholder that owns 15% or more shares in U.S. Firm, please complete Attachment B.

Is the U.S. Firm a wholly-owned or partially owned subsidiary?	Yes
	No

If so, please provide the name of the U.S. Firm's parent company(ies). In addition, for any parent identified, please complete Attachment B.

Is the U.S. Firm proposing to subcontract some of the proposed work to another firm?	Yes
	No

If yes, U.S. Firm shall complete Attachment C for each subcontractor. Attached?	Yes
	Not applicable

#### Project Manager

Name	Surname	
	Given Name	

Address

Telephone

Fax

Email

#### Negotiation Prerequisites

Discuss any current or anticipated commitments which may impact the ability of the U.S. Firm or its subcontractors to complete the Activity as proposed and reflect such impact within the project schedule.

Identify any specific information which is needed from the Grantee before commencing negotiations.

*U.S. Firm may attach additional sheets, as necessary.*

**U.S. Firm's Representations**

U.S. Firm shall certify to the following (or provide an explanation as to why any representation cannot be made):

1. U.S. Firm is a [check one]  Corporation  LLC  Partnership  Sole Proprietor  Other:  .  
 duly organized, validly existing and in good standing under the laws of the State of:  .  
 The U.S. Firm has all the requisite corporate power and authority to conduct its business as presently conducted, to submit this proposal, and if selected, to execute and deliver a contract to the Grantee for the performance of the USTDA Activity. The U.S. Firm is not debarred, suspended, or to the best of its knowledge or belief, proposed for debarment or ineligible for the award of contracts by any federal or state governmental agency or authority.
2. The U.S. Firm has included herewith, a copy of its Articles of Incorporation (or equivalent charter or document issued by a designated authority in accordance with applicable laws that provides information and authentication regarding the legal status of an entity) and a Certificate of Good Standing (or equivalent document) issued within 1 month of the date of signature below by the State of:  .  
 The U.S. Firm commits to notify USTDA and the Grantee if it becomes aware of any change in its status in the state in which it is incorporated. USTDA retains the right to request an updated certificate of good standing. **(U.S. publicly traded companies need not include Articles of Incorporation or Good Standing Certificate)**
3. Neither the U.S. Firm nor any of its principal officers have, within the ten-year period preceding the submission of this proposal, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government contract or subcontract; violation of federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating federal or state criminal tax laws, or receiving stolen property.
4. Neither the U.S. Firm, nor any of its principal officers, is presently indicted for, or otherwise criminally or civilly charged with, commission of any of the offenses enumerated in paragraph 3 above.
5. There are no federal or state tax liens pending against the assets, property or business of the U.S. Firm. The U.S. Firm, has not, within the three-year period preceding the submission of this proposal, been notified of any delinquent federal or state taxes in an amount that exceeds US\$3,000 for which the liability remains unsatisfied. Taxes are considered delinquent if (a) the tax liability has been fully determined, with no pending administrative or judicial appeals; and (b) a taxpayer has failed to pay the tax liability when full payment is due and required.
6. The U.S. Firm has not commenced a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself of its debts under any bankruptcy, insolvency or other similar law. The U.S. Firm has not had filed against it an involuntary petition under any bankruptcy, insolvency or similar law.
7. The U.S. Firm certifies that it complies with USTDA Nationality, Source, and Origin Requirements and shall continue to comply with such requirements throughout the duration of the USTDA-funded activity. The U.S. Firm commits to notify USTDA and the Grantee if it becomes aware of any change which might affect U.S. Firm's ability to meet the USTDA Nationality, Source, and Origin Requirements.

*The U.S. Firm shall notify USTDA if any of the representations are no longer true and correct.*

U.S. Firm certifies that the information provided in this form is true and correct. U.S. Firm understands and agrees that the U.S. Government may rely on the accuracy of this information in processing a request to participate in a USTDA-funded activity. If at any time USTDA has reason to believe that any person or entity has willfully and knowingly provided incorrect information or made false statements, USTDA may take action under applicable law. The undersigned represents and warrants that he/she has the requisite power and authority to sign on behalf of the U.S. Firm.

Name		Signature	
Title			
Organization		Date	





**ATTACHMENT B**

**USTDA-Funded Feasibility Study, Technical Assistance, or Training Grant**

**U.S. Firm Information Form – Shareholder(s) and Parent Company(ies)**

If applicable, U.S. Firm provided a list of shareholders and the percentage of their ownership. This form shall be completed for each shareholder that owns 15% or more shares in U.S. Firm, as well as any parent corporation of the U.S. Firm (“Shareholder”). In addition, this form shall be completed for each shareholder identified in Attachment B that owns 15% or more shares in any Shareholder, as well as any parent identified in Attachment B.

USTDA Activity Number [To be completed by USTDA]	
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Activity Title [To be completed by USTDA]	
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Full Legal Name of U.S. Firm	
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Full Legal Name of Shareholder	
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Business Address of Shareholder (street address only)	
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Telephone number		Fax Number	
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Year Established (include any predecessor company(s) and year(s) established, if appropriate). Please attach additional pages as necessary.	
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Country of Shareholder’s Principal Place of Business	
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Please provide a list of directors and principal officers as detailed in Attachment A. Attached?	Yes
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Type of Ownership	Publicly Traded Company
	Private Company
	Other

If applicable, provide a list of shareholders and the percentage of their ownership. In addition, for each shareholder that owns 15% or more shares in Shareholder, please complete Attachment B.	
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Is the Shareholder a wholly-owned or partially owned subsidiary?	Yes
	No

If so, please provide the name of the Shareholder’s parent(s). In addition, for any parent identified, please complete Attachment B.	
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*Shareholder may attach additional sheets, as necessary.*



**ATTACHMENT C**

**USTDA-Funded Feasibility Study, Technical Assistance, or Training Grant**

**Subcontractor Information Form**

This form is designed to enable the U.S. Trade and Development Agency ("USTDA") to obtain information about entities and individuals proposed for participation in USTDA-funded activities. Information in this form is used to conduct screening of entities and individuals to ensure compliance with legislative and executive branch prohibitions on providing support or resources to, or engaging in transactions with, certain individuals or entities with which USTDA must comply.

USTDA Activity Number [*To be completed by USTDA*]

Activity Title [*To be completed by USTDA*]

Full Legal Name of Prime Contractor U.S. Firm ("U.S. Firm")

Full Legal Name of Subcontractor

Business Address of Subcontractor (street address only)

Telephone Number

Fax Number

Year Established (include any predecessor company(s) and year(s) established, if appropriate). Please attach additional pages as necessary.

**Subcontractor Point of Contact**

Name	Surname	
	Given Name	

Address

Telephone

Fax

Email

**Subcontractor's Representations**

Subcontractor shall provide the following (or any explanation as to why any representation cannot be made), made as of the date of the proposal:

1. Subcontractor is a <i>[check one]</i>	<input type="checkbox"/> Corporation	<input type="checkbox"/> LLC	<input type="checkbox"/> Partnership	<input type="checkbox"/> Sole Proprietor	<input type="checkbox"/> Other
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duly organized, validly existing and in good standing under the laws of:  .

The subcontractor has all the requisite corporate power and authority to conduct its business as presently conducted, to participate in this proposal, and if the U.S. Firm is selected, to execute and deliver a subcontract to the U.S. Firm for the performance of the USTDA Activity and to perform the USTDA Activity. The subcontractor is not debarred, suspended, or to the best of its knowledge or belief, proposed for debarment or ineligible for the award of contracts by any federal or state governmental agency or authority.

2. Neither the subcontractor nor any of its principal officers have, within the ten-year period preceding the submission of the Offeror's proposal, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government contract or subcontract; violation of federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating federal or state criminal tax laws, or receiving stolen property.

3. Neither the subcontractor, nor any of its principal officers, is presently indicted for, or otherwise criminally or civilly charged with, commission of any of the offenses enumerated in paragraph 2 above.

4. There are no federal or state tax liens pending against the assets, property or business of the subcontractor. The subcontractor, has not, within the three-year period preceding this RFP, been notified of any delinquent federal or state taxes in an amount that exceeds \$3,000 for which the liability remains unsatisfied. Taxes are considered delinquent if (a) the tax liability has been fully determined, with no pending administrative or judicial appeals; and (b) a taxpayer has failed to pay the tax liability when full payment is due and required.

5. The subcontractor has not commenced a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law. The subcontractor has not had filed against it an involuntary petition under any bankruptcy, insolvency or similar law.

6. The Subcontractor certifies that it complies with the USTDA Nationality, Source, and Origin Requirements and shall continue to comply with such requirements throughout the duration of the USTDA-funded activity. The Subcontractor commits to notify USTDA, the Contractor, and the Grantee if it becomes aware of any change which might affect U.S. Firm's ability to meet the USTDA Nationality, Source, and Origin Requirements.

*The selected Subcontractor shall notify the U.S. Firm, Grantee and USTDA if any of the representations included in its proposal are no longer true and correct.*

Subcontractor certifies that the information provided in this form is true and correct. Subcontractor understands and agrees that the U.S. Government may rely on the accuracy of this information in processing a request to participate in a USTDA-funded activity. If at any time USTDA has reason to believe that any person or entity has willfully and knowingly provided incorrect information or made false statements, USTDA may take action under applicable law. The undersigned represents and warrants that he/she has the requisite power and authority to sign on behalf of the Subcontractor.

Name	<input type="text"/>	Signature	<input type="text"/>
Title	<input type="text"/>		
Organization	<input type="text"/>	Date	<input type="text"/>