

**REQUEST FOR PROPOSALS**

**FEASIBILITY STUDY FOR THE  
KHAYELITSHA AND MITCHELLS PLAIN DIGITAL INCLUSION PROJECT**

Submission Deadline: **10:00 AM  
LOCAL (SOUTH AFRICA) TIME  
SEPTEMBER 28, 2012**

Submission Place: **TENDER BOX NUMBER: 1  
TENDER SUBMISSION OFFICE  
2ND FLOOR, CONCOURSE LEVEL,  
CIVIC CENTRE,  
HERTZOG BOULEVARD  
CITY OF CAPE TOWN  
SOUTH AFRICA**

AN ORIGINAL AND FIVE COPIES OF YOUR PROPOSAL SHALL BE RECEIVED PRIOR TO THE TIME AND DATE SPECIFIED ABOVE. PROPOSALS RECEIVED AFTER SAID TIME AND DATE WILL NOT BE ACCEPTED OR CONSIDERED. PROPOSALS SHALL BE SEALED AND LABELED "REQUEST FOR PROPOSALS: FEASIBILITY STUDY FOR THE KHAYELITSHA AND MITCHELLS PLAIN DIGITAL INCLUSION PROJECT."

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## **Section 1: INTRODUCTION**

The U.S. Trade and Development Agency (USTDA) has provided a grant in the amount of US\$315,000 to the City of Cape Town (the “Grantee”) in accordance with a grant agreement dated August 8, 2012 (the “Grant Agreement”) to fund the cost of goods and services required for a feasibility study (“Feasibility Study”) to evaluate the technical, financial, and other critical aspects of the proposed Khayelitsha and Mitchells Plain Digital Inclusion project in South Africa (“Host Country”). In particular, the Feasibility Study will evaluate the feasibility of implementing a wireless access network (“Wi-Fi Network”) for individuals, households, and businesses in Khayelitsha and Mitchells Plain (“K&MP”), two communities within the Cape Town metropolitan area. The Feasibility Study will also evaluate the suitability of existing infrastructure and plans for extending Cape Town’s Metropolitan Optic Fibre Network (“MOFN”) to and expanding the MOFN within K&MP for the purpose of implementing the Wi-Fi network.

The Grant Agreement is attached at Annex 4 for reference. The Grantee is soliciting technical proposals from qualified U.S. firms to provide expert consulting services to perform the Feasibility Study.

### **1.1 BACKGROUND SUMMARY**

The Grantee has embarked on the roll-out of a municipal optic fiber backbone network within the Cape Town metropolitan area. Known as the MOFN, this network provides the backhaul capacity required for the Grantee’s municipal ICT networks, as well as the ICT networks of other operators. The principal objectives of the MOFN are: (1) to lower the Grantee’s overall telecommunication costs; (2) to support efficient and effective municipal service delivery; and (3) to support the economic development of Cape Town.

The first phase of the MOFN, which connected 70 municipal buildings with optic fiber and network services, was completed in March 2012. Existing MOFN infrastructure includes: (1) 270 km of optic fiber cable, comprised of core routes between switching centers, local routes between distribution points, and access cables to individual buildings; (2) five switching centers; and (3) a dense wavelength division multiplexing optical layer capable of supporting multiple virtually separate high capacity networks. The Grantee is currently preparing for the implementation of the second phase of the MOFN, which will include the extension of the MOFN to K&MP and the implementation of a Wi-Fi network in K&MP.

The Feasibility Study will evaluate the feasibility of implementing a Wi-Fi network in K&MP, as well as the suitability of existing infrastructure and plans for extending the MOFN to K&MP for the purpose of implementing a Wi-Fi network. In particular, the Feasibility Study will: (1) review existing MOFN infrastructure, as well as plans and budgetary resources for its expansion into K&MP; (2) evaluate the technical, economic, financial, environmental, regulatory, and developmental aspects of implementing a Wi-Fi network in K&MP; and (3) provide the Grantee with technology recommendations, budgetary requirements, pricing models, and project management and implementation plans for a Wi-Fi network in K&MP.

Portions of a background Definitional Mission are provided for reference in Annex 2.

## **1.2 OBJECTIVE**

The objective of the Feasibility Study is to provide the Grantee with analyses and recommendations that will support its decision-making with regard to the implementation of a Wi-Fi network in K&MP. The Terms of Reference (“TOR”) for this Feasibility Study are attached as Annex 5.

## **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 by a USTDA grant of US\$315,000. **The USTDA grant of US\$315,000 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\$315,000 to the Grantee. The funding provided under the Grant Agreement shall be used to fund the costs of the contract between the Grantee and the U.S. firm selected by the Grantee to perform the TOR. 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 Khayelitsha and Mitchells Plain Digital Inclusion project.

### **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 DEFINITIONAL MISSION REPORT**

USTDA sponsored a Definitional Mission 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 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 Feasibility Study.

### **2.5 PROJECT FUNDING SOURCE**

The Feasibility Study will be funded under a grant from USTDA. The total amount of the grant is not to exceed US\$315,000.

## **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.

## **2.12 LANGUAGE OF PROPOSAL**

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

## **2.13 PROPOSAL SUBMISSION REQUIREMENTS**

An Original and five copies of your proposal must be received no later than 10:00 AM local (South Africa), on September 28, 2012, at:

Tender Box Number: 1  
Tender Submission Office  
2nd floor, Concourse Level,  
Civic Centre,  
Hertzog Boulevard  
City of Cape Town  
South Africa

Proposals may be either sent by overnight courier or hand-delivered. Whether the proposal is sent by courier or hand-delivered, the Offeror shall be responsible for actual delivery of the proposal to the above address before the deadline. Any proposal received after the deadline may 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**

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 "REQUEST FOR PROPOSALS: FEASIBILITY STUDY FOR THE KHAYELITSHA AND MITCHELLS PLAIN DIGITAL INCLUSION PROJECT" and designation of "original" or "copy number x." The original and five 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.

## **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 sixty 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 by a USTDA grant of US\$315,000, which is a fixed amount.

Offerors shall submit one original and five copies of the proposal. Proposals received by fax or email cannot be accepted.

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 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 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.

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 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 Feasibility Study. If subcontractors are 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 relevant and verifiable project references must be provided for each of the Offeror and any subcontractors, 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 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:

### **Offeror's Experience and Qualifications: 35 points maximum**

- Offeror's experience and qualifications in the design, installation, integration, operation, and maintenance of wireless access, optic fiber backbone, and other related ICT delivery networks: 10 points
- Offeror's experience and qualifications related to technological delivery options for wireless access, optic fiber backbone, and other related ICT delivery networks: 5 points
- Offeror's experience and qualifications in project financing, cost estimating, and the development of pricing models and multi-stakeholder ownership/investment structures for wireless access, optic fiber backbone, and other related ICT delivery networks, preferably for projects requiring subsidization: 5 points
- Offeror's experience and qualifications in the development of project management plans, including staffing and training requirements, for wireless access, optic fiber backbone, and other related ICT delivery projects: 5 points
- Offeror's experience and qualifications in the development of programs that encourage the increased utilization of ICT services: 5 points
- Offeror's experience and qualifications in performing similar feasibility studies or other closely related work: 5 points

### **Organizational Structure, Management, and Key Personnel: 35 points maximum**

- Quality of the Offeror's proposed organizational structure and management plan for the Feasibility Study: 5 points
- Experience and expertise of the Offeror's proposed Project Manager in performing similar feasibility studies or other closely related work: 10 points
- Experience and expertise of the Offeror's other key personnel (including U.S. subcontractors, if any) in fulfilling the various functions required for the Feasibility Study: 10 points
- Experience and expertise of the Offeror's local subcontractors in fulfilling the various functions required for the Feasibility Study: 10 points

### **Technical Approach and Work Plan: 25 points maximum**

- Quality of the Offeror's proposed Technical Approach and Work Plan for the Feasibility Study: 15 points
- Quality of the Offeror's proposed schedule for carrying out the Feasibility Study: 10 points

**Country/Regional Experience: 5 points maximum**

- Offeror's experience working in South Africa, sub-Saharan Africa, and/or other similar environments, preferably in the ICT sector: 5 points

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

Price will not be a factor in contractor selection.

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**ANNEX 1**

**FEDBIZOPPS ANNOUNCEMENT**

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Tender Box Number: 1; Tender Submission Office; 2nd floor, Concourse Level, Civic Centre, Hertzog Boulevard; City of Cape Town; South Africa

## B—South Africa: Feasibility Study for the Khayelitsha and Mitchells Plain Digital Inclusion Project

POC: Anthony O'Tapi, USTDA, 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901, Tel: (703) 875-4357, Fax: (703) 875-4009. Khayelitsha and Mitchells Plain Digital Inclusion Project. 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 feasibility study that will evaluate the technical, financial, and other critical aspects of the proposed Khayelitsha and Mitchells Plain Digital Inclusion project in South Africa ("Host Country"). In particular, the feasibility study will evaluate the feasibility of implementing a wireless access network ("Wi-Fi Network") for individuals, households, and businesses in Khayelitsha and Mitchells Plain ("K&MP"), two communities within the Cape Town metropolitan area. The feasibility study will also evaluate the suitability of existing infrastructure and plans for extending Cape Town's Metropolitan Optic Fibre Network ("MOFN") to and expanding the MOFN within K&MP for the purpose of implementing the Wi-Fi network.

The Grantee has embarked on the roll-out of a municipal optic fiber backbone network within the Cape Town metropolitan area. Known as the MOFN, this network provides the backhaul capacity required for the Grantee's municipal ICT networks, as well as the ICT networks of other operators. The principal objectives of the MOFN are: (1) to lower the Grantee's overall telecommunication costs; (2) to support efficient and effective municipal service delivery; and (3) to support the economic development of Cape Town.

The first phase of the MOFN, which connected 70 municipal buildings with optic fiber and network services, was completed in March 2012. Existing MOFN infrastructure includes: (1) 270 km of optic fiber cable, comprised of core routes between switching centers, local routes between distribution points, and access cables to individual buildings; (2) five switching centers; and (3) a dense wavelength division multiplexing optical layer capable of supporting multiple virtually separate high capacity networks. The Grantee is currently preparing for the implementation of the second phase of the MOFN, which will include the extension of the MOFN to K&MP and the implementation of a Wi-Fi network in K&MP.

The feasibility study will evaluate the feasibility of implementing a Wi-Fi network in K&MP, as well as the suitability of existing infrastructure and plans for extending the MOFN to K&MP for the purpose of implementing a Wi-Fi network. In particular, the feasibility study will: (1) review existing MOFN infrastructure, as well as plans and budgetary resources for its expansion into K&MP; (2) evaluate the technical, economic, financial, environmental, regulatory, and developmental aspects of implementing a Wi-Fi network in K&MP; and (3) provide the Grantee with technology recommendations, budgetary requirements, pricing models, and project management and implementation plans for a Wi-Fi network in K&MP.

The U.S. firm selected will be paid in U.S. dollars from a US\$315,000 grant to the Grantee from the U.S. Trade and Development Agency (“USTDA”).

A detailed Request for Proposals (“RFP”), which includes requirements for the Proposal, the Terms of Reference, and portions of a background definitional mission 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 the 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 in English directly to the Grantee by 10:00 AM local (South Africa) time, on September 28, 2012, 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.

**A N N E X 2**

**PORTIONS OF BACKGROUND DEFINITIONAL MISSION REPORT**

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**USTDA**  
**Definitional Mission**  
**South Africa**  
**Information and Communications Technology**  
**FINAL REPORT**

Prepared for the:

**US Trade and Development Agency**  
**1000 Wilson Boulevard, Suite 1600**  
**Arlington, Virginia 22209 - 3901**

Prepared by:



**19700 Fairchild, Suite 300**  
**Irvine, CA 92612 U.S.A.**

**[www.global-resources.com](http://www.global-resources.com)**

**Tel: (01) (949) 721-0323**

**Fax: (01) (949) 721-0336**

June 30, 2012



This report was funded by the U.S. Trade and Development Agency (USTDA), an agency of the United States 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 TDA. 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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## Executive Summary

The USTDA RFQ for the ICT Definitional Mission to South Africa identified that the Definitional Mission Contractor (DMC) would research and locate potential USTDA Grant projects in five ICT areas, and across multiple locations. These areas and locations are noted below, and also in a DM planning chart that the ICT Contractor developed to help structure the in-country visit plan.

*ICT Sub-Sector Areas for Project Review:*

Integration of Municipal ICT Systems  
Rollout of Broadband Infrastructure  
Spectrum Utilization  
Disaster Management  
ICT Systems for Government, Education,  
Health, Finance and other Services

*Potential Geographic Locations:*

Johannesburg  
Pretoria (Tshwane)  
Cape Town  
Durban / Richards Bay / KZN Province  
Port Elizabeth / Nelson Mandela Bay

During the DM briefing call, USTDA's Africa Business Development Manager (ABDM) and USTDA's Africa Trade and Development Specialist (ATDS) joined the call, and the DMC learned that many ICT project ideas had been discussed over a three-year time frame with numerous private and public sector entities throughout South Africa. At that time, the DMC recommended that the two USTDA offices share all contacts, so that all communications and potential grant activities could be reviewed.

The DMC reviewed numerous correspondences that were forwarded by the ABDM, as well as the contacts and overview provided by USTDA's Country Manager for Southern Africa (CMSA). It became apparent that there were many project leads, and also that some were not directly in the core focus areas of the ICT DM. The DMC then worked with the two USTDA offices to jointly review all the contact data and information, so that a set of priorities could be established for the in-country DM work component. This led to a grouping of priority projects as "A, B or C" and a geographic plan for assessing these projects in an organized and systematic way (while leaving time for meetings with organizations and individuals so that new project ideas could be vetted). The DMC developed and then utilized the *South Africa ICT DM Priority Chart* as a tool to plan and coordinate all meetings, so that the DM focus could be appropriately retained.

Once all the e-mail correspondences and contacts were reviewed and organized, the DMC developed a *South Africa ICT DM Contact Sheet*, so all communications to both established and new contacts could be well coordinated. The sheet was populated with over 100 contacts, with over 75 of those individuals correlated as "group A" in terms of DM outreach.

As per the DMC's DM proposal, the DMC prepared a *South Africa ICT DM Briefing Package Questionnaire (ICT DM BPQ)*. The goal of this e-communication was to introduce South African meeting attendees and potential Grantees to USTDA prior to the DM team's arrival, and to solicit any available information in advance of the in-country work. The CMSA had been explicit that the goal of the DM was to generate projects, and the DMC wanted to ensure that valuable meeting times could be used for more intensive discussions of specific projects, as opposed to using the time for general discussions. The *ICT DM BPQ* was systematically released to all Group A contacts.

The DMC then worked with both USTDA offices through a series of weekly calls, to follow-up on established as well as new contacts and leads, and to finalize the in-country meeting schedule.

The following material covers key grant opportunities and core points that were reviewed during the in-country work from February 20 – March 14, 2012, and identifies all insights and recommendations that arose from the meetings. During the in-country work, the ABDM and DMC provided a briefing on USTDA resources for US firms at the US Consulate, in addition to working jointly conducting meetings throughout the country that communicated USTDA's resources and reviewed project concepts and ideas. The DMC also followed-up with numerous contacts and organizations after the in-country work, so as to ensure a thorough vetting and discussion of potential Grant projects and to ensure that contacts fully understood USTDA's resources, now and for the future.

As a result of the ICT DM, the DMC recommends the *Khayelitsha and Mitchells Plain Digital Inclusion Feasibility Study* for the City of Cape Town Metropolitan Area for USTDA funding support. The detailed Terms of Reference (TOR), project budget, work schedule, US export potential and contractor qualifications can be found within this final DM report.

As additional results from the ICT DM, the DMC has identified several initiatives for USTDA follow-up; the description of these activities can be found in the *Project Description* and *Recommendations* sections of this report.

## **Project Description**

The USTDA RFQ for the ICT Definitional Mission to South Africa identified that the DMC would research and locate potential USTDA Grant projects in five ICT areas, and across multiple locations. These areas and locations are noted below, and also in a DM planning chart that the ICT Contractor developed to help structure the in-country visit plan.

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The DMC then worked with both USTDA offices through a series of weekly calls, to follow-up on the established and new contacts and leads, and to finalize the in-country meeting schedule. The following material covers core issues that were reviewed in-country, and identifies any recommendations that arose from the meetings. The DMC also followed-up with numerous contacts and organizations after the in-country work, so as to ensure a thorough vetting and discussion of potential Grant projects and to ensure that contacts fully understood USTDA's resources, now and for the future.

## ***Johannesburg / Pretoria***

### **USTDA Briefing and ICT Roundtable**

The ABDM and DMC hosted an ICT roundtable for US ICT suppliers, as well as representatives from the US Department of State and US Commercial Service. The ABDM and DMC provided brief overviews of their roles with USTDA, and outlined the criteria for pursuing / obtaining a USTDA grant. A group discussion followed, including comments on the ICT / broadband situation in South Africa, specific queries on possible grant activities, and queries on USTDA's work to date in South Africa. As a result of the briefing, multiple follow-on meetings transpired with US ICT suppliers, leading to discussions and / or evaluations for potential Grant concepts, between these firm's representatives, potential project sponsors, the CMSA, ABDM, ATDS, and the DMC.

### **National Treasury**

Petrus Matji, the *National Treasury Director: Water Affairs, CoGTA & DoC and Public Finance: Urban Development & Infrastructure* hosted a large group meeting, so that the ABDM and DMC could present information about USTDA and the ICT DM, and provide initial comments on potential grant topics. Attendees included representatives from the National Treasury, Council for Scientific and Industrial Research (CSIR), Department of Communications, Department of Public Enterprise, South African Local Government Association (SALGA), University of Fort Hare, and the US Department of State.

The ABDM and DMC provided brief overviews of their roles with USTDA, and outlined the criteria for pursuing / obtaining a USTDA grant. A group discussion followed, including comments on the ICT / broadband situation in South Africa, specific queries on possible grant activities, and queries on USTDA's work to date in South Africa.

The University representative (Ms. Gumbo) shared materials about the Siyakhula Living Lab (SLL), and their research project that is currently building on the multi-functional distributed community communication platform which has been developed and deployed in Dwesa, a deep-rural, marginalized community in the Eastern Cape province – the field site of this

research. Their project aim is to re-engineer and extend the platform in order to transform it into a ubiquitous, user-driven community ICT services platform. Given the remote location of the project and its research orientation, there did not seem to be an immediate fit for a USTDA grant; however, the DMC recommends that USTDA stay in touch with Ms. Gumbo, as the SLL is a multi-stakeholder operation that consists of academia, industry, government and marginalized communities to facilitate user-driven innovation in the “ICT for Development” domain, and over time, the project could scale to include a range of ICT product and service offerings for a larger group of users. The ABDM and DMC did advise Ms. Gumbo that unfortunately, USTDA could not provide funds for purchasing equipment.

As a result of the presentations and discussions, CSIR asked for a follow-up meeting, and the Department of Communications representative indicated that he would share information about USTDA with his superiors, but did not wish to schedule a follow-on meeting at that time.

### **Council for Scientific and Industrial Research (CSIR)**

The ABDM and DMC provided brief overviews of their roles with USTDA, and outlined the criteria for pursuing / obtaining a USTDA grant. CSIR then provided two presentations during the 2.5 hour meeting and a question and answer period followed.

Kobus Roux, *Manager of Strategic Initiatives and Contract R&D*, reviewed his recent research, which had correlated the current broadband (backbone) network, school locations, and then forecasted different planning activities to expand the network to reach different numbers of primary schools, under different scenarios. The work was excellent, and Mr. Roux noted that he was keen to review this with the DMC, as he knew that the DMC was a specialist in this type of integrated / multi-disciplinary ICT network and economic planning. The DMC suggested that adding an analytic layer which correlated economic centers of activity (especially at the secondary and tertiary city level) would integrate a perspective as to how increased digital inclusion (e-education) in the schools could then leverage into increased job creation and employment at local or regional economic centers (and thereby ideally slow down rural labor migrations to major cities in South Africa). Mr. Roux also identified several bureaucratic challenges to implementing e-education at the national level, and the DMC concurred that practical challenges (such as a lack of power, the need for an established national policy regarding e-content within the schools, and funding) needed to be addressed. Mr. Roux and the DMC also discussed Mr. Roux’s observation that there were many stakeholders involved in e-education and the DMC noted that in many countries, one method to stimulate an effective policy implementation was for the top levels of government to designate a senior official to (a) bring together the divergent perspectives and interests and (b) thereby design an executable plan with specific projects to drive e-education from both a top-down and bottom-up perspective.

Dr. Fisseho Mekuria, Research Group Leader for Wireless Computing and Networking in the CSIR-Meraka Institute then presented an overview of the challenges of rural area internet connectivity in terms of affordability and sustainability. The presentation is on file with USTDA, and also requested funding for a proposed 2<sup>nd</sup> phase for a pilot project that plans to utilize TV white space technology for rural connectivity (planned for 3Q and 4Q 2012).

The DMC reviewed the project goal, and noted that research work with TV white space technology was an important area, and especially for South Africa where additional spectrum could be used for these broadband applications. The DMC explained that USTDA funds unfortunately could not be used for local goods procurement (more than 50% of the request was for local products), but reinforced that with a different approach (Grant request), the project concept was one that USTDA could definitely consider. The DMC noted that e-education was an important activity (e.g. how connectivity can help schools to obtain internet access / information), and (when asked), again explained that only 20% of a potential USTDA grant could be used for local staffing. The DMC also noted that in a potential Grant request, it would be important to show exactly what procurements and trade opportunities could result from the increases in connectivity (e.g. network equipment, computers, power systems, etc.).

The DMC encouraged CSIR to consider how they might revise the pilot project request to USTDA, e.g. could CSIR obtain funding for the goods and consider how USTDA might support a feasibility study for expansion and / or an evaluation for phase 2. The DMC also encouraged CSIR to include a provincial or national education stakeholder in a future proposal revision, so that the pilot's results could be followed by an authority that could potentially have the ability to expand, fund and/or otherwise utilize the results to advance e-education within the country.

Following the in-country component of the DM, the DMC followed-up multiple times with Dr. Mekuria and learned that a tender had been released to procure equipment for the pilot's *first* phase. Apparently, the pilot was behind schedule and Dr. Mekuria believed that phase 2 would now commence in 2013. The DMC again noted that perhaps USTDA could support the project, through a complementary FS for its scaling / expansion. Dr. Mekuria noted that ICASA would have to provide a license for this activity, and again the DMC noted that a "USTDA FS might be a wise tool to help in that regard."

## **ICASA**

The ABDM and DMC met with ICASA representatives twice, with the following results.

During the first meeting with Councillor Stucke and the CEO, discussions centered on digital TV and concerns regarding delays in obtaining locally-sourced set-top boxes, challenges in

spectrum management, white space field trials (“where they would welcome project proposals from US vendors”), and a lack of funding from the National Treasury for critical procurement needs. When the CEO joined, he noted that the core issue facing ICASA was funding, and issues of staff turnover (losses of trained staff to vendors and other ICT sector organizations). The DMC noted that one way USTDA had supported regulators and other nationally-funded organizations was to help them assess fees and costs, and create new and more effective operational structures, so that fees could be aligned with cost structures, and so that organizations could operate in a truly autonomous matter. The CEO was extremely interested in this concept, and the DMC followed-up with an extensive e-mail and sample of the Feasibility Study that USTDA funded for the *Serbian State Agency for the Protection of Intellectual Property Rights*. In return, the CEO provided the ICASA five year strategic plan, noting that USTDA was welcome to “propose project cooperations” with ICASA. Both the ABDM and DMC noted that USTDA did not work in this manner, and again emphasized that the meeting goal and dialogues were to seek specific project / Grant opportunities with a mutual organizational fit.

The CMSA arrived in South Africa just before the DMC departed, and the DMC was asked to join for a second meeting at ICASA with Chairperson Mncube, Councillor Leboo, a representative from the US State Department, and the ABDM. During this meeting, Chairperson Mncube noted his appreciation for the training support that the US government had provided, and requested additional funding to send additional staff to the US for similar training activities. The Chairperson noted that ICASA was undergoing an organizational restructuring, and the CMSA reintroduced the concept that the DMC had shared with the CEO and Councilor Stucke (e.g. a potential USTDA sponsored Technical Assistance or Feasibility Study project that would assist ICASA with its organizational changes and / or operational transformation). As requested, the DMC resent the materials to ICASA, and the group noted that the US State Department contact (Mr. Leiby) and the ABDM would stay in contact to discuss the training request.

### ***City of Pretoria (Tshwane)***

The ABDM and DMC met with the *Strategic Executive Director, Economic Development of the City of Tshwane* to discuss ICT projects where a USTDA grant could provide potential assistance. Ms. Mhlekwa took over responsibilities for “smart city” initiatives in December, and during the meeting Ms. Mhlekwa discussed a range of needs, including smart metering (electricity), water management, city infrastructure and services, and the need to have an inventory of ICT assets (especially because the City had annexed two new geographic areas and Ms. Mhlekwa was appropriately concerned that the City could not plan for services extensions without knowing what ICT infrastructure was in place or needed). The DMC concurred that having a combination database / GIS system was essential for a City, and Ms. Mhlekwa agreed that since time was short, it was important to have a second meeting to frame a USTDA grant project.

The ABDM and DMC returned two weeks later and anticipated a meeting with a range of city staff; however, due to time and schedule constraints, only Ms. Mhlekwa could meet. Ms. Mhlekwa again emphasized her ICT project needs, and the DMC offered to develop a TOR for an ICT inventory / planning project, if Ms. Mhlekwa concurred that it was the City's most critical need. Ms. Mhlekwa indicated that this would be ideal, and agreed to a work plan / schedule for assessing and developing a USTDA grant project during the DMC's stay in South Africa, and immediately upon their return to the US.

As planned, the DMC worked throughout the weekend, and submitted an expedited TOR draft (see Attachment I) for Ms. Mhlekwa's review and comment, but unfortunately, time and scheduling constraints prevented Ms. Mhlekwa from continuing the dialogue with the DMC / USTDA. Also, the DMC learned that Ms. Mhlekwa planned to recruit both a CIO and "Smart City" manager, and this staffing assistance should place the City in a better position for supporting and working with a USTDA grant.

The DMC therefore recommends that USTDA follow-up with the City of Tshwane after the additional staff members are hired (e.g. fall 2012).

### ***City of Johannesburg***

The *Director of Business Relationship Management of the Office of the Chief Information Office (CIO) of the City of Johannesburg* hosted a meeting where representatives from various City departments attended (water, social assistance, City safety programs, and welfare, among others). Unfortunately, except for the host, none of the attendees had business cards and a promised guest list was never received. During the meeting, the ABDM and DMC provided brief overviews of their roles with USTDA, and outlined the criteria for pursuing / obtaining a USTDA grant. Many ICT needs were discussed, including "smart city" initiatives, the challenges of water losses, crime mapping, and the need for ICT support. The ABDM and DMC asked multiple times if there were specific initiatives or projects, and if / how they could arrange follow-on meetings with meeting representatives to discuss these potential Grant project concepts. While many of the attendees noted the need for funding support (and particularly funds for procurements), none of the attendees wished to arrange a follow-on meeting.

### ***City of Cape Town: CIO Broadband Projects and Smart Crime***

#### **CIO Broadband Projects**

Accompanied by the ABDM, the DMC met with Andre Stelzner, CIO for the City of Cape Town to discuss his response to the ICT DM BPQ, which outlined a Feasibility Study grant concept that would support a pilot Wi-Fi network to provide internet access to the southeast Cape Town Metropolitan area, and specifically to Khayelitsha and Mitchells Plain, two economically and

socially depressed metropolitan areas. While the Cape Town meeting covered many issues, both the DMC and CIO were pressed for time, and it was suggested that the DMC return to Cape Town for further “hands on meetings” with key City and Provincial stakeholders for the project, and to potentially develop the TOR for this project; March 12 / 13 were held for these activities.

After a series of discussions between the DMC and CMSA, the decision was taken for the DMC to revisit Cape Town. During the two-day work session, the DMC met with the CIO, his telecommunications manager and staff, and Alderman Qually, all of whom concurred that USTDA could play a vital role in funding the Feasibility Study, if City procurement rules permitted this funding route (it was noted that even with grants and other forms of support, the City still had to ensure that accepting a Grant was permissible). The telecommunications manager provided critical background, documents, and insights during the team’s work sessions. A site visit to Khayelitsha and Mitchells Plain provided important visual, topographical and demographic perspectives relative to the potential network and service planning concerns.

The CMSA then visited Cape Town on March 19 and followed-up on the activity, and provided the CIO additional information regarding USTDA grant processes.

As a result of ongoing work by the DMC with the CIO and his team, and USTDA’s continued dialogue with the City of Cape Town, the DMC recommends the *Khayelitsha and Mitchells Plain Digital Inclusion Feasibility Study Project* for USTDA grant support. The fully developed TOR, Staffing Qualifications, Project Schedule and Project Budget can be found within this DM report.

### **Smart Crime (Smart Cops)**

As a follow-up to initial discussions by USTDA’s Johannesburg office, the DMC met with Alderman J.P. Smith to discuss a potential USTDA grant request for a smart crime project. The specific need concerned a “Smart Cops” project, which involves updating the City of Cape Town fleet management system, and Alderman Smith and the DMC discussed the range of grant tools USTDA provides, and if / how a USTDA FS grant may be a good fit for the Smart Cops project.

The City of Cape Town has frustrations with its current fleet management vendor and locally sourced fleet management system, and is pursuing an approximate R 19M (approximately US \$3M) procurement, if a decision is taken to fully replace the existing fleet management system. Separately, key City decision makers planned to visit the US (via a State Department supported trip) in the spring, interacting with police, fire and other crime-related agencies. While the Study Tour’s focus is not specifically upon fleet management, Alderman Smith noted that many technological concepts for handling crime and safety would be seen.

The DMC believes that following the Study Tour, the City will have more information and exposure to US technologies to guide its procurement planning. It is also possible that when the City decision makers return to South Africa, a decision could be taken to release an RFP for a new system, given the City's expanded technological and vendor knowledge base. Further, given the possible \$3M procurement estimate, the DMC was concerned that the topic was too small for a USTDA grant and / or that following the Study Tour, the City may decide to dramatically expand the project scope to include additional technological capabilities that could support related smart-crime needs.

After discussions with the CMSA, the DMC followed-up with Alderman Smith by e-mail, and identified that USTDA and the DMC felt that the timing was premature to develop a Feasibility Study grant, and that the project scope for the fleet management system was too small; however, the DMC suggested that USTDA follow-up with Alderman Smith in the June to August timeframe, to see if and how the project scope may have been revised, which may lead to a better scale and scope for a potential USTDA grant.

### ***KwaZulu-Natal (KZN) Province / Disaster Management***

The ABDM and DMC met with Mr. S.E. Ngema, *Senior Manager Policy and Planning for KZN* with responsibility for Disaster Management in KZN Province. Mr. Ngema provided an outline of the province, identified the three top priorities in the area of disaster management, and discussed the main obstacles to implementing the disaster management policies set for by the Province and South Africa.

KZN is largely a rural province with few major cities outside of Durban and Richards Bay. There are eleven districts that surround Durban and the total population of KZN is approximately 10 million or 20% of the population of South Africa. The province has the largest population in South Africa residing in informal communities.

The DMC learned that national and provincial policies outline requirements for implementing disaster risk management plans and Disaster Operation Centers (DOCs), and the policies provide clear definitions of a three tiered structure (phased approach) for establishing the disaster risk management plans and DoCs in each major municipality and district. The three levels of disaster risk management are noted below<sup>1</sup>:

Level I focuses primarily on establishing institutional arrangements for disaster risk management; putting in place contingency plans for responding to known priority threats as identified in the initial stages of the disaster risk management assessment; and identifying key

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<sup>1</sup> "Policy Framework for Disaster Risk Management for the Province of KwaZulu – Natal", N. Dube, Member of the KwaZulu-Natal Executive Council, November 1, 2010, pp. 51 &52,.

stakeholders and developing the capability to generate a Level 2 Disaster Risk Management Plan.

Level 2 includes establishing processes for a comprehensive disaster risk assessment; identifying and establishing formal consultative mechanisms for developing disaster risk reduction projects; and introducing supportive information management and communication system and emergency communication capabilities.

Level 3 must specify clear institutional arrangements for coordinating and aligning the disaster risk management plan with other governmental initiatives and plans of institutional role players. Level III must also show evidence of informed disaster risk assessment and ongoing disaster risk monitoring capabilities.

The three priorities that Mr. Ngema identified in the Province's effort to satisfy the Disaster Risk Management Plan policy for KZN are:

- To have DOCs in Durban and the eleven districts surrounding Durban;
- Expand the communications services from Durban to and between the eleven districts;
- Expand the emergency services in the eleven districts, with a particular concern for the lack of sufficient fire-fighting equipment.

Obstacles to fulfilling the Provincial policy regarding disaster management are:

- The municipalities and districts are not cooperating with the Province;
- On average, only about half the work between Durban and the eleven districts has been accomplished to attain disaster management readiness at Level I.

During the meeting, the ABDM and DMC provided Mr. Ngema a description of USTDA and its Grant activities and processes. While Mr. Ngema continued to discuss the national and provincial policies and the current initiatives to establish DOCs, he was unable to provide any specific information on the budget for the work in progress on the provincial DOC, nor any plans or budgets for the district DOCs. Further, Mr. Ngema was unable to identify a specific Provincial disaster management project that would link to a procurement or specific investment.

The ABDM and DMC debriefed after the meeting and concluded that there was a very low probability for identifying a Grant opportunity, given the current state of the Province's disaster readiness, and the lack of cooperation on the part of the Districts. Nonetheless, given the DM's priorities in disaster management, the DMC asked Mr. Ngema to provide him with copies of the National and Provincial directives on establishing DOCs, a copy of the Provincial plan and

budget for the DOC, and the status report on the progress in establishing Provincial and District DOCs. At the same time, the DMC provided Mr. Ngema a sample copy of a USTDA TOR so he could become more familiar with the USTDA Grant process.

Following the Durban meeting, the DMC initiated communications with Mr. Sabelo Gwala, who serves as a *Director / Specialist – Human Development and handles disaster management at the South African Local Governance Association (SALGA)*. The DMC wanted to gain an additional perspective on KZN’s disaster recovery planning situation. Mr. Gwala confirmed that at the national level the first priority is to have all municipalities and districts achieve a Level 1 status for disaster management, which is the key point Mr. Ngema had shared.

Level 1 is strictly an administrative process, and while a USTDA Technical Assistance Grant could potentially assist with that challenge, the lack of coordination among the key stakeholders is a major hurdle that the KZN government – at the district and municipal levels – must overcome. The DMC recommends that the ABDM monitor the progress of the eleven districts within the KZN province on achieving Level 1 status. Once Level 1 status is attained, USTDA may choose to revisit the opportunity to support the Province’s disaster risk management efforts as they move toward Level 2 and will then be prepared to design and / or procure ICT systems.

### **Limpopo Province / Municipal ICT Projects – Limpopo Economic Development Enterprise (LimDev)**

The DMC learned that Limpopo Province, a vastly expansive geography, was characterized by a chronic lack of ICT infrastructure, and that USTDA might be able to assist the Province in its ICT growth goals. Further, the Provincial government had designated the Limpopo Economic Development Enterprise (LimDev) as the organization to drive the ICT infrastructure development plan, so the ABDM contacted LimDev and a meeting with key officials was organized by the ABDM for the DMC.

During the meeting, the DMC provided an overview of USTDA, outlined the criteria for pursuing/obtaining a USTDA grant, and discussed their “hands-on DM roles” in helping local organizations to design a TOR and related materials to pursue a potential USTDA Grant. A group discussion followed on the ICT / broadband situation in Limpopo, with specific queries on possible grant activities and USTDA’s work to date in South Africa. The DMC answered all questions, and immediately supplied meeting attendees with two electronic files with ICT Feasibility Study TORs and related information for pursuing a USTDA Grant activity.

The LimDev meeting attendees included the Program Manager for Business Development (Ms. Pauliina Mapatha), Program Manager (PMO), Broadband Program Manager, Broadband Infrastructure Manager, Program Manager: LICTI, and an ICT Executive. After the two hour

discussion, Ms. Mapatha noted that (a) for some time, the Province had been trying to determine how to develop its broadband infrastructure and that the visit by the USTDA DMC was very timely and appreciated; (b) while a USTDA Feasibility Study grant could be an ideal tool to assist LimDev in its planning work, it was important for LimDev to consider USTDA relative to other potential resources; and (c) LimDev was required to discuss this potential resource at the Board level. The meeting closed with Ms. Mapatha planning to discuss the USTDA Grant opportunity with LimDev's senior management, with a promise to then respond to USTDA and the DMC regarding their proposed next steps.

The DMC team followed up during their visit, and again, one week later when the CMSA was in South Africa and could meet with LimDev to answer any further questions. LimDev declined the latter opportunity, noting that they did not yet have a decision as to how to proceed. The DMC followed up again in April, but LimDev did not respond with a further request for discussions. During the preparation of this report, the DMC recommended that USTDA contact Ms. Mapatha in the summer (June / July 2012) to understand LimDev's decision and / or next steps vis-à-vis pursuing a Grant via USTDA.

On May 31, the ABDM met with Limpopo Premier Cassel Mathale, Chief of Staff Phuti Mosomane, Director General Rachel Molepo-Modipa, Senior General Manager: Planning Nepo Kekana, and the LimDev Executive Manager: ICT Mmapula Kekana. During this meeting, Premier Mathale confirmed that Limpopo would like to receive USTDA grant assistance for the broadband infrastructure project, and instructed Mr. Kekana and Ms. Kekana (no relation) to work with USTDA to develop the terms of the grant program. Mr. Kekana then corresponded with the ABDM weekly throughout June, and requested that the ABDM return along with the CMSA in August 2012 to determine next steps for this activity, among others.

The DMC believes that a USTDA Grant could be an excellent resource for LimDev, to assist them with planning and potentially implementing an ICT broadband / commercialization strategy.

### **Project Sponsor's Capabilities and Commitment**

Cape Town is South Africa's oldest city, its second-most populous and with an area of 2,455 km<sup>2</sup>, its largest. It is the legislative capital of South Africa, the administrative and economic center of the Western Cape Province, and Africa's third-biggest economic hub. It produces 10.58% of South Africa's gross domestic product (GDP) and accounts for more than 71% of the Western Cape's economic activity.

As a metro municipality, the City of Cape Town has a municipal governance and service delivery heritage that dates back more than 300 years, and as a large, complex and diversified

organization, it has a proposed 2011/12 budget of R27.1 billion (approximately US \$3.4B), which is inclusive of the operating budget of R22 billion (US \$2.8B). The City has more than 220 Councillors and 2500 staff serving 3.7 million residents across the sprawling and geographically diverse metro. The City administration delivers services such as water, electricity, waste removal, sanitation, new infrastructure, roads, public spaces, facilities, housing developments, the upgrade of informal settlements and existing infrastructure, clinics, and more.

Andre Stelzner serves as the *Director: Information Systems and Technology* of the metro municipality, and is responsible for ensuring that ICT systems are maintained and developed to meet the City's current and ongoing needs, and Alderman Qually serves as the Chancillor in charge of ICT. As one of the primary goals of the *Khayelitsha and Mitchells Plain Digital Inclusion Feasibility Study Project* is to extend ICT services into two city settlements, the City of Cape Town and in particular, the Information Systems and Technology department, is the appropriate organization to carry this dynamic responsibility forward.

### **Implementation Financing**

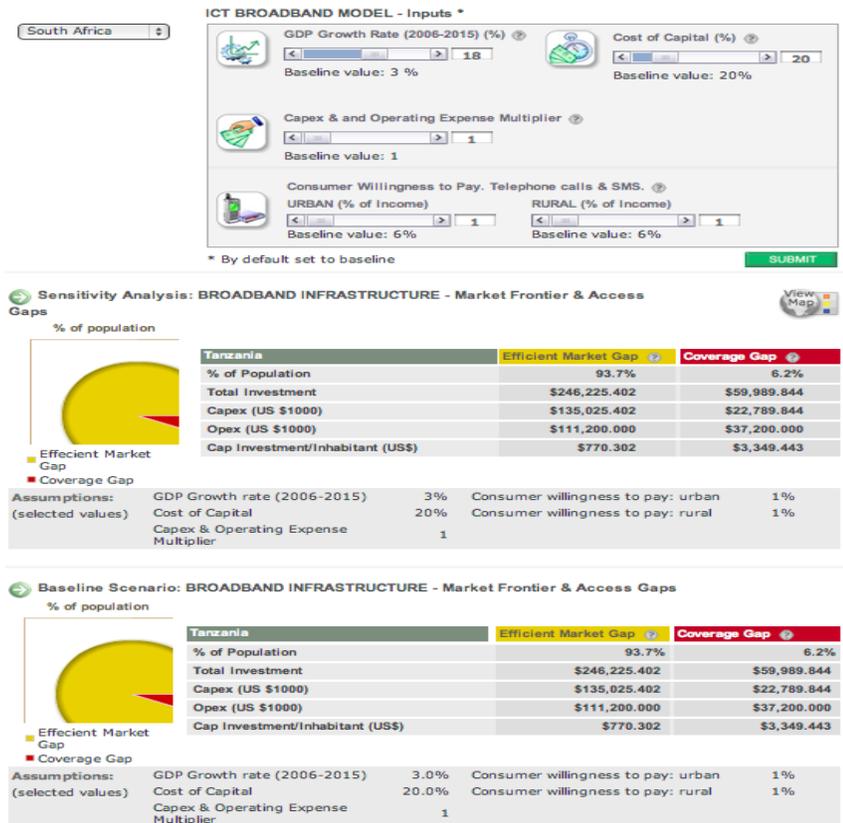
Using the established contacts / relationships supplied by the CMSA and ABDM, the DMC contacted five individuals at the World Bank, and was eventually referred to Laurent Besancon, who handles the Africa / ICT portfolio for the World Bank. During a scheduled call, Mr. Besancon indicated that there were no specific activities in the World Bank ICT funding pipeline for South Africa, but that he was aware that "metro projects" were very big, and that meeting with the National Treasury could help move any potential project dialogues "forward". Mr. Besancon noted that the timing was "very ripe" for the USTDA ICT DM and that the World Bank would be happy to play a complimentary role to USTDA's Grant funding, assuming an appropriate opportunity arose that was a good fit for both organizations.

The DMC contacted four individuals at the Development Bank of South Africa (DBSA) and had several e-dialogues with Julie Clarke, who handles the Drylands Fund. The Drylands Fund became operational in April 2011, is housed as an Agency in the Development Bank of Southern Africa, and aims to significantly scale up efforts to address environmental degradation, climate change and rural poverty across South Africa (with strong linkages into the region). The DMC wanted to capture how this fund, and the DBSA, might assist US investors / exporters with South Africa.

The DBSA provides five financial services, namely: grants, lending, investing, underwriting of guarantees and the arranging of finance, and the DBSA currently focuses on the funding of large scale infrastructure projects within the public and private sector. To qualify for funding, projects must meet certain key criteria. First, a project must be consistent with the DBSA's sectoral and geographic mandate, i.e. in support of infrastructure development within South Africa and the

SADC region, and projects must deliver impact on the lives of the communities and areas they will serve. This implies that projects must be financially and economically viable and must benefit the economy of the host country. They must be socially responsible, environmentally sustainable, technically appropriate, and legally and contractually sound. The implementing agency must have the institutional capacity to plan, implement and manage the project. All risks must be clearly identified, thoroughly analyzed and prudently mitigated. Overall, the development impact of the project should be maximized and should be sustainable. For more information, exporters and investors should visit the DBSA website at: <http://www.dbsa.org/>

The African Development Bank’s *Africa Infrastructure Knowledge Program (AIKP-ICT)*<sup>2</sup> has been addressing the links between the market frontier (those who still need broadband access) and broadband access gaps, and as shown on this page, this live, financial / economic planning tool can help South African investors to consider differing investment projects and returns / benefits, relative to the cost of capital and the customers’ willingness to pay. While the AIKP-ICT Is not a financing organization, it is an extremely valuable resource for exporters and investors working in South Africa’s ICT sector.



<sup>2</sup> <http://infrastructureafrica.afdb.org/models/ictbroadband.asp>

The Southern African Enterprise Development Fund (SAFEDF), a US\$100 million USAID-sponsored project, promotes small-to-medium-sized enterprises throughout South Africa. It specializes in mezzanine financing, expansion and replacement capital, leveraged buy-outs and buy-ins, public private partnership and privatization, turnarounds, and management buyouts, and the fund seeks to invest in small and medium sized enterprises and established businesses. In case of buyouts, it also buys non-core division of a large corporate from its existing owners. The fund prefers to invest in companies operating in industrial manufacturing, financial services, real estate, telecommunications/information and communication technologies, and natural resources, and seeks to invest in the Southern Africa with a focus on Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Republic of South Africa, Swaziland, Tanzania, and Zambia. The fund typically invests a maximum of \$10 million per individual investment, and makes equity, quasi equity, and debt investments.

The fund also co-invests and seeks majority or significant minority ownership, board seats, and voting and information rights in its portfolio companies, and invests through capital provided by the United States Government.<sup>3</sup> The fund prefers to exit its investments through management buyouts, trade sales, or initial public offerings on a domestic or international exchange.

The Overseas Private Investment Corporation (OPIC) assists U.S. investors through four principal activities designed to promote overseas investment and reduce the associated risks: they provide insurance investments overseas against a broad range of political risks; finance overseas businesses through loans and loan guaranties; provide investment funds that provide equity to businesses overseas; and advocate American business community interests overseas.

OPIC programs are generally available in South Africa<sup>4</sup>, although from time to time, statutory and policy constraints may limit the availability of programs, or programs that were previously unavailable may become eligible. Also, under agreements with certain countries, the investor may need to obtain host government approval before OPIC can support a project.

The Export-Import Bank of the United States (Ex-Im Bank) is the official export credit agency of the United States federal government, whose mission is to create and sustain U.S. jobs by financing sales of U.S. exports to international buyers. Ex-Im Bank does not compete with private sector lenders, but rather provides financing for transactions that would otherwise not take place because commercial lenders are either unable or unwilling to accept the political or commercial risks inherent in the deal. With more than 77 years of experience, Ex-Im Bank has supported over \$456 B of U.S. exports (primarily to developing markets worldwide), and since 1999, Ex-Im Bank has supported over \$5 B in transactions throughout sub-Saharan Africa.

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<sup>3</sup> <http://investing.businessweek.com/research/stocks/private/snapshot.asp?privcapId=430802>

<sup>4</sup> <http://opic.gov/doing-business/where-we-work/africa>

Ex-Im provides working capital guarantees (pre-export financing); export credit insurance; and loan guarantees and direct loans (buyer financing), and its resources are available for both private and public sector transactions in South Africa.<sup>5</sup>

The Small Business Administration (SBA) helps small business exporters by providing a number of loan programs specifically designed to help them develop or expand their export activities. The loan programs fall into three categories, namely the *Export Express Loan Program*, the *Export Working Capital Program (EWCP)*, and the *International Trade Loan Program*. The *Export Express Loan Program* offers streamlined financing up to \$500,000, while via the *EWCP*, the SBA provides lenders with up to a 90% guaranty on export loans up to \$5million as a credit enhancement, so that the lenders will make the necessary export working capital available. The *International Trade Loan Program* offers term loans for fixed assets and working capital to businesses that plan to start or continue exporting, or that have been adversely affected by competition from imports and need to retool to become more competitive. Details and qualifications for each of these export assistance financing programs can be found at: [www.sba.gov/content/export-loan-programs](http://www.sba.gov/content/export-loan-programs)

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

The CoCT is committed to extending the existing City-owned and operated MOFN into the settlements of Khayelitsha and Mitchells Plain. This fiber optic backbone extension will provide broadband connectivity to the municipal buildings within the settlements, and will also create the opportunity for suppliers and service providers to extend the network, so that the settlements' residents and local businesses could access this ICT infrastructure. The U.S. export potential derives from three areas of this broadband expansion initiative.

First, Phase II of the MOFN will extend the existing fiber optic backbone into Khayelitsha, Mitchells Plain and beyond.

As background, during Phase I, the CoCT spent a total of \$12.45M on equipment for the MOFN. Of that budget, approximately US \$6.23 was sourced to US Vendors. Specific equipment categories that were purchased from US vendors included optical fiber, optical distribution frames, DWDM devices, switching devices, routers, and software used to monitor traffic over the fiber, and software for inventorying the equipment. The budget for the MOFN's Phase II is approximately five times that of the budget for Phase I. Phase II could therefore potentially

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<sup>5</sup> [http://www.exim.gov/tools/country/country\\_limits.cfm](http://www.exim.gov/tools/country/country_limits.cfm) ; <http://www.exim.gov/about/mission.cfm>

generate approximately five times the opportunity for US exports in the same ICT product and services categories or US \$31.2M.

Second, to connect the proposed local network (a wi-fi mesh network) in Khayelitsha and Mitchells Plain to the MOFN, data switches are needed, specifically Dense Wavelength Division Multiplexing (DWDM) devices and Multiprotocol Label Switching (MPLS) devices. DWDM is a technology that puts data from different sources together on an optical fiber, with each signal carried at the same time on its own separate light wavelength. MPLS is a mechanism in high performance telecommunications networks that directs data from one network node to the next based on short path labels rather than long network addresses, avoiding complex lookups in a routing table.

Finally, the network that connects the residents and local businesses to the MOFN will require Wi-Fi routers and non-ICT equipment such as towers, electrical connections, local construction, and other network support / physical plant equipment. It is assumed that the non-ICT equipment would be sourced locally; hence the US export potential centers on the Wi-Fi routers.

Competition is keen in these ICT areas. The table below identifies US suppliers in each category, although many more may elect to compete for the opportunity. The budget estimate for the MPLS and DWDM devices has been discussed with and directly provided by the CoCT.

Given the accuracy of the planning and design work that has been done to date by the CoCT on the entire network, the DM Contractor thereby concurs and estimates the US export potential for the network products would be at the midpoint of \$42.3M to \$46.1M or an average of \$44.2M, as shown below and on the next page.

**Representative List of Potential U.S.-Based Suppliers**

<b>Product Category</b>	<b>Potential U.S. Suppliers</b>	<b>Estimated US Export Potential</b>
Phase II of the MOFN – Build out to Khayelitsha, Mitchells Plain and Beyond	Tyco Electronics, Berwyn, PA Corning Fiber, Corning, NY GE, Fairfield, CT Johnson Controls, Milwaukee, WI Cisco, San Jose, CA Broadsoft, Gaithersburg, MD Acme Packet, Bedford, MA CA Computer Associates, Islandia, NY	\$ 31,200,000

MPLS & DWDM	Advantage Optics, Batavia, IL Ciena, Linthicum, MD Cisco, San Jose, CA Juniper Networks, Sunnyvale, CA Motorola, Schaumburg, IL Oclaro Inc., San Jose, CA Oplink, Fremont, CA Opnext, Fremont, CA Optelian, Marietta, GA	\$ 4,700,000
Wi-Fi Routers	Advantage Optics, Batavia, IL Aruba Networks, Sunnyvale, CA Ciena, Linthicum, MD Cisco, San Jose, CA Juniper Networks, Sunnyvale, CA Motorola, Schaumburg, IL Opnext, Fremont, CA Optelian, Marietta, GA Tropos, Sunnyvale, CA	\$ 6,400,000 to \$ 10,200,000
<b>Total</b>		<b>\$42,300,000 to \$46,100,000</b>

Khayelitsha’s population is approximately 500,000 and is reputed to be the largest and fastest growing township in South Africa; fewer than 7% of its residents are over 50 years old and over 40% of its residents are under 19 years of age.<sup>6</sup> Mitchell’s Plain’s population is approximately 300,000 with 62% of the residents younger than 29 years of age<sup>7</sup>. While the two settlements face economic challenges, as an example of the US export potential, Mitchell’s Plain has experienced a real GDP growth compounded annual growth rate of 3.4% from 1995 – 2004, and a rate of 4.2% from 2000 – 2004. The retail sector accounts for a large share of the settlement’s nodal GDP, with the manufacturing and public sector accounting for significant shares (and reportedly experiencing growth). Importantly, the fastest-growing sectors were identified by a South African government report as transport and communications, trade, and finance and business services.<sup>8</sup>

Individuals between their teens and late thirties tend to be the highest adopters and users of e-technologies and devices. Transport and communications, trade, and finance and business

<sup>6</sup> [http://en.wikipedia.org/wiki/Khayelitsha#cite\\_ref-1](http://en.wikipedia.org/wiki/Khayelitsha#cite_ref-1)

<sup>7</sup> Mitchell’s Plain Nodal Economic Development Profile, *Department of Provincial and Local Government of the Republic of South Africa*.

<sup>8</sup> Ibid.

services all require communications in order to facilitate transactions. In fact, transport's reliance on ICT has dramatically increased in the last decade as data applications for e-based fare collection and intelligent transportation systems have reframed how both consumers and suppliers interact with and in the transportation services delivery chain. Trade is increasingly relying upon e-procurements and web-based platforms for increased productivities, transparency and functionality (accounting, inventory management and distribution). Finance and business services require the movement of information and funds, all of which have moved steadily from paper-based and fax-based systems to internet and intranet based systems.

Khayelitsha and Mitchells Plain have some of the lowest internet and ICT device (computer, smart phone, tablet, etc.) densities. While individuals and businesses in these settlements do face very real purchasing constraints, mobile commerce is becoming an increasing proportion of how and where businesses and individuals conduct transactions. In order to access the MOFN network extension into the two settlements, individuals and business would be expected to allocate funds for the purchases of computers, tablets, smartphones and electronic devices to obtain mobile access and / or connectivity to computer-mediated networks. As part of the *Khayelitsha and Mitchells Plain Digital Inclusion Feasibility Study Project*, the Contractor will be assessing how e-goods and services will be priced and / or subsidized as to be affordable to Khayelitsha and Mitchells Plains' residents, and how individuals and businesses (and supportive humanitarian and / or funding organizations) will be able to support purchases and technology adoptions and diffusions of these devices within the two settlements.

The DM Contractor therefore forecasts an additional market potential averaging \$100 per person, based on a conservative 25% penetration of the total market for the computers and / or devices within the two settlements. With the two settlements' total population of 800,000 residents, this presents an additional export potential of \$20M. Assuming that residents purchase the devices and access tools from non-US sources and that an individual's purchase may only yield an export potential for part of the purchase (e.g. a device's component that is sourced from the US or a licensing fee that returns to the US), the DM Contractor forecasts a 20% return on the \$20M market, or a total US export potential of \$4M.

Lastly, small businesses within the two settlements would be expected to allocate additional funds for computers and e-access devices, and for connectivity (service). While the number of businesses may be in the hundreds, each purchase is assumed to be significantly higher, in the range of \$400 - \$500 per business. As a conservative estimate, the DM Contractor estimates the two settlements' small business market for e-devices at \$.5M.

Therefore, the total US export potential is a total of \$44.2M plus \$4M plus \$.5M or \$48.7M.

### Foreign Competition

The U.S. faces stiff foreign competition in the area of communications equipment manufacturing. The table on the next page provides a sample of these vendors.

#### Representative List of Potential Foreign Suppliers

Product Category	Potential Foreign Supplier
MPLS & DWDM	<ul style="list-style-type: none"> <li>• ADVA Optical Networking, Munich Germany</li> <li>• Advanced Multimedia, Pte., Ltd., Singapore</li> <li>• Itas Technology Corp, Hsinchu, Taiwan</li> <li>• Mitsubishi Electric Corp., Tokyo, Japan</li> <li>• Nokia Siemens Networks, Espoo, Finland</li> <li>• O-Net Communications, Shun Tak Centre, Hong Kong</li> <li>• Sesami Solutions, Chennai, India</li> <li>• Shenzhen Golight Tech. Co., Ltd, Shenzhen, China</li> <li>• Toyo Corporation, Tokyo, Japan</li> <li>• Transmode, Stockholm, Sweden</li> <li>• O-Net Communications, Shun Tak Centre, Hong Kong</li> </ul>
Wi-Fi Routers	<ul style="list-style-type: none"> <li>• Advanced Multimedia, Pte., Ltd., Singapore</li> <li>• Asiarf Company, Ltd., Yonghe City, Taiwan</li> <li>• Gateway Infocomm, Hyderabad, India</li> <li>• Nanjing Palm 3-G Technology Co, Jiangsu, China</li> <li>• P2 Mobile Technologies, Ltd, Quangdong, China</li> <li>• Sesami Solutions, Chennai, India</li> <li>• Shanghai UTT Technologies Co. Ltd. Shanghai, China</li> <li>• Wavion Wireless Networks, Yogne'am- Illit, Israel</li> <li>• Xiamen Four-Faith Communication</li> </ul>

	Technology Co., Ltd. Fujian, China • Zylog Systems, Ltd., Chennai (Madras), India
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## Foreign Competition and Market Entry Issues

Numerous foreign competitors are active in South Africa's ICT sector.

Huawei (Chinese) first entered the South African market in 1998 in Pretoria, and relocated to Johannesburg in 1999, and the South African office also serves as the headquarters for the entire Sub-Saharan region. A training initiative with the University of Cape Town is underway, supplying basic and advanced product training to telecoms engineers, and the Chinese competitor has supplied the university with the necessary equipment needed to operate a fully functional Huawei training facility.

Telkom Group is a wireline and wireless telecommunications provider in South Africa that operates in more than 38 countries throughout the African continent. It is semi-privatized, 39% state-owned company. Huawei is Telkom's only strategic partner for its 21CN integrated access network, providing an access platform integrating voice, IP and video, and the firm also became a strategic global partner of MTN in 2005, having signed a 3-year framework agreement worth US \$600 million, featuring communications equipment provision and service. (MTN is a South Africa-based multinational mobile telecommunications firm, operating in many African and Middle Eastern markets.) Huawei also provides Vodacom with advanced 3G terminals and CellC with high-end IP networks and value added services. (Vodacom is a pan-African mobile telecommunications firm, and provides GSM services to 35M customers in South Africa, Tanzania, Lesotho, Mozambique and the Democratic Republic of the Congo.) Huawei is also listed as the first partner to be chosen by the fixed network operator SNO. The Government of the Northwest Province has also purchased and implemented an IP WAN from Huawei.<sup>9</sup>

Siemens (Germany) celebrated its 150th year of operation in South Africa, having installed the first telegraph line in Africa from Simonstown to Cape Town in 1860. Siemens IT Solutions and Services functions across the Energy, Industry and Healthcare sectors, and supports significant investments by the public sector in major infrastructure upgrade projects. In 2010, Siemens completed major projects in transport, building technologies, healthcare and energy, where a "lucrative seven-year frame order agreement worth over EUR 180 million"<sup>10</sup> was secured with South Africa's energy utility company. In fiscal 2010 (October 1, 2009 – September 30, 2010), sales to customers in South Africa amounted to EUR 575 million, and new orders totaled almost

<sup>9</sup> <http://www.huawei.com/africa/en/catalog.do?id=348>

<sup>10</sup> [http://africa.siemens.com/en/siemens-in-africa/country-profiles/south\\_africa.htm](http://africa.siemens.com/en/siemens-in-africa/country-profiles/south_africa.htm)

EUR 513 million. As of the 2010 closing, Siemens had more than 2,200 employees in South Africa.

Vodacom was owned on a 50/50 basis by Telkom and the British mobile phone operator Vodafone, and in 2008, Vodafone announced that it had agreed to increase its stake to 65%. Vodacom is the leading cellular network in South Africa with an estimated market share of 58% and more than 23 million customers.

When the City of Cape Town merged seven local authorities to create a single “unicity,” the City’s administration replaced fragmented legacy systems and manual processes with the SAP ERP Human Capital Management solution. Looking back in time, in 2004, Cape Town Mayoral Committee member for corporate service, Alderman Qually, told Moneyweb that a “R335m (US \$43M) investment was “redeemed by achieving a positive return on investment within 36 months”. The City launched the first phase of its (SAP billing) system in the first quarter of 2004, had the entire metropolitan area of the city on the system by September 2004 and had ironed out all the major issues relating to the system by the end of 2004.<sup>11</sup> And in April, 2011, the electricity service department of the City of Cape Town awarded SAP a R951312.00 (US \$12.1M) contract for the SAP-AMI (advanced metering infrastructure) for electricity applications<sup>12</sup>. That was in addition to the request for a single source selection to appoint a SAP technical expert to assist with the upgrade of the Cape Town advanced traffic management system the previous month.<sup>13</sup>

## Market Entry Issues

Like many countries throughout the world, South Africa suffered a recession in 2009, but economic growth rebounded to 3.2 percent in the second quarter of 2010.<sup>14</sup> Inflationary pressures in the South African economy continued to wane since December 2009, with CPI inflation at 4.2% in 2011. However, a trade agreement with the European Union enables many European products to enter South Africa duty-free and at lower rates than U.S. products.

Although unemployment remains high (official figure of about 25 percent), skilled labor is apparently difficult to find in various technical and professional segments, due to emigration and the state of the education system. And according to the US Country Commercial Guide for

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<sup>11</sup> <http://www.moneyweb.co.za/mw/view/mw/en/page295025?oid=562205&sn=2009%20Detail>

<sup>12</sup> [http://www.silobreaker.com/city-of-cape-town-and-bc-hydro-implement-sap-ami-integration-for-utilities\\_2265643297965867008](http://www.silobreaker.com/city-of-cape-town-and-bc-hydro-implement-sap-ami-integration-for-utilities_2265643297965867008)

<sup>13</sup> [www.capetown.gov.za%2Fen%2FSupplyChainManagement%2FAwarded%2520Tenders%25202011%2FTenders%2520Awarded%2520March%25202011.pdf](http://www.capetown.gov.za%2Fen%2FSupplyChainManagement%2FAwarded%2520Tenders%25202011%2FTenders%2520Awarded%2520March%25202011.pdf)

<sup>14</sup> [https://docs.google.com/viewer?url=http%3A%2F%2Fexport.gov%2Fsouthafrica%2Fbuild%2Fgroups%2Fpublic%2F%40bg\\_za%2Fdocuments%2Fwebcontent%2Fbg\\_za\\_034197.pdf](https://docs.google.com/viewer?url=http%3A%2F%2Fexport.gov%2Fsouthafrica%2Fbuild%2Fgroups%2Fpublic%2F%40bg_za%2Fdocuments%2Fwebcontent%2Fbg_za_034197.pdf)

South Africa, current statistics show that HIV/AIDS affects one in six South Africans and is also a factor both in terms of labor availability, productivity, and medical costs.

High telecommunications and security expenses add to the cost of doing business in South Africa, and while recently installed fiber optic cable systems have reduced telecom costs somewhat, at least on a retail basis, broadband service is relatively limited in terms of the consumer market.

## **Developmental Impact**

The ICT *Khayelitsha and Mitchells Plain Digital Inclusion Feasibility Study* and follow-on potential project implementation would provide important developmental benefits. As described within the *Feasibility Study TOR*, the project addresses Cape Town's digital gap, by providing an optic fibre connectivity to underpin the last-mile connection to the two settlements, stimulating the development of the last mile networks by ICT product and service suppliers, and includes a digital inclusion program, so that residents can learn how to use ICTs and obtain community specific content and internet-based education, information and opportunities to improve their overall financial, economic and social well being.

- *Infrastructure:* If implemented, the project will add two forms of ICT infrastructure connectivity. The high-speed Metropolitan Fiber Optic Backbone will extend into the two settlements, and new last-mile connections will be launched to link the residents and businesses of Khayelitsha and Mitchells Plain to the fibre optic network.
- *Human Capacity Building:* One of the three core areas of the Project, focuses on providing residents and businesses of Khayelitsha and Mitchells Plain education and "hands on" skills development in accessing and using the internet and digital tools for education, information and opportunities to improve their overall financial, economic and social well being.
- *Technology Transfer and Productivity Improvements:* The Project focuses upon utilizing ICT as a tool that can provide information access for residents and businesses, but also serve as a vehicle for improving business operations, service efficiency and customer outreach. As Khayelitsha and Mitchells Plain residents and businesses climb the ICT learning curve, they will be able to use database systems, customer relationship management (CRM) software, e-commerce, mobile devices (texting), social media techniques and other ICT competences to more effectively manage their businesses and daily tasks. International case studies have proven the positive impacts that internet access has had on numerous economic pockets around the world.
- *Improved Accounting and Transparency:* With ICTs, consumers and suppliers have more access to pricing and availability of components and finished products, leading to

greater market efficiencies. Further, with improved database and accounting procedures, small and medium scale enterprises can manage their internal operations and organizations with more specific tools. This provides financial and economic benefits on a daily basis, and these benefits multiply if / when a business is evaluated for a potential sale or consolidation.

### **Alternatives:**

There are numerous ICT models and technologies to support the network expansion, and one of the three purposes of the *Khayelitsha and Mitchells Plain Digital Inclusion Feasibility Study* is to assess the different technological options, along with different pricing and consumer sensitivity models, and to determine the options that best fit the operational context. While the residents of Khyaelitsha and Mitchells Plain are generally economic disadvantaged, there are pockets of economic activity that are quite vibrant, and residents may elect to invest in a high-capacity, private network. Alternatively, a group of small businesses could elect to co-invest and develop a shared public services network.

### **Impact on the Environment**

Most information and communications technology (ICT) projects have a positive impact on the environment. The more that businesses and individuals utilize service-based assets to perform functions (as opposed to capital assets), the less possibility there is for damage to the environment. As an example, as voice, data and images move electronically, they substitute for the human movement of information. As less private and public transportation is used to handle communication activity, the spread of noxious fumes to the environment are minimized, and chemical and human-made resources suffer less depletion. Human efficiencies are increased, as valuable time and energies can be allocated to other productive activities.

As a Feasibility Study activity and potential ICT implementation, the *Khayelitsha and Mitchells Plain Digital Inclusion Feasibility Study Project* identified in this DM report should not be expected to cause adverse harm to the environment. However, as the City of Cape Town's Metropolitan Optic Fibre Optic expansion does involve digging, ducting and civil works, the recommend ToR includes a preliminary environmental impact assessment, as per USTDA's requirements.

### **Impact on U.S. Labor**

*The Khayelitsha and Mitchells Plain Digital Inclusion Feasibility Study Project* identified in this DM report should not displace U.S. labor; in fact, as the Feasibility Study program is designed to accelerate two settlements' residents (over 800,000 people) and small businesses' access to

and use of ICT, that business acceleration will generate jobs for U.S. citizens by enhancing and expediting export opportunities in the sale of all technologies that the Grantee could purchase, including the core ICT infrastructure, and all the computers, devices and services that will need provide access along that network. As South Africa is a major global trading partner and Cape Town is a top global tourist destination, US jobs should be sustained and / or increased as tourism, e-commerce, and traditional business (trading) opportunities enhance by the residents' and small businesses' inclusion as part of the global digital grid.

## **Proposed Contractor Qualifications**

### **City of Cape Town Metropolitan Area *Khayelitsha and Mitchells Plain Digital Inclusion Feasibility Study Project***

#### **Proposed Contractor Qualifications**

##### **Project Manager**

- Minimum of fifteen (15) years of experience in the ICT industry
- Specific expertise in planning corporate and metro-area multiprotocol label switching (MPLS) networks which support multiple telecommunications networks on an “open access” basis
- Expertise in managing cross-functional teams and in assessing economic, industry, business planning, and financial, economic and social development issues associated with telecommunication network designs and expansions
- Organizational, management and cross-cultural skills and perspective to oversee and carry out the Feasibility Study effectively; ability to work closely and effectively with the client, City of Cape Town and Provincial government stakeholders, as well as with ICT vendors, users and community groups
- Minimum of a bachelor's (or similar four year accredited university program) or technical degree in electrical engineering, telecommunications engineering or other communications-related field; master's degree preferred
- Experience working in an emerging or developing country required; experience working within Africa and with city planning and management organizations a plus

##### **Senior Wireless Technologist**

- Minimum of ten (10) years of experience in the ICT industry
- Specific expertise in planning, configuring, and /or integrating wireless technologies in existing and future telecommunications infrastructures relative to a client's strategic project plan

- Experience working with wireless network integrations with fiber backbone networks, including planning and / or maintaining microwave, WiMAX, WiFi and various mesh networks
- Experience planning and / or testing site network functions for current and future network technologies, and applying lessons from troubleshooting wireless network performance issues to future network infrastructure planning
- Experience meeting with telecommunications users, vendors, clients and ICT industry stakeholders, and documenting and analyzing users', vendors', clients' and stakeholders' concerns related to a current and / or proposed telecommunications project
- Proficiency in computer programs such as word processing, spreadsheet, and presentation software is required
- Organizational and cross-cultural skills and perspective to carry out the Feasibility Study effectively, including working with team members with different functional expertise
- Minimum of a bachelor's (or similar four year accredited university program) or technical degree in electrical engineering, telecommunications engineering or other communications-related field
- Experience working in Africa and with city planning and management organizations a plus

#### **Senior Network Planner**

- Minimum of ten (10) years of experience in the ICT industry
- Specific expertise in telecommunications / network planning and working with senior information technology officers to troubleshoot and coordinate existing telecommunications / network plans with documented project goals
- Expert in telecommunications network planning, design and implementation of telecommunications activities necessary to expand and support new or existing infrastructures relative to a client's strategic project plan
- Experience analyzing and interpreting wiring diagrams, blue prints, network plans and related documents and information, and inspecting communications facilities so as to assess the quality, functionality and current and future needs for integrating wireline and wireless technologies and expanding a telecommunications network
- Experience supporting technical projects that reduce cost, add or improve service, or provide innovative business solutions consistent with a business or project strategy
- Experience meeting with telecommunications users, vendors, clients and ICT industry stakeholders, and documenting and analyzing users', vendors', clients' and stakeholders' concerns related to a current and / or proposed telecommunications project
- Proficiency in computer programs such as word processing, spreadsheet, and presentation software is required
- Organizational and cross-cultural skills and perspective to carry out the Feasibility Study effectively, including working with team members with different functional expertise

- Minimum of a bachelor's (or similar four year accredited university program) or technical degree in electrical engineering, telecommunications engineering or other communications-related field
- Experience working in Africa and with city planning and management organizations a plus

### **Financial and Economic Analyst**

- Minimum of ten (10) years of experience selecting and applying economic, financial, market and/or statistical techniques and models to perform analysis in support of business decisions, preferably in the telecommunications industry
- Expertise in developing analytical models by using creative problem solving skills and mathematical and /or statistical modeling techniques; experience preparing quantitative and qualitative reports and communicating the report's results to senior managers and / or clients
- Expert in preparing studies, such as those used to identify and determine optimal prices and rate structures, identify projected demand level and growth rates for services, identify the profitability and competitiveness of existing and new services, identify the financial impact of industry changes, and related analyses of business initiatives that support the goals and objectives of a client
- Experience in preparing cost analyses to support proposed pricing for goods and services for regulated and non-regulated business initiatives
- Experience with key strategic financial issues in emerging markets, including such areas as financial system development, financial access for the unbanked and underserved, and infrastructure finance
- Exceptional proficiency in spreadsheet programs is required and experience in other personal computer programs such as word processing, presentation and statistical software is preferred
- Organizational and cross-cultural skills and perspective to carry out the Feasibility Study effectively, including working with team members with different functional expertise
- Minimum of a bachelor's (or similar four year accredited university program degree in business, finance, economics, mathematics or a closely related field is required
- Experience working in Africa and with city planning and management organizations a plus

### **ICT Business Analyst**

- Minimum of ten (10) years of experience in performing primary and secondary ICT market research, including assessing sector trends, market segments and sizes, preparing forecasts, and developing industry models

- Experience in market analysis from both the demand and competitive side, including understanding regulatory scenarios, analyzing future trends, and market drivers, and sector restraints and challenges
- “Hands on” experience coordinating and conducting primary research (group interviews) and collecting and sorting supplier, group, and individual interview data into quantitative and qualitative analyses that supports economic and financial business planning activities
- Proficiency in in personal computer programs such as word processing, presentation and statistical software is preferred
- Organizational and cross-cultural skills and perspective to carry out the Feasibility Study effectively, including working with team members with different functional expertise
- Minimum of a bachelor’s (or similar four year accredited university program degree in business, economics, communications, or a closely related field is required
- Experience working in Africa and with city planning and management organizations a plus

#### **Digital Inclusion Program Design and Evaluation Specialist**

- Expertise in designing and / or managing information and communication technology (ICT) programs (such as community technology programs), that enable residents and small businesses to be more fully included in a digital society by helping residents and small businesses access technology, build ICT skills and make beneficial use of digital content
- Expertise working as an analyst, program designer and /or program manager in international development and /or international aid programs whose goals including alleviating economic challenges and or disparities, and which supported individuals’ financial, economic, and social development
- Senior expertise in defining and utilizing quantitative and qualitative tools for measuring baseline ICT and financial, economic and social development indicators, and establishing tools and parameters for assessing an international development and / or international aid program’s financial, economic and social impact over a extended (up to 10 year) time frame (e.g. measurement and evaluation)
- Experience in soliciting, coordinating and securing financial, and goods and services commitments and donations from individuals, multilateral donors, private voluntary organizations, non-governmental organizations, corporations, governments, aid organizations and other organizations towards a specific program or business initiative
- Experience designing and /or managing programs that provide learning, training, and development, and consultation and communication with individuals and groups, and structuring the mission, operational and staff support and strategy to support a new program’s initiatives and goals, especially in developing and / or emerging countries

- Organizational and cross-cultural skills and perspective to carry out the Feasibility Study effectively, including working with team members with different functional expertise
- Minimum of a bachelor's (or similar four year accredited university program degree in business, economics, communications, or a closely related field is required
- Experience working in Africa and with city planning and management organizations a plus

#### **Local Technical Contractor**

- Minimum of five (5) years of experience in the ICT industry
- Experience working with wireline and wireless technology projects in South Africa
- Familiarity and experience working with global ICT vendors including hardware, software, and services suppliers
- Experience meeting with telecommunications users, vendors, clients and ICT industry stakeholders, and documenting and analyzing users', vendors', clients' and stakeholders' concerns related to a current and / or proposed telecommunications project
- Proficiency in computer programs such as word processing, spreadsheet, and presentation software is required
- Organizational and cross-cultural skills and perspective to carry out the Feasibility Study effectively, including working with team members with different functional expertise
- Experience working in the City of Cape Town and / or with South African government or state-run projects a plus

#### **Local Economic Development Contractor**

- Minimum of five (5) years of experience in economic development, ideally with a community development program. Preferred experience in working with programs that enable residents and small businesses to be more fully included in a digital society by helping residents and small businesses access technology, build ICT skills and make beneficial use of digital content
- Expertise working in a support role or as an analyst, program designer and /or program manager in international development and /or international aid programs whose goals including alleviating economic challenges and or disparities, and which supported individuals' financial, economic, and social development
- Experience in gathering data to establish a baseline for an international development and / or international aid program's financial, economic and social program launch
- Experience in researching foundation, corporate, government, multilateral donor, private voluntary organization, non-governmental organizations, and aid organization grant and funding resources that apply to specific program's mission and objective, and developing a database of funding resources and potential and realized donor commitments
- Experience working with programs that provide learning, training, and development for economically disadvantaged individuals and an ability to build and maintain effective

working relationships in the designated Feasibility Study communities of Khayeltisha and Mitchells Plain

- Proficiency in computer programs such as word processing, spreadsheet, and presentation software is required
- Organizational and cross-cultural skills and perspective to carry out the Feasibility Study effectively, including working with team members with different functional expertise
- Experience working in the City of Cape Town and / or with South African government or state-run projects a plus

#### **Local Development Community Liaison**

- Ability to support the *Digital Inclusion Program Design and Evaluation Specialist* in designing information and communication technology (ICT) programs (such as community technology programs), that enable residents and small businesses to be more fully included in a digital society by helping residents and small businesses access technology, build ICT skills and make beneficial use of digital content
- Expertise working in a support role or as an analyst, program assistant and /or program manager in community development, international development and /or international aid programs whose goals including alleviating economic challenges and or disparities, and which supported individuals' financial, economic, and social development
- Experience defining and utilizing quantitative and qualitative tools for measuring baseline financial, economic and social development indicators, and establishing tools and parameters for assessing a community development, international development and / or international aid program's financial, economic and social impact over a extended (up to 5 year) time frame
- Experience in soliciting, coordinating and securing financial, and goods and services commitments and donations from individuals, multilateral donors, private voluntary organizations, non-governmental organizations, corporations, governments, aid organizations and other organizations towards a specific program or business initiative
- Experience designing and /or managing programs that provide learning, training, and development, and consultation and communication with individuals and groups, and structuring the mission, operational and staff support and strategy to support a new program's initiatives and goals.
- Direct, hands-on experience and established contacts and relationships from working in the Khayelitsha and Mitchells Plain settlements, ideally in a position that required work with multiple humanitarian and / or technology organizations and with residents and small businesses.
- Ability to establish and maintain in-person, telephone and e-mail liaison with core FS stakeholders and client organizations; ability to generate strategic dialogue and insights in collaboration with Feasibility Study team members and community stakeholder organizations and residents

### **Justification**

The City of Cape Town has embarked on the roll-out of the municipal optic fibre core network within the metropolitan area, and this network provides the backhaul capacity to render numerous telecommunication dependent services within the City.

As the roll-out of this network is still in its early stage, the City's own funding sources are still being consumed by the network implementation project and the costs to connect City facilities and municipal services. A project to establish Wi-Fi services (which will provide internet access to households) would therefore only be initiated in the outer years due to financial constraints. This would deny economically-disadvantaged Cape Town residents access to the internet and also generate opportunity costs, as the City's ability to provide the service to economically and socially depressed area of Cape Town will be lost.

**Terms of Reference – See Grant Agreement for final TOR**

### **Budget and Work Schedule**

The total proposed budget for the Khayelitsha and Mitchells Plain Digital Inclusion Feasibility Study is \$313,127 and is shown on the following page. A proposed work schedule for the Khayelitsha and Mitchells Plain Digital Inclusion Feasibility Study follows.



# South Africa ICT DM Report

Task	CoCT Proposed Project Schedule								
	U.S. Based		South Africa (S.A.) Based			U.S. Based		S.A. Base	U.S. Based
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Task 1 - Document Review, Info Gathering & Work Plan Finalization	24	U.S.							
Task 2 - MOFN Expansion Plan & Pricing Model to K & MP	37		U.S.	S.A.					
Task 3 - K & MP Economic, Social and Digital Inclusion Baseline	17			S.A.					
Task 4 - Assess the Tech. Delivery Options & Pricing Models for Providing WHA network Expansion to K & MP	42			S.A.	S.A.				
Task 5 - Develop a Program Management Plan for the K & MP Digital Inclusion Project.	18				S.A.				
Task 6 - Conduct a Financial and Economic Analysis	17					U.S.			
Task 7 - Conduct an Environmental Assessment	4				U.S.				
Task 8 - Analyze Developmental Impacts	7					U.S.			
Task 9 - Conduct a Regulatory Assessment	2					U.S.			
Task 10 - Assessment, Recommendation & Implementation Plan for the Primary Network Option	35						U.S.	S.A.	
Task 11 - Final Report	12								U.S.

## Recommendations

- **City of Cape Town: Smart Crime (Smart Cops)**

USTDA should follow-up directly with Alderman Smith during the June to August timeframe to assess if and how the US Study Tour impacted the potential procurement plan for the fleet management (smart cops) project. See details in Section B, *Project Description*.

- **City of Cape Town: CIO / Broadband Projects**

The DMC recommends that USTDA support the *Khayelitsha and Mitchells Plain Digital Inclusion Feasibility Study Project* that is fully developed (TOR, Proposed Contractor Qualifications, Project Schedule and Project Budget) within this DM report.

- **City of Tshwane**

The DMC recommends that USTDA follow-up with the City of Tshwane after new CIO and “smart city” managers are hired (fall 2012). See details in Section B, *Project Description*.

- **CSIR**

In late 2012, USTDA should obtain an update from CSIR regarding the CSIR TV White Space Technology Pilot Study, and determine if CSIR wishes to consider how a USTDA FS grant could support the potential scaling of the wireless broadband activity and / or support the organization’s work with ICASA regarding obtaining a license for white space / rural wireless broadband ICT implementations (see Section B, *Project Description*).

- **KwaZulu-Natal (KZN) Province / Disaster Management**

At this time, it is premature to provide KZA Province a disaster management grant program. Once Level 1 status is attained, USTDA may choose to revisit the opportunity to support the Province’s disaster risk management efforts as they move toward Level 2 and will then be prepared to design and / or procure ICT systems.

- **LimDev**

The DMC believes that a USTDA Grant could be an excellent resource for LimDev, should they still require an ICT broadband planning / commercialization strategy. The DMC recommends that the CMSA and ABDM meet with LimDev during the CMSA’s visit to South Africa in August, as a follow-up to the DMC’s and ABDM’s March and May meetings.

## E-Education

There were several activities transpiring in South Africa involving e-education; however, these initiatives were in the research and/or very early project development stages and did not yet

meet the criteria for USTDA support. However, USTDA may wish to follow-up on these projects in the future, to determine if there may be a potential fit for the Agency's grant resources.

- **CSIR**

As noted above, CSIR's pilot project focuses upon the use of white space for rural wireless broadband ICT implementations. As this potential connectivity could support students' access to the internet, as noted herein, the DMC encouraged CSIR to include a provincial or national education stakeholder in a future proposal revision, so that the pilot's results could be followed by an authority who could potentially have the ability to expand, fund and / or otherwise utilize the results to advance e-education within the country. During future discussions with CSIR, USTDA should determine if and how the structure of the pilot has advanced.

- **Siyakhula Living Lab (SLL)**

In mid-2013, USTDA should obtain an update regarding the Siyakhula Living Lab (SLL) to determine if it has scaled or has oriented towards a more commercially-oriented activity, in addition to its "ICT for Development" research focus (see Section B, *Project Description (National Treasury)* for more information).

**A N N E X 3**

**USTDA NATIONALITY REQUIREMENTS**

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**U.S. TRADE AND DEVELOPMENT AGENCY  
Arlington, VA 22209-2131**

**NATIONALITY, SOURCE, AND ORIGIN REQUIREMENTS**

The purpose of USTDA's nationality, source, and origin requirements is to assure 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, each of the following provisions shall apply to the delivery of goods and services funded by USTDA under this Grant Agreement: (a) for professional services, the Contractor must be either a U.S. firm or U.S. individual; (b) the Contractor may use U.S. subcontractors without limitation, but the use of subcontractors from host country may not exceed twenty percent (20%) of the USTDA Grant amount and may only be used for specific services from the Terms of Reference identified in the subcontract; (c) employees of U.S. Contractor or U.S. subcontractor firms responsible for professional services shall be U.S. citizens or non-U.S. citizens lawfully admitted for permanent residence in the U.S.; (d) goods purchased for implementation 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 (e) 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 standards of eligibility upon request.

**NATIONALITY:**

1) Rule

Except as USTDA may otherwise agree, the Contractor for USTDA funded activities must be either a U.S. firm or a U.S. individual. Prime contractors may utilize U.S.

subcontractors without limitation, but the use of host country subcontractors is limited to 20% of the USTDA grant amount.

## 2) Application

Accordingly, only a U.S. firm or U.S. individual may submit proposals on USTDA funded activities. Although those proposals may include subcontracting arrangements with host country firms or individuals for up to 20% of the USTDA grant amount, they may not include subcontracts with third country entities. U.S. firms submitting proposals must ensure that the professional services funded by the USTDA grant, to the extent not subcontracted to host country entities, are supplied by employees of the firm or employees of U.S. subcontractor firms who are U.S. individuals.

Interested U.S. firms and consultants who submit proposals must meet USTDA nationality requirements as of the due date for the submission of proposals and, if selected, must continue to meet such requirements throughout the duration of the USTDA-financed activity. These nationality provisions apply to whatever portion of the Terms of Reference is funded with the USTDA grant.

## 3) Definitions

A "U.S. individual" is (a) a U.S. citizen, or (b) a non-U.S. citizen lawfully admitted for permanent residence in the U.S. (a green card holder).

A "U.S. firm" is a privately owned firm which 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. individuals, 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, organized in the U.S. with its principal place of business in the U.S., may also qualify as a "U.S. firm" as would a joint venture organized or incorporated in the United States consisting entirely of U.S. firms and/or U.S. individuals.

A nonprofit organization, such as an educational institution, foundation, or association may also qualify as a "U.S. firm" if it is incorporated in the United States and managed by a governing body, a majority of whose members are U.S. individuals.

## **SOURCE AND ORIGIN:**

### 1) Rule

In addition to the nationality requirement stated above, any goods (e.g., equipment and materials) and services related to their shipment (e.g., international transportation and insurance) funded under the USTDA Grant Agreement must have their source and origin in the United States, unless USTDA otherwise agrees. However, necessary purchases of goods and project support services which are unavailable from a U.S. source (e.g., local food, housing and transportation) are eligible without specific USTDA approval.

### 2) Application

Accordingly, the prime contractor must be able to demonstrate that all goods and services purchased in the host country to carry out the Terms of Reference for a USTDA Grant Agreement that were not of U.S. source and origin were unavailable in the United States.

### 3) 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.*

**ANNEX 4**

**USTDA GRANT AGREEMENT, INCLUDING MANDATORY CONTRACT CLAUSES**

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## **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 the City of Cape Town ("Grantee"). USTDA agrees to provide the Grantee under the terms of this Grant Agreement US\$315,000 ("USTDA Grant") to fund the cost of goods and services required for a feasibility study ("Study") on the proposed Khayelitsha and Mitchells Plain Digital Inclusion project ("Project") in South Africa ("Host Country").

### **1. USTDA Funding**

The funding 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 and in accordance with the Disbursement Procedures as described in Clause H of Annexure II.

### **2. Terms of Reference**

The Terms of Reference for the Study ("Terms of Reference") are attached as Annex I and are hereby made a part of 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**

The Grantee shall undertake its best efforts to provide reasonable support for the Contractor, such as local transportation, office space, and secretarial support.

### **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 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 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 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 Grantee-approved Contractor invoices in accordance with the procedures set forth in the USTDA Mandatory 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.

**8. Study Schedule**

**(A) Study Completion Date**

The completion date for the Study, which is March 31, 2013, 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 J.

#### **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 this 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 or non-U.S. citizens lawfully admitted for permanent residence 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. The USTDA shall ensure that the authorized representative has signed a confidentiality agreement to protect any confidential information of the Grantee that they might become privy to.

## 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 Executive Mayor. 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: City Manager  
City of Cape Town  
Private Bag X9181  
Cape Town, 8000  
South Africa

Phone: + 27 (21) 400 1111  
Fax: +27 (21) 400 1332  
E-Mail: [city.manager@capetown.gov.za](mailto:city.manager@capetown.gov.za)

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

Phone: +1 (703) 875-4357  
Fax: +1 (703) 875-4009  
E-Mail: [grantnotices@ustda.gov](mailto:grantnotices@ustda.gov) and [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 12/13 1001  
Activity No.: 2012-11019A  
Reservation No.: 2012222  
Grant No.: GH201211222

## **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 and Annexures Amendments**

Either party may submit to the other party at any time a proposed amendment to the Grant Agreement. A Grant Agreement and the annexures 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 I 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.

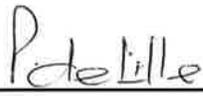
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**IN WITNESS WHEREOF, the Government of the United States of America and the City of Cape Town, each acting through its duly authorized representative, have caused this Grant Agreement to be signed in the English language in their names and delivered 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**

**For the City of Cape Town**

By: 

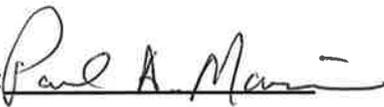
By: 

Date: 8/8/12

Date: 8-8-2012

Witnessed:

Witnessed:

By: 

By: 

**Annex I -- Terms of Reference**

**Annex II -- USTDA Mandatory Clauses**

## Annex I

### Terms of Reference

The City of Cape Town (“Grantee”) has requested funding from the U.S. Trade and Development Agency (“USTDA”) for a feasibility study (“Study”) to evaluate the technical, financial, and other critical aspects of the proposed Khayelitsha and Mitchells Plain Digital Inclusion project (“Project”) in South Africa. In particular, the Study will evaluate the feasibility of implementing a wireless access network (“Wi-Fi Network”) for individuals, households, and businesses in Khayelitsha and Mitchells Plain (“K&MP”). The study will also evaluate the suitability of existing infrastructure and plans for extending Cape Town’s Metropolitan Optic Fibre Network (“MOFN”) to and expanding the MOFN within K&MP for the purpose of implementing the Wi-Fi network. The primary objective of the Study is to provide the Grantee with analyses and recommendations that will support its decision-making with regard to the implementation of the Project.

#### **Definitions:**

For the purposes of these Terms of Reference, the following definitions shall apply:

1. “Extension of the MOFN to K&MP” shall refer to the development of core routes between K&MP and existing MOFN infrastructure.
2. “Expansion of the MOFN within K&MP” shall refer to the development of local routes between distribution points, access cables to individual buildings, networking equipment, and other hardware, software, and services required for the expansion of the MOFN backbone within K&MP.
3. “Implementation of the Wi-Fi Network” shall refer to the development of switching centers, telecoms aggregations rooms, routers, and other hardware, software, and services required for the implementation of a wireless access network in K&MP.
5. “Project” shall refer to all of the following: (1) extension of the MOFN to K&MP, (2) expansion of the MOFN within K&MP, (3) implementation of the Wi-Fi Network, and (4) programs to encourage the increased utilization of information and communication technology (“ICT”) services by individuals, households, and businesses in K&MP. “ISPs” shall refer to internet service providers currently operating in South Africa.
6. “Digital Development Organizations” shall refer to any organization (including public, private, and not-for-profit) involved with the planning and delivery of social and economic development programs in K&MP that directly link with and/or provide resources that enhance digital diffusion and/or digital literacy in one or more of the following areas:
  - i. Literacy (written and digital)
  - ii. Computer, internet and digital skills
  - iii. Language and/or culturally-relevant digital content development
  - iv. Small- and medium-sized enterprise development

- v. Community outreach and education (especially with regard to literacy and/or the utilization of ICT services)
  - vi. Any other areas deemed pertinent by the Contractor and Grantee to the increased utilization of ICT services by individuals, households, and businesses in K&MP
7. “ICT Suppliers” shall refer to U.S. and South African ICT equipment and service suppliers representing a cross-section of the ICT sector (hardware, software, carriers, ISPs, digital content developers, website design/hosting, etc.) that are active in South Africa.

All other definitions are as indicated within these Terms of Reference.

### **Task 1: Document Review, Information Gathering, and Work Plan Finalization**

*Principal Task Location: United States*

**Sub-Task 1.1 – Document Review and Information Gathering:** The Grantee shall provide the Contractor with all available information needed for the Contractor to successfully carry out the Study, including but not limited to:

- Information related to the MOFN, including but not limited to its current status, next steps, and any outcomes and challenges that have transpired during the planning, launching, and/or operation of the MOFN
- Budgets, technical plans, managerial plans, and any other available information related to each aspect of the Project
- Information about existing ICT infrastructure within the seven regions that comprise the City of Cape Town Metropolitan Area
- Demographic, socio-economic, digital access, and digital inclusion data for the seven regions that comprise the City of Cape Town Metropolitan Area, including but not limited to statistics and information related to geography, teledensity, internet penetration and use, education and literacy levels, and demographic, economic, social and income differentiators among the regions, with a focus as to how K&MP compare to the other regions
- Information about ISPs, Digital Development Organizations, ICT suppliers, and any other Project stakeholders deemed pertinent by the Contractor and Grantee
- “The Economic Impact of a Metropolitan Broadband Network for the City of Cape Town” by Strategic Economic Solutions cc
- “City of Cape Town Broadband Project – Underserved Areas Gap Analysis” by Leon Van Wyk
- Any other information the Grantee deems pertinent to the Contractor’s ability to successfully carry out the Study

The Contractor shall review all of the information provided by the Grantee. The Contractor shall also conduct secondary background research using publically available sources. The Contractor shall compile all relevant information from the document review

and secondary research to be utilized by the Contractor in carrying out the Study in a document review report.

**Sub-Task 1.2 – Work Plan Finalization:** Following the completion of Sub-Task 1.1, the Contractor shall review the Contractor’s work plan for carrying out the Study (“Work Plan”), gather input from the Grantee regarding the Work Plan, including Grantee requests for changes to the Work Plan, if any, revise or confirm the Work Plan as necessary, and provide the Grantee with a copy of the final Work Plan. At a minimum, the Work Plan shall:

- Describe the Contractor’s organizational structure for the Study (if subcontractors are to be used, the Work Plan shall also describe the organizational relationship between the Contractor and the subcontractors).
- Discuss how the Contractor will manage the Study, including key staff assignments.
- Identify the Contractor’s Project Manager for the Study (**note:** the Project Manager shall have the responsibility and authority to act on behalf of the Contractor in all matters related to the Study).
- Provide a list of Contractor personnel (including both U.S. and local subcontractors, if any) that will participate in the Study, along with the following information for each member of the Study team: position in the Study, pertinent experience, and curriculum vitae.
- Provide a manpower schedule and level of effort for each Task to be carried out under these Terms of Reference.
- Discuss the Contractor’s methodology for completing all Study requirements.
- Include a brief narrative of the Contractor’s methodology for completing each Task to be carried out under these Terms of Reference.
- Provide a detailed schedule of performance for the Study, including periodic reporting or review points, incremental delivery dates, and other Study milestones.
- Describe any support or additional information the Contractor will require from the Grantee to complete the Study.

**Task 1 Deliverable:** The Contractor shall provide the Grantee with a report of all work performed pursuant to Task 1.

**Task 2: MOFN Expansion Plan, Budget for Transmission-Related Equipment and Preliminary Pricing Models**

*Principal Task Location: South Africa*

The Contractor shall:

- Review the Grantee’s draft budget and existing plans for the extension of the MOFN to and expansion of the MOFN within K&MP.
- Conduct site visits to existing MOFN infrastructure, at a minimum including site visits to exiting MOFN switching centers and telecoms aggregations rooms.

- Observe existing MOFN equipment, operations, line capacities, and related technical, operational, facility, and human resource capabilities.
- Review the Grantee's technology plans for the switching centers in K&MP.
- Confirm the availability and suitability of the MOFN to provide the backhaul needed for providing internet access to individuals, households, and businesses in K&MP.
- Create a preliminary budget for transmission-related equipment required to develop connectivity access to K&MP using the MOFN backbone.
- Create preliminary pricing models for (1) leasing connectivity access to ISPs in K&MP using the MOFN backbone and (2) the provision of ICT services to individuals, households, and businesses in K&MP on the Wi-Fi Network (**note:** the preliminary pricing models for the provision of ICT services to individuals, households, and businesses in K&MP on the Wi-Fi Network shall include at least three service options: basic connectivity, basic connectivity plus enhanced services, and basic connectivity plus enhanced and top line services).
- Provide the Grantee with copies of the draft budget for transmission-related equipment and preliminary pricing models and service options for review and comment.
- Revise the draft budget for transmission-related equipment and preliminary pricing models and service options based on the Grantee's comments and provide the Grantee with copies of the final draft budget for transmission-related equipment and preliminary pricing models and service options.

**Task 2 Deliverable:** The Contractor shall provide the Grantee with a report of all work performed pursuant to Task 2.

### **Task 3: Economic, Social and Digital Inclusion Baseline**

*Principal Task Location: South Africa*

**Sub-Task 3.1 – Baseline Statistics and Data Tables:** The Contractor shall document demographic, socio-economic, digital access, and digital inclusion characteristics of the residents of K&MP to be used for additional analyses under these Terms of Reference and as a baseline for future monitoring and evaluation of the impact of the Project on the economic and social development of the residents of K&MP. In particular, the Contractor shall develop two tables (one for Khayelitsha and one for Mitchells Plain) that include, but are not limited to the following information:

- A population pyramid, age structure diagram, or other graphical illustration of the distribution of various age groups by geographic area
- Population density by geographic area
- Average family size
- Average education, by age group bands
- Average literacy, by age group bands
- Average digital literacy (defined as the ability to read English and use a basic computer), by age group bands
- Average family income, by nuclear family and, if applicable, extended family

- Top 10 employment sectors
- Top 10 employment locations (within or outside of K&MP)
- Average daily travel distance, by foot, public transportation, and/or private transportation
- Commercial density and types of business (both formal and informal), by size, scale, and product/service delivery
- Teledensity (defined as installed access base relative to population) both via wired and wireless technologies
- Television density, by type of service distribution (satellite, cable, or broadcast)
- Other data and indicators deemed pertinent by the Contractor and Grantee that contribute to establishing a baseline regarding the demographic, socio-economic, digital access, and digital inclusion characteristics of the residents of K&MP

The Contractor shall also provide supporting documentation that identifies qualitative and quantitative background information for each table.

**Sub-Task 3.2 – Meetings with K&MP Businesses:** The Contractor shall meet with businesses (both formal and informal) operating within K&MP to evaluate their current utilization of ICT services, current communication costs and constraints, ability to pay for ICT services, and potential productivity gains from access to affordable, reliable ICT services. In particular, the Contractor shall:

- (1) Research and identify businesses (both formal and informal) operating within K&MP.
- (2) Conduct meetings with at least ten K&MP businesses.
- (3) Utilizing similar categories to those used in section four of the “The Economic Impact of a Metropolitan Broadband Network for the City of Cape Town” report, gather information from the K&MP businesses about their:
  - a. Current utilization of ICT services
  - b. Current communication costs and constraints
  - c. Ability to pay for ICT services
  - d. Potential productivity gains from access to affordable, reliable ICT services
- (4) Document all information and results obtained from the meetings.

**Sub-Task 3.3 – Interviews with Residents of K&MP:** The Contractor shall develop a draft questionnaire that addresses key factors related to an individual’s ability to utilize ICT services. In particular, the questionnaire shall seek responses about the ability of residents of K&MP to:

- Read and write in English
- Use a keyboard (type at least 25 words per minute)
- Utilize software (word processing, spreadsheet, visual presentation, games, and any other software applications deemed pertinent by the Contractor and Grantee)
- Access the internet and web-based services
- Utilize the internet and web-based services to research and obtain information related to an individual’s personal or professional challenges
- Participate effectively in on-line educational programs

- Afford the purchase of a computer or digital access device
- Afford to rent access (connectivity time) on a computer or digital access device (e.g. at an internet café)
- Preferred payment method for purchasing or renting access to ICT services (e.g. pre-pay, contract, “pay as you go”, shared access, etc.)
- Other data and indicators deemed pertinent by the Contractor and Grantee that address the core abilities and resources that affect an individual’s ability to utilize ICT services

The Contractor shall provide the Grantee with a copy of the draft questionnaire for review and comment. Based on the Grantee’s comments, the Contractor shall revise or confirm the questionnaire and provide the Grantee with a copy of the final questionnaire.

The Contractor shall develop a plan for interviewing at least 120 residents of K&MP. The plan shall include methodologies for selecting interviewees and encouraging interviewees to meet and share information with the Contractor. The Contractor shall provide the Grantee with a copy of the draft plan for review and comment. Based on the Grantee’s comments, the Contractor shall revise or confirm the plan and provide the Grantee with a copy of the final plan for interviewing at least 120 residents of K&MP.

The Contractor shall use the questionnaire to conduct interviews with at least 120 residents of K&MP and assess their ability to utilize and pay for ICT services. The interviews shall be conducted in-person in groups of eight or less. The Contractor shall not distribute the questionnaire for response, but shall use the questionnaire as a tool for verbal discussions with the interviewees. The interviewees shall represent a cross-section of the demographic populations that reside within K&MP, at a minimum including at least 20 individuals who are under 18 years of age, 80 individuals who are between 18 and 45 years of age, and 20 individuals who are over 45 years of age.

The Contractor shall document all information and results obtained from the interviews. Utilizing the baseline statistics and data tables developed pursuant to Sub-Task 3.1, and the information and results obtained from the meetings with K&MP businesses and interviews with residents of K&MP, the Contractor shall prepare a quantitative and qualitative report that identifies the baseline findings regarding the demographic, socio-economic, digital access, and digital inclusion characteristics of the residents of K&MP.

**Task 3 Deliverable:** The Contractor shall provide the Grantee with a report of all work performed pursuant to Task 3.

**Task 4: Technological Delivery Options, Draft Technical Plan and Budget, and Updated Pricing Models**

*Principal Task Location: South Africa*

**Sub-Task 4.1 – K&MP Site Visits:** The Contractor shall conduct site visits to K&MP and identify key demographic, environmental, topographical, and related network

installation and ICT service delivery factors that affect the selection of effective technological delivery options for the implementation of the Wi-Fi Network. These factors shall include but not be limited to:

- Population density
- Topography
- Access to the MOFN
- Current housing construction with a particular focus on the impact of building materials (including tin roofing) on signal refraction
- The location of schools, community centers, libraries and other areas where residents congregate and could utilize shared ICT access devices and/or shared connectivity
- Current centers of business activity (both formal and informal)
- Current and potential network traffic
- Any other factors deemed pertinent by the Contractor and Grantee

**Sub-Task 4.2 – Technological Delivery Options:** Given the distinctive demographic, environmental, topographical, and related network installation and ICT service delivery factors identified pursuant to Sub-Task 4.1, the Contractor shall research, analyze, and recommend technological delivery options for the implementation of the Wi-Fi Network. The technological delivery options shall encompass all technology-related requirements for the implementation of the Wi-Fi Network, including but not limited to: hardware, software, networking equipment, configuration, systems integration, etc. The technological delivery options may include single technology solutions, hybrid technology solutions, separate or integrated technology solutions for each settlement, and any other technology solutions that would maximize the functionality, coverage, penetration, reliability, interconnectivity, and affordability of the Wi-Fi Network. In particular, the Contractor shall:

- Research potential technological delivery options for the implementation of the Wi-Fi Network.
- Prepare a list of potential technological delivery options for the implementation of the Wi-Fi Network.
- Identify and conduct a comparative analysis of the advantages and disadvantages of each technological delivery option with respect to functionality, coverage, penetration, reliability, connectivity requirements, affordability, and any other parameters deemed pertinent by the Contractor and Grantee.
- Rank each technological delivery option in order of overall desirability, with supportive reasoning for the rankings.
- Provide the Grantee with a report of the comparative analysis and rankings of the potential technological delivery options for review and comment.
- Gather and respond to feedback from the Grantee on the comparative analysis and rankings of the potential technological delivery options and Grantee requests for additional information on the potential technological delivery options, if any.
- Provide the Grantee with a final list of recommended technological delivery options for the implementation of the Wi-Fi Network.

**Sub-Task 4.3 – Draft Technical Plan and Budget:** The Contractor shall prepare a draft technical plan for the implementation of the Wi-Fi Network with consideration to maximizing the functionality, coverage, penetration, reliability, interconnectivity, and affordability of the Wi-Fi Network. The draft technical plan shall include all of the steps the Grantee and other relevant Project stakeholders will need to take subsequent to the completion of the Study to implement the Wi-Fi Network from a technical standpoint, including but not limited to any requirements for: additional studies, technical drawings, detailed engineering and design, hardware, software and related equipment, construction, installation, systems integration, operations, maintenance, etc.

The Contractor shall develop a draft budget for the technical requirements associated with implementation of the Wi-Fi Network. The draft technical budget shall include estimated budgetary requirements for each step included in the draft technical plan.

The Contractor shall provide the Grantee with copies of the draft technical plan and technical requirements budget for review and comment, revise the draft technical plan and technical requirements budget based on the Grantee's comments, and provide the Grantee with copies of the final technical plan and technical requirements budget.

**Sub-Task 4.4 – Meetings with ISPs:** The Contractor shall meet with ISPs to evaluate their interest and capability to provide ICT services in K&MP via the Wi-Fi Network. In particular, the Contractor shall:

- (1) Research and identify ISPs operating in South Africa, the Western Cape Province, Cape Town, and K&MP.
- (2) Conduct meetings with at least five ISPs, at least two of which have operations in the Western Cape Province.
- (3) Gather information from the ISPs about:
  - a. Existing pricing models and ownership structures for the provision of ICT services in South Africa
  - b. Historical ICT spending patterns in South Africa
  - c. Historical information about the usage of ICT services in South Africa
  - d. ICT service, pricing and payment plans currently available to individuals, households, and businesses in K&MP and/or other South African settlements with similar socio-economic and demographic characteristics
  - e. Their interest and capability to provide internet services in K&MP via the Wi-Fi Network
- (4) Provide the ISPs with the preliminary pricing models and service options developed pursuant to Task 2 and gather feedback and respond to questions from the ISPs regarding the preliminary pricing models and service options.
- (5) Document all information and results obtained from the meetings, including the ISPs expectations regarding pricing models and service options for providing internet services in K&MP via the Wi-Fi Network.

The Contractor shall also meet with at least five establishments within K&MP where residents can pay for access to digital access devices and ICT services (such as internet

cafés) to evaluate their interest and capability to provide ICT services in K&MP via the Wi-Fi Network. In particular, the Contractor shall:

1. Research and identify establishments within K&MP where residents can pay for access to digital access devices and ICT services.
2. Conduct meetings with at least five such establishments.  
Gather information from these establishments about:
  - a. ICT service, pricing and payment plans currently available to individuals, households, and businesses in K&MP and/or other South African settlements with similar socio-economic and demographic characteristics
  - b. Their interest and capability to provide internet services in K&MP via the Wi-Fi Network
4. Document all information and results obtained from the meetings.

Based on the feedback received during the Contractor's meetings with the ISPs and establishments within K&MP where residents can pay for access to digital access devices and ICT services, the Contractor shall revise or confirm the preliminary pricing models and service options. The Contractor shall provide the Grantee with a copy of the revised or confirmed pricing models and service options, along with a report on the overall findings from the Contractor's meetings with the ISPs and establishments within K&MP where residents can pay for access to digital access devices and ICT services, for review and comment. Based on the Grantee's comments, the Contractor shall revise or confirm the pricing models and service options and provide the Grantee with a copy of the updated pricing models and service options.

**Task 4 Deliverable:** The Contractor shall provide the Grantee with a report of all work performed pursuant to Task 4.

#### **Task 5: Project Management Plan**

*Principal Task Location: South Africa*

**Sub-Task 5.1 – Organizational Structure and Staffing:** The Contractor shall review and assess the Grantee's current and planned organizational structure and staffing responsibilities for managing the Project. The Contractor shall document the technical and non-technical components of the Project that require management responsibility. The Contractor shall identify the skills and competencies that are required for effectively implementing and managing the Project.

**Sub-Task 5.2 – Meetings with Digital Development Organizations:** The Contractor shall meet with Digital Development Organizations to evaluate their interest and capability to plan and deliver programs that encourage the increased utilization of ICT services by individuals, households, and businesses in K&MP. In particular, the Contractor shall:

1. Research and identify Digital Development Organizations.
2. Conduct meetings with at least fifteen Digital Development Organizations.
3. Gather relevant information from the Digital Development Organizations and assess their experience, expertise, staffing capabilities, organizational resources, funding resources, and overall potential to encourage the increased utilization of ICT services by individuals, households, and businesses in K&MP.
4. If possible, obtain a letter of support and/or concept paper commitment from each Digital Development Organization regarding their interest in and potential contributions to the Project.
5. Utilize a table format to identify the following parameters for each Digital Development Organizations:
  - (1) Type of organization (public, private, or non-profit)
  - (2) Organizational mission and principal activities
  - (3) Size, budget, services, and potential resources and/or capabilities that the organization could potentially contribute to the Project
  - (4) A synopsis of the organization's demonstrated interest in and potential contributions to the Project
  - (5) Contact information (name, job title, organization, address, telephone, and e-mail) for at least two representatives from each organization
6. Document the results of the meetings, identify those Digital Development Organizations that demonstrate an interest in participating in the Project, and prepare a ranking and summary of those organizations that have the greatest potential to support the Project, with supportive reasoning for the rankings.
7. Prepare a summary of any outstanding data, information, concerns and/or challenges that arose during the meetings.

**Sub-Task 5.3 – ICT Suppliers Roundtable(s):**

The Contractor shall conduct one or more roundtable meetings with ICT Suppliers to evaluate their interest and capability to participate in the Project. In particular, the Contractor shall:

1. Research and identify ICT Suppliers.
2. Conduct one or more roundtables with ICT Suppliers to discuss the Project and solicit potential interest from the ICT Suppliers to participate in the Project (**note:** in total, the ICT Supplier roundtable(s) shall include at least twenty different ICT Suppliers).
3. Provide contact information (name, job title, organization, address, telephone, and e-mail) for each roundtable attendee.
4. If possible, obtain a letter of support or written commitment from each interested ICT Supplier regarding their interest in and potential contributions to the Project.
5. Utilize a table format to identify the following parameters for each ICT Supplier:
  - 1.Type of goods and/or services supplied
  - 2.Experience participating in similar projects
  - 3.Potential resources and/or capabilities that the ICT Supplier could potentially contribute to the Project
  - 4.A synopsis of the ICT Supplier's demonstrated interest in and potential contributions

to the Project

8. Document the results of the roundtables and identify those ICT Suppliers that demonstrate an interest in participating in the Project.
9. Prepare a summary of any outstanding data, information, concerns and/or challenges that arose during the meetings.

The Grantee shall supply the meeting room and audio/visual equipment for the ICT Supplier roundtable(s).

**Sub-Task 5.5 – Project Management Plan:** The Contractor shall develop a management plan for the Project. The project management plan shall include:

1. A draft mission statement
2. A management and staffing plan (including key competencies, an organizational chart, and an overview of key responsibilities)
3. Program office funding requirements (including estimated budgets for staff and operations, fixed and variable costs, with supporting details)

**Task 5 Deliverable:** The Contractor shall provide the Grantee with a report of all work performed pursuant to Task 5.

#### **Task 6: Economic and Financial Analyses**

*Principal Task Location: United States*

**Sub-Task 6.1 – Economic and Financial Cost Benefit Analyses:** The Contractor shall conduct economic and financial cost benefit analyses of the Project. The Contractor shall utilize similar methodologies and analyses to those used in section five of the “The Economic Impact of a Metropolitan Broadband Network for the City of Cape Town” report. In particular, the economic and financial cost benefit analyses shall take into account the impact of the Project on all the stakeholders within society and not only those of the financing agent. The economic and financial cost benefit analyses shall also take into account all of the findings from the above Tasks. In particular, the Contractor shall:

1. Develop an overall cost estimate for the Project and each aspect of the Project, broken down by goods and services required for: additional studies, technical drawings, detailed engineering and design, hardware, software and related equipment, construction, installation, systems integration, operations, maintenance, management, staffing, training, overhead, compliance with regulatory and environmental requirements, financing costs, etc.
2. Conduct a life cycle cost analysis of the Project to examine the initial capital costs to plan, design, develop, and build the Project as well as provide a detailed analysis of all long-term operations costs associated with maintaining the facilities, equipment, and other assets to be financed as part of the Project (**note:** long-term operations costs may include but are not limited to: warranties, operation, maintenance, acquisition, installation, refurbishment, potential disposal costs, etc.

3. Develop an estimate for Project revenues based on the recommended pricing models and service options and anticipated demand and ability to pay for ICT services in K&MP.
4. Estimate any other costs and benefits related to the Project, such as potential productivity gains for individuals, households, and businesses in K&MP as a result of access to affordable, reliable ICT services.
5. Calculate the net present value, benefit cost ratio, and internal rate of return for the Project and provide additional qualitative and quantitative information regarding the overall costs and benefits of the Project.

**Sub-Task 6.2 – Meetings with Consumer Needs Organizations:** The Contractor shall meet with at least eight organizations that are familiar with consumer needs and unmet demand for ICT services in K&MP and/or other South African settlements with similar socio-economic and demographic characteristics. Such organizations may include government agencies responsible for community outreach, public service agencies, non-governmental organizations dealing with consumer rights in the public utility sector, and any other organizations deemed pertinent by the Contractor and Grantee. During these meetings, the Contractor shall seek information regarding attitudes and expectations for pricing, payment methods, service plans, and subsidies for ICT services in K&MP, as well as the capacity of these organizations to provide financial resources or other contributions to support the Project.

**Sub-Task 6.3 – Affordability Gap Analyses:** The Contractor shall conduct affordability gap analyses of the recommended pricing models and service options. The affordability gap analysis shall identify the aggregate gap between pricing and affordability for full broadband penetration covering all individuals, households, and businesses within K&MP. The affordability gap analyses shall take into account all of the findings from the above Tasks and shall include multiple consumer payment scenarios, such as full payment by individuals, households, and businesses in K&MP and at least two different subsidy options.

The Contractor shall develop two tables (one for Khayelitsha and one for Mitchells Plain) that include but are not limited to the following categories and parameters:

- *Categories:* Top five employment sectors; next five employment sectors; top quartile of family income; second quartile of family income; third quartile of family income; and fourth quartile of family income
- *Parameters:* Number of people; number of households; broadband penetration; percent of total broadband market; consumer cost for service option 1 (basic connectivity); consumer cost for service option 2 (basic connectivity and enhanced service offerings); consumer cost for service option 3 (basic connectivity, enhanced and top-line service offerings); consumers' ability to pay for each service option ("Affordability"); and the gap between price and Affordability for each service option

The Contractor shall also provide supporting documentation that identifies qualitative and quantitative background information for each table, as well as estimates and expectations

as to how Affordability will change over the next five years.

**Sub-Task 6.4 – Subsidy Analysis:** The Grantee shall provide the Contractor with information regarding:

1. Current subsidies that the Grantee provides to individuals, households, and businesses in K&MP
2. Estimates of potential revenues and costs associated with the MOFN (excluding K&MP) from 2013 – 2017
3. Any other Grantee, Western Cape Provincial Government, and Government of South Africa budgetary resources that may be available to subsidize the Project

The Contractor shall identify and assess potential sources of subsidies for the Project, including but not limited to: utilizing excess revenues from other parts of the MOFN, other Grantee, Western Cape Provincial Government, and/or Government of South Africa budgetary resources, and support from the private sector and not-for-profit organizations. The Contractor shall also identify and assess different options for arranging and delivering subsidies to support the Project. The Contractor shall provide the Grantee with copies of these assessments, including the Contractor's recommendations for sourcing, arranging, and delivering subsidies to support the Project, for review and comment. Based on the Grantee's comments, the Contractor shall revise or confirm the recommendations for sourcing, arranging, and delivering subsidies to support the Project.

Based on the affordability gap and subsidy analyses, the Contractor shall revise or confirm the updated pricing models and service options. The Contractor shall provide the Grantee with a copy of the revised or confirmed pricing models and service options, along with a report on the overall findings from the affordability gap and subsidy analyses, for review and comment. Based on the Grantee's feedback, the Contractor shall revise or confirm the pricing models and service options and provide the Grantee with a copy of the final pricing models and service options.

**Sub-Task 6.5 – Financing Options:** The Contractor shall provide the Grantee with analyses and recommendations for financing each aspect of the Project. In particular, the Contractor shall:

1. Identify and evaluate different scenarios for the financial and ownership structure of the Project, such as build-operate-transfer, different debt-to-equity ratios, etc.
2. Recommend a financial and ownership structure for the Project.
3. Identify and evaluate potential sources of financing for the Project, including but not limited to:
  1. Grantee, Western Cape Provincial Government, and Government of South Africa budgetary resources
  2. Multilateral lending agencies, such as the World Bank and the African Development Bank
  3. Bilateral credit agencies, such as the Export-Import Bank of the United States

4. Private sector financing mechanisms, such as commercial loans, supplier credits, and private equity investments (especially from ISPs interested in providing internet services in K&MP via the Wi-Fi Network)
5. Any other potential financing sources deemed pertinent by the Contractor and Grantee
4. Meet with representatives from potential financing sources to discuss the Project and gather feedback regarding their interest and capability to provide financial resources for the Project.
5. If possible, obtain a letter of support or written commitment from each interested potential financing source regarding their interest and capability to provide financial resources for the Project.
6. Provide contact information (name, job title, address, telephone, and e-mail) for at least one representative of each potential financing source.
7. Recommend sources of financing for the Project.

**Sub-Task 6.6 – Procurement Options:** The Contractor shall provide the Grantee with analyses and recommendations for procuring goods and services required for the implementation of the Project. In particular, the Contractor shall:

1. Identify, evaluate, and document the advantages and disadvantages of utilizing different tendering/procurement process options, such as request for proposals/quotes, a direct tender process, etc.
2. Review and evaluate the Grantee's procurement policies, processes, and practices, including the Grantee's plans for procuring goods and services required for the implementation of the Project, as well as any relevant South African procurement laws and regulations.
3. Provide the Grantee with recommendations for procuring goods and services required for the implementation of the Project taking into account issues such as life-cycle costing, the use of performance specifications, evaluation of product quality, reliability, durability and warranties, technology dependency and proprietary systems, etc.

**Task 6 Deliverable:** The Contractor shall provide the Grantee with a report of all work performed pursuant to Task 6.

### **Task 7: Preliminary Environmental Impact Assessment**

*Principal Task Location: United States*

The Contractor shall conduct a preliminary environmental impact assessment of the Project, with reference to South African environmental requirements, including those of the Grantee, as well as those of multilateral lending agencies (such as the World Bank and the African Development Bank). The preliminary environmental impact assessment shall: identify anticipated environmental impacts, both positive and negative, associated with the Project; provide recommendations for maximizing positive environmental impacts and minimizing negative environmental impacts; and identify the steps that the

Grantee will need to take subsequent to the Study's completion and prior to implementation of the Project to comply with South African environmental requirements and those of multilateral lending agencies (such as the World Bank and the African Development Bank).

**Task 7 Deliverable:** The Contractor shall provide the Grantee with a report of all work performed pursuant to Task 7.

### **Task 8: Developmental Impact Assessment**

*Principal Task Location: United States*

The Contractor shall conduct a development impact assessment of the Project. The purpose of the development impact assessment is to provide the Project's decision makers and interested parties with a broader view of the Project's potential effects on South Africa. The development impact assessment shall identify the anticipated impacts of the Project in the following categories:

- **Infrastructure:** The Contractor shall identify the anticipated infrastructure impacts of the Project, giving a brief synopsis and concrete examples of infrastructure impacts. Examples of infrastructure impacts related to implementation of the Project may include the installation of optical fiber cables, optical distribution frames, and networking equipment associated with the extension of the MOFN to and expansion of the MOFN within K&MP, data switches, Wi-Fi routers, and networking equipment associated with the Wi-Fi network, and any new ancillary infrastructure required for Project implementation. The Contractor shall provide specific information about the anticipated infrastructure impacts of the Project, such as the length of fiber optic cables and the number of data switches, Wi-Fi routers and other network equipment to be installed, as well as the anticipated impact of this infrastructure on access to affordable, reliable ICT services in K&MP.
- **Human Capacity Building:** The Contractor shall identify the anticipated number and types of local jobs that would be created or retained as a result of the Project. The Contractor shall also identify the number of local people who would receive training and the types of training programs required to implement and sustain the Project. The Contractor shall not include any training performed under these Terms of Reference in the development impact assessment.
- **Technology Transfer and Productivity Enhancement:** The Contractor shall identify the anticipated advanced technologies that would be utilized for the Project. The Contractor shall also identify anticipated efficiencies that would be gained as a result of the Project. Examples of efficiencies related to implementation of the Project may include higher output per resource use, lower costs, or other common measures of efficiency used in the ICT industry, such as increased bit rates or data transfer rates.

- Market Oriented Reforms: The Contractor shall provide a description of any institutional, legal, regulatory, or standards changes that are recommended pursuant to these Terms of Reference and the effect they would have if implemented.
- Other: The Contractor shall identify any other anticipated development impacts or benefits that would result from increasing access to affordable, reliable ICT services in K&MP, such as positive spin-off effects on other sectors of the economy, indirect support for new employment opportunities, improved living standards, etc.

**Task 8 Deliverable:** The Contractor shall provide the Grantee with a report of all work performed pursuant to Task 8.

**Task 9: Regulatory Assessment**

*Principal Task Location: United States*

The Contractor shall conduct an assessment of any institutions, laws, regulations, and standards that will impact the implementation of the Project. In particular, the Contractor shall:

1. Identify and evaluate any institutions, laws, regulations, and standards that will impact the implementation of the Project, including those of the Grantee, the Western Cape Provincial Government, and the Government of South Africa, as well as those of multilateral lending agencies (such as the World Bank and the African Development Bank).
2. Utilize a table format to identify and assess any institutions, laws, regulations, and standards that could positively or negatively impact the procurement, installation, and/or operation of each of the technological delivery options recommended pursuant to Sub-Task 4.2.
3. Identify the steps the Grantee will need to take prior to and during the implementation of the Project to comply with all relevant institutional, legal, regulatory, and standards requirements.
4. Identify any institutional, legal, regulatory, or standards barriers that could prevent the successful implementation of the Project.
5. If necessary, recommended changes to South African institutions, laws, regulations, and/or standards that would support the implementation of digital inclusion projects in South Africa.
6. Prepare a report that documents all of the findings, evaluations, and recommendations from the Contractor's assessment of institutions, laws, regulations, and standards that will impact the implementation of the Project.

**Task 9 Deliverable:** The Contractor shall provide the Grantee with a report of all work performed pursuant to Task 9.

## **Task 10: Implementation Plan**

*Principal Task Location: United States*

The Contractor shall develop an implementation plan that identifies all the steps the Grantee will need to take subsequent to the Study's completion to implement the Project ("Implementation Plan"), such as:

- (A) Compliance with all institutional, legal, regulatory, and standards requirements, including all necessary approvals, certifications, and permits
- (B) Full environmental impact assessments, if necessary, that comply with South African environmental requirements and those of multilateral lending agencies (such as the World Bank and the African Development Bank)
- (C) Financial arrangements
- (D) Procurements of goods and services
- (E) Systems installation, integration, operation, management, and maintenance requirements
- (F) Staffing and training requirements

The Implementation Plan shall include:

- A. Descriptions of all the steps the Grantee and other relevant Project stakeholders will need to take to implement the Project
- B. Final recommendations for pricing models, service options and subsidies, technological delivery options, the project management plan, financial and ownership structure, procurement options, and any other key recommendations for the implementation of the Project
- C. A recommended schedule for implementing the Project, including recommendations for phasing, milestones, and prioritization of investments
- D. Budgetary requirements for each step in the Implementation Plan
- E. An assessment of how the implementation of the Project will impact access to affordable, reliable ICT services in K&MP
- F. Justifications for the investment requirements of the Project based on cost-benefit analyses
- G. Identification of any open concerns from the Grantee or other relevant Project stakeholders regarding the implementation of the Project
- H. Identification of key commitments and offers of support from the Grantee and other relevant Project stakeholders for the implementation of the Project

The Contractor shall provide the Grantee with a draft Implementation Plan for review and comment, gather feedback from the Grantee regarding the draft Implementation Plan, including Grantee requests for changes to the draft Implementation Plan, if any, revise or confirm the draft Implementation Plan as necessary, and provide the Grantee with a copy of the final Implementation Plan.

The Contractor shall deliver a presentation of the final Implementation Plan to the Grantee and other relevant Project stakeholders. The Grantee shall supply the meeting room and audio/visual equipment necessary for the presentation.

**Task 10 Deliverable:** The Contractor shall provide the Grantee with a report of all work performed pursuant to Task 10.

**Task 11: Final Report**

*Principal Task Location: United States*

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 the above tasks, and shall include all deliverables and documents that have been provided to the Grantee. The Final Report shall be prepared in accordance with Clause J 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 the City of Cape Town ("Client"), dated \_\_\_\_\_ ("Grant Agreement"). The Client has selected \_\_\_\_\_ ("Contractor") to perform the feasibility study ("Study") for the proposed Khayelitsha and Mitchells Plain Digital Inclusion project ("Project") in South Africa ("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 J. 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 N 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 or non-U.S. citizens lawfully admitted for permanent residence 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. Reporting Requirements**

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.

## **H. 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. 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 H(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. 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. 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. 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."

(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. "

**(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 N below, or by e-mail to [invoices@ustda.gov](mailto:invoices@ustda.gov).

## **I. Termination**

### **(1) Method of Termination**

- a) 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, I, and O of the USTDA Mandatory Contract Clauses shall survive the termination of this Contract.

## **J. 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.

## **K. 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.

## **L. Study Schedule**

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

The completion date for the Study, which is March 31, 2013, 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.

## **M. 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.

## **N. 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 12/13 1001

Activity No.: 2012-11019A

Reservation No.: 2012222

Grant No.: GH201211222

## **O. 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.

## **P. 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.

## **Q. Contact Persons**

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

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

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.

## **R. 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.

## **S. 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.

**ANNEX 5**

**TERMS OF REFERENCE (FROM USTDA GRANT AGREEMENT)**

DRAFT

## Annex I

### Terms of Reference

The City of Cape Town (“Grantee”) has requested funding from the U.S. Trade and Development Agency (“USTDA”) for a feasibility study (“Study”) to evaluate the technical, financial, and other critical aspects of the proposed Khayelitsha and Mitchells Plain Digital Inclusion project (“Project”) in South Africa. In particular, the Study will evaluate the feasibility of implementing a wireless access network (“Wi-Fi Network”) for individuals, households, and businesses in Khayelitsha and Mitchells Plain (“K&MP”). The study will also evaluate the suitability of existing infrastructure and plans for extending Cape Town’s Metropolitan Optic Fibre Network (“MOFN”) to and expanding the MOFN within K&MP for the purpose of implementing the Wi-Fi network. The primary objective of the Study is to provide the Grantee with analyses and recommendations that will support its decision-making with regard to the implementation of the Project.

#### **Definitions:**

For the purposes of these Terms of Reference, the following definitions shall apply:

1. “Extension of the MOFN to K&MP” shall refer to the development of core routes between K&MP and existing MOFN infrastructure.
2. “Expansion of the MOFN within K&MP” shall refer to the development of local routes between distribution points, access cables to individual buildings, networking equipment, and other hardware, software, and services required for the expansion of the MOFN backbone within K&MP.
3. “Implementation of the Wi-Fi Network” shall refer to the development of switching centers, telecoms aggregations rooms, routers, and other hardware, software, and services required for the implementation of a wireless access network in K&MP.
5. “Project” shall refer to all of the following: (1) extension of the MOFN to K&MP, (2) expansion of the MOFN within K&MP, (3) implementation of the Wi-Fi Network, and (4) programs to encourage the increased utilization of information and communication technology (“ICT”) services by individuals, households, and businesses in K&MP. “ISPs” shall refer to internet service providers currently operating in South Africa.
6. “Digital Development Organizations” shall refer to any organization (including public, private, and not-for-profit) involved with the planning and delivery of social and economic development programs in K&MP that directly link with and/or provide resources that enhance digital diffusion and/or digital literacy in one or more of the following areas:
  - i. Literacy (written and digital)
  - ii. Computer, internet and digital skills
  - iii. Language and/or culturally-relevant digital content development
  - iv. Small- and medium-sized enterprise development

- v. Community outreach and education (especially with regard to literacy and/or the utilization of ICT services)
  - vi. Any other areas deemed pertinent by the Contractor and Grantee to the increased utilization of ICT services by individuals, households, and businesses in K&MP
7. "ICT Suppliers" shall refer to U.S. and South African ICT equipment and service suppliers representing a cross-section of the ICT sector (hardware, software, carriers, ISPs, digital content developers, website design/hosting, etc.) that are active in South Africa.

All other definitions are as indicated within these Terms of Reference.

### **Task 1: Document Review, Information Gathering, and Work Plan Finalization**

*Principal Task Location: United States*

**Sub-Task 1.1 – Document Review and Information Gathering:** The Grantee shall provide the Contractor with all available information needed for the Contractor to successfully carry out the Study, including but not limited to:

- Information related to the MOFN, including but not limited to its current status, next steps, and any outcomes and challenges that have transpired during the planning, launching, and/or operation of the MOFN
- Budgets, technical plans, managerial plans, and any other available information related to each aspect of the Project
- Information about existing ICT infrastructure within the seven regions that comprise the City of Cape Town Metropolitan Area
- Demographic, socio-economic, digital access, and digital inclusion data for the seven regions that comprise the City of Cape Town Metropolitan Area, including but not limited to statistics and information related to geography, teledensity, internet penetration and use, education and literacy levels, and demographic, economic, social and income differentiators among the regions, with a focus as to how K&MP compare to the other regions
- Information about ISPs, Digital Development Organizations, ICT suppliers, and any other Project stakeholders deemed pertinent by the Contractor and Grantee
- "The Economic Impact of a Metropolitan Broadband Network for the City of Cape Town" by Strategic Economic Solutions cc
- "City of Cape Town Broadband Project – Underserved Areas Gap Analysis" by Leon Van Wyk
- Any other information the Grantee deems pertinent to the Contractor's ability to successfully carry out the Study

The Contractor shall review all of the information provided by the Grantee. The Contractor shall also conduct secondary background research using publically available sources. The Contractor shall compile all relevant information from the document review

and secondary research to be utilized by the Contractor in carrying out the Study in a document review report.

**Sub-Task 1.2 – Work Plan Finalization:** Following the completion of Sub-Task 1.1, the Contractor shall review the Contractor’s work plan for carrying out the Study (“Work Plan”), gather input from the Grantee regarding the Work Plan, including Grantee requests for changes to the Work Plan, if any, revise or confirm the Work Plan as necessary, and provide the Grantee with a copy of the final Work Plan. At a minimum, the Work Plan shall:

- Describe the Contractor’s organizational structure for the Study (if subcontractors are to be used, the Work Plan shall also describe the organizational relationship between the Contractor and the subcontractors).
- Discuss how the Contractor will manage the Study, including key staff assignments.
- Identify the Contractor’s Project Manager for the Study (**note:** the Project Manager shall have the responsibility and authority to act on behalf of the Contractor in all matters related to the Study).
- Provide a list of Contractor personnel (including both U.S. and local subcontractors, if any) that will participate in the Study, along with the following information for each member of the Study team: position in the Study, pertinent experience, and curriculum vitae.
- Provide a manpower schedule and level of effort for each Task to be carried out under these Terms of Reference.
- Discuss the Contractor’s methodology for completing all Study requirements.
- Include a brief narrative of the Contractor’s methodology for completing each Task to be carried out under these Terms of Reference.
- Provide a detailed schedule of performance for the Study, including periodic reporting or review points, incremental delivery dates, and other Study milestones.
- Describe any support or additional information the Contractor will require from the Grantee to complete the Study.

**Task 1 Deliverable:** The Contractor shall provide the Grantee with a report of all work performed pursuant to Task 1.

**Task 2: MOFN Expansion Plan, Budget for Transmission-Related Equipment and Preliminary Pricing Models**

*Principal Task Location: South Africa*

The Contractor shall:

- Review the Grantee’s draft budget and existing plans for the extension of the MOFN to and expansion of the MOFN within K&MP.
- Conduct site visits to existing MOFN infrastructure, at a minimum including site visits to exiting MOFN switching centers and telecoms aggregations rooms.

- Observe existing MOFN equipment, operations, line capacities, and related technical, operational, facility, and human resource capabilities.
- Review the Grantee's technology plans for the switching centers in K&MP.
- Confirm the availability and suitability of the MOFN to provide the backhaul needed for providing internet access to individuals, households, and businesses in K&MP.
- Create a preliminary budget for transmission-related equipment required to develop connectivity access to K&MP using the MOFN backbone.
- Create preliminary pricing models for (1) leasing connectivity access to ISPs in K&MP using the MOFN backbone and (2) the provision of ICT services to individuals, households, and businesses in K&MP on the Wi-Fi Network (**note:** the preliminary pricing models for the provision of ICT services to individuals, households, and businesses in K&MP on the Wi-Fi Network shall include at least three service options: basic connectivity, basic connectivity plus enhanced services, and basic connectivity plus enhanced and top line services).
- Provide the Grantee with copies of the draft budget for transmission-related equipment and preliminary pricing models and service options for review and comment.
- Revise the draft budget for transmission-related equipment and preliminary pricing models and service options based on the Grantee's comments and provide the Grantee with copies of the final draft budget for transmission-related equipment and preliminary pricing models and service options.

**Task 2 Deliverable:** The Contractor shall provide the Grantee with a report of all work performed pursuant to Task 2.

### **Task 3: Economic, Social and Digital Inclusion Baseline**

*Principal Task Location: South Africa*

**Sub-Task 3.1 – Baseline Statistics and Data Tables:** The Contractor shall document demographic, socio-economic, digital access, and digital inclusion characteristics of the residents of K&MP to be used for additional analyses under these Terms of Reference and as a baseline for future monitoring and evaluation of the impact of the Project on the economic and social development of the residents of K&MP. In particular, the Contractor shall develop two tables (one for Khayelitsha and one for Mitchells Plain) that include, but are not limited to the following information:

- A population pyramid, age structure diagram, or other graphical illustration of the distribution of various age groups by geographic area
- Population density by geographic area
- Average family size
- Average education, by age group bands
- Average literacy, by age group bands
- Average digital literacy (defined as the ability to read English and use a basic computer), by age group bands
- Average family income, by nuclear family and, if applicable, extended family

- Top 10 employment sectors
- Top 10 employment locations (within or outside of K&MP)
- Average daily travel distance, by foot, public transportation, and/or private transportation
- Commercial density and types of business (both formal and informal), by size, scale, and product/service delivery
- Teledensity (defined as installed access base relative to population) both via wired and wireless technologies
- Television density, by type of service distribution (satellite, cable, or broadcast)
- Other data and indicators deemed pertinent by the Contractor and Grantee that contribute to establishing a baseline regarding the demographic, socio-economic, digital access, and digital inclusion characteristics of the residents of K&MP

The Contractor shall also provide supporting documentation that identifies qualitative and quantitative background information for each table.

**Sub-Task 3.2 – Meetings with K&MP Businesses:** The Contractor shall meet with businesses (both formal and informal) operating within K&MP to evaluate their current utilization of ICT services, current communication costs and constraints, ability to pay for ICT services, and potential productivity gains from access to affordable, reliable ICT services. In particular, the Contractor shall:

- (1) Research and identify businesses (both formal and informal) operating within K&MP.
- (2) Conduct meetings with at least ten K&MP businesses.
- (3) Utilizing similar categories to those used in section four of the “The Economic Impact of a Metropolitan Broadband Network for the City of Cape Town” report, gather information from the K&MP businesses about their:
  - a. Current utilization of ICT services
  - b. Current communication costs and constraints
  - c. Ability to pay for ICT services
  - d. Potential productivity gains from access to affordable, reliable ICT services
- (4) Document all information and results obtained from the meetings.

**Sub-Task 3.3 – Interviews with Residents of K&MP:** The Contractor shall develop a draft questionnaire that addresses key factors related to an individual’s ability to utilize ICT services. In particular, the questionnaire shall seek responses about the ability of residents of K&MP to:

- Read and write in English
- Use a keyboard (type at least 25 words per minute)
- Utilize software (word processing, spreadsheet, visual presentation, games, and any other software applications deemed pertinent by the Contractor and Grantee)
- Access the internet and web-based services
- Utilize the internet and web-based services to research and obtain information related to an individual’s personal or professional challenges
- Participate effectively in on-line educational programs

- Afford the purchase of a computer or digital access device
- Afford to rent access (connectivity time) on a computer or digital access device (e.g. at an internet café)
- Preferred payment method for purchasing or renting access to ICT services (e.g. pre-pay, contract, “pay as you go”, shared access, etc.)
- Other data and indicators deemed pertinent by the Contractor and Grantee that address the core abilities and resources that affect an individual’s ability to utilize ICT services

The Contractor shall provide the Grantee with a copy of the draft questionnaire for review and comment. Based on the Grantee’s comments, the Contractor shall revise or confirm the questionnaire and provide the Grantee with a copy of the final questionnaire.

The Contractor shall develop a plan for interviewing at least 120 residents of K&MP. The plan shall include methodologies for selecting interviewees and encouraging interviewees to meet and share information with the Contractor. The Contractor shall provide the Grantee with a copy of the draft plan for review and comment. Based on the Grantee’s comments, the Contractor shall revise or confirm the plan and provide the Grantee with a copy of the final plan for interviewing at least 120 residents of K&MP.

The Contractor shall use the questionnaire to conduct interviews with at least 120 residents of K&MP and assess their ability to utilize and pay for ICT services. The interviews shall be conducted in-person in groups of eight or less. The Contractor shall not distribute the questionnaire for response, but shall use the questionnaire as a tool for verbal discussions with the interviewees. The interviewees shall represent a cross-section of the demographic populations that reside within K&MP, at a minimum including at least 20 individuals who are under 18 years of age, 80 individuals who are between 18 and 45 years of age, and 20 individuals who are over 45 years of age.

The Contractor shall document all information and results obtained from the interviews. Utilizing the baseline statistics and data tables developed pursuant to Sub-Task 3.1, and the information and results obtained from the meetings with K&MP businesses and interviews with residents of K&MP, the Contractor shall prepare a quantitative and qualitative report that identifies the baseline findings regarding the demographic, socio-economic, digital access, and digital inclusion characteristics of the residents of K&MP.

**Task 3 Deliverable:** The Contractor shall provide the Grantee with a report of all work performed pursuant to Task 3.

**Task 4: Technological Delivery Options, Draft Technical Plan and Budget, and Updated Pricing Models**

*Principal Task Location: South Africa*

**Sub-Task 4.1 – K&MP Site Visits:** The Contractor shall conduct site visits to K&MP and identify key demographic, environmental, topographical, and related network

installation and ICT service delivery factors that affect the selection of effective technological delivery options for the implementation of the Wi-Fi Network. These factors shall include but not be limited to:

- Population density
- Topography
- Access to the MOFN
- Current housing construction with a particular focus on the impact of building materials (including tin roofing) on signal refraction
- The location of schools, community centers, libraries and other areas where residents congregate and could utilize shared ICT access devices and/or shared connectivity
- Current centers of business activity (both formal and informal)
- Current and potential network traffic
- Any other factors deemed pertinent by the Contractor and Grantee

**Sub-Task 4.2 – Technological Delivery Options:** Given the distinctive demographic, environmental, topographical, and related network installation and ICT service delivery factors identified pursuant to Sub-Task 4.1, the Contractor shall research, analyze, and recommend technological delivery options for the implementation of the Wi-Fi Network. The technological delivery options shall encompass all technology-related requirements for the implementation of the Wi-Fi Network, including but not limited to: hardware, software, networking equipment, configuration, systems integration, etc. The technological delivery options may include single technology solutions, hybrid technology solutions, separate or integrated technology solutions for each settlement, and any other technology solutions that would maximize the functionality, coverage, penetration, reliability, interconnectivity, and affordability of the Wi-Fi Network. In particular, the Contractor shall:

- Research potential technological delivery options for the implementation of the Wi-Fi Network.
- Prepare a list of potential technological delivery options for the implementation of the Wi-Fi Network.
- Identify and conduct a comparative analysis of the advantages and disadvantages of each technological delivery option with respect to functionality, coverage, penetration, reliability, connectivity requirements, affordability, and any other parameters deemed pertinent by the Contractor and Grantee.
- Rank each technological delivery option in order of overall desirability, with supportive reasoning for the rankings.
- Provide the Grantee with a report of the comparative analysis and rankings of the potential technological delivery options for review and comment.
- Gather and respond to feedback from the Grantee on the comparative analysis and rankings of the potential technological delivery options and Grantee requests for additional information on the potential technological delivery options, if any.
- Provide the Grantee with a final list of recommended technological delivery options for the implementation of the Wi-Fi Network.

**Sub-Task 4.3 – Draft Technical Plan and Budget:** The Contractor shall prepare a draft technical plan for the implementation of the Wi-Fi Network with consideration to maximizing the functionality, coverage, penetration, reliability, interconnectivity, and affordability of the Wi-Fi Network. The draft technical plan shall include all of the steps the Grantee and other relevant Project stakeholders will need to take subsequent to the completion of the Study to implement the Wi-Fi Network from a technical standpoint, including but not limited to any requirements for: additional studies, technical drawings, detailed engineering and design, hardware, software and related equipment, construction, installation, systems integration, operations, maintenance, etc.

The Contractor shall develop a draft budget for the technical requirements associated with implementation of the Wi-Fi Network. The draft technical budget shall include estimated budgetary requirements for each step included in the draft technical plan.

The Contractor shall provide the Grantee with copies of the draft technical plan and technical requirements budget for review and comment, revise the draft technical plan and technical requirements budget based on the Grantee's comments, and provide the Grantee with copies of the final technical plan and technical requirements budget.

**Sub-Task 4.4 – Meetings with ISPs:** The Contractor shall meet with ISPs to evaluate their interest and capability to provide ICT services in K&MP via the Wi-Fi Network. In particular, the Contractor shall:

- (1) Research and identify ISPs operating in South Africa, the Western Cape Province, Cape Town, and K&MP.
- (2) Conduct meetings with at least five ISPs, at least two of which have operations in the Western Cape Province.
- (3) Gather information from the ISPs about:
  - a. Existing pricing models and ownership structures for the provision of ICT services in South Africa
  - b. Historical ICT spending patterns in South Africa
  - c. Historical information about the usage of ICT services in South Africa
  - d. ICT service, pricing and payment plans currently available to individuals, households, and businesses in K&MP and/or other South African settlements with similar socio-economic and demographic characteristics
  - e. Their interest and capability to provide internet services in K&MP via the Wi-Fi Network
- (4) Provide the ISPs with the preliminary pricing models and service options developed pursuant to Task 2 and gather feedback and respond to questions from the ISPs regarding the preliminary pricing models and service options.
- (5) Document all information and results obtained from the meetings, including the ISPs expectations regarding pricing models and service options for providing internet services in K&MP via the Wi-Fi Network.

The Contractor shall also meet with at least five establishments within K&MP where residents can pay for access to digital access devices and ICT services (such as internet

cafés) to evaluate their interest and capability to provide ICT services in K&MP via the Wi-Fi Network. In particular, the Contractor shall:

1. Research and identify establishments within K&MP where residents can pay for access to digital access devices and ICT services.
2. Conduct meetings with at least five such establishments.  
Gather information from these establishments about:
  - a. ICT service, pricing and payment plans currently available to individuals, households, and businesses in K&MP and/or other South African settlements with similar socio-economic and demographic characteristics
  - b. Their interest and capability to provide internet services in K&MP via the Wi-Fi Network
4. Document all information and results obtained from the meetings.

Based on the feedback received during the Contractor's meetings with the ISPs and establishments within K&MP where residents can pay for access to digital access devices and ICT services, the Contractor shall revise or confirm the preliminary pricing models and service options. The Contractor shall provide the Grantee with a copy of the revised or confirmed pricing models and service options, along with a report on the overall findings from the Contractor's meetings with the ISPs and establishments within K&MP where residents can pay for access to digital access devices and ICT services, for review and comment. Based on the Grantee's comments, the Contractor shall revise or confirm the pricing models and service options and provide the Grantee with a copy of the updated pricing models and service options.

**Task 4 Deliverable:** The Contractor shall provide the Grantee with a report of all work performed pursuant to Task 4.

#### **Task 5: Project Management Plan**

*Principal Task Location: South Africa*

**Sub-Task 5.1 – Organizational Structure and Staffing:** The Contractor shall review and assess the Grantee's current and planned organizational structure and staffing responsibilities for managing the Project. The Contractor shall document the technical and non-technical components of the Project that require management responsibility. The Contractor shall identify the skills and competencies that are required for effectively implementing and managing the Project.

**Sub-Task 5.2 – Meetings with Digital Development Organizations:** The Contractor shall meet with Digital Development Organizations to evaluate their interest and capability to plan and deliver programs that encourage the increased utilization of ICT services by individuals, households, and businesses in K&MP. In particular, the Contractor shall:

1. Research and identify Digital Development Organizations.
2. Conduct meetings with at least fifteen Digital Development Organizations.
3. Gather relevant information from the Digital Development Organizations and assess their experience, expertise, staffing capabilities, organizational resources, funding resources, and overall potential to encourage the increased utilization of ICT services by individuals, households, and businesses in K&MP.
4. If possible, obtain a letter of support and/or concept paper commitment from each Digital Development Organization regarding their interest in and potential contributions to the Project.
5. Utilize a table format to identify the following parameters for each Digital Development Organizations:
  - (1) Type of organization (public, private, or non-profit)
  - (2) Organizational mission and principal activities
  - (3) Size, budget, services, and potential resources and/or capabilities that the organization could potentially contribute to the Project
  - (4) A synopsis of the organization's demonstrated interest in and potential contributions to the Project
  - (5) Contact information (name, job title, organization, address, telephone, and e-mail) for at least two representatives from each organization
6. Document the results of the meetings, identify those Digital Development Organizations that demonstrate an interest in participating in the Project, and prepare a ranking and summary of those organizations that have the greatest potential to support the Project, with supportive reasoning for the rankings.
7. Prepare a summary of any outstanding data, information, concerns and/or challenges that arose during the meetings.

**Sub-Task 5.3 – ICT Suppliers Roundtable(s):**

The Contractor shall conduct one or more roundtable meetings with ICT Suppliers to evaluate their interest and capability to participate in the Project. In particular, the Contractor shall:

1. Research and identify ICT Suppliers.
2. Conduct one or more roundtables with ICT Suppliers to discuss the Project and solicit potential interest from the ICT Suppliers to participate in the Project (**note:** in total, the ICT Supplier roundtable(s) shall include at least twenty different ICT Suppliers).
3. Provide contact information (name, job title, organization, address, telephone, and e-mail) for each roundtable attendee.
4. If possible, obtain a letter of support or written commitment from each interested ICT Supplier regarding their interest in and potential contributions to the Project.
5. Utilize a table format to identify the following parameters for each ICT Supplier:
  - 1.Type of goods and/or services supplied
  - 2.Experience participating in similar projects
  - 3.Potential resources and/or capabilities that the ICT Supplier could potentially contribute to the Project
  - 4.A synopsis of the ICT Supplier's demonstrated interest in and potential contributions

to the Project

8. Document the results of the roundtables and identify those ICT Suppliers that demonstrate an interest in participating in the Project.
9. Prepare a summary of any outstanding data, information, concerns and/or challenges that arose during the meetings.

The Grantee shall supply the meeting room and audio/visual equipment for the ICT Supplier roundtable(s).

**Sub-Task 5.5 – Project Management Plan:** The Contractor shall develop a management plan for the Project. The project management plan shall include:

1. A draft mission statement
2. A management and staffing plan (including key competencies, an organizational chart, and an overview of key responsibilities)
3. Program office funding requirements (including estimated budgets for staff and operations, fixed and variable costs, with supporting details)

**Task 5 Deliverable:** The Contractor shall provide the Grantee with a report of all work performed pursuant to Task 5.

#### **Task 6: Economic and Financial Analyses**

*Principal Task Location: United States*

**Sub-Task 6.1 – Economic and Financial Cost Benefit Analyses:** The Contractor shall conduct economic and financial cost benefit analyses of the Project. The Contractor shall utilize similar methodologies and analyses to those used in section five of the “The Economic Impact of a Metropolitan Broadband Network for the City of Cape Town” report. In particular, the economic and financial cost benefit analyses shall take into account the impact of the Project on all the stakeholders within society and not only those of the financing agent. The economic and financial cost benefit analyses shall also take into account all of the findings from the above Tasks. In particular, the Contractor shall:

1. Develop an overall cost estimate for the Project and each aspect of the Project, broken down by goods and services required for: additional studies, technical drawings, detailed engineering and design, hardware, software and related equipment, construction, installation, systems integration, operations, maintenance, management, staffing, training, overhead, compliance with regulatory and environmental requirements, financing costs, etc.
2. Conduct a life cycle cost analysis of the Project to examine the initial capital costs to plan, design, develop, and build the Project as well as provide a detailed analysis of all long-term operations costs associated with maintaining the facilities, equipment, and other assets to be financed as part of the Project (**note:** long-term operations costs may include but are not limited to: warranties, operation, maintenance, acquisition, installation, refurbishment, potential disposal costs, etc).

3. Develop an estimate for Project revenues based on the recommended pricing models and service options and anticipated demand and ability to pay for ICT services in K&MP.
4. Estimate any other costs and benefits related to the Project, such as potential productivity gains for individuals, households, and businesses in K&MP as a result of access to affordable, reliable ICT services.
5. Calculate the net present value, benefit cost ratio, and internal rate of return for the Project and provide additional qualitative and quantitative information regarding the overall costs and benefits of the Project.

**Sub-Task 6.2 – Meetings with Consumer Needs Organizations:** The Contractor shall meet with at least eight organizations that are familiar with consumer needs and unmet demand for ICT services in K&MP and/or other South African settlements with similar socio-economic and demographic characteristics. Such organizations may include government agencies responsible for community outreach, public service agencies, non-governmental organizations dealing with consumer rights in the public utility sector, and any other organizations deemed pertinent by the Contractor and Grantee. During these meetings, the Contractor shall seek information regarding attitudes and expectations for pricing, payment methods, service plans, and subsidies for ICT services in K&MP, as well as the capacity of these organizations to provide financial resources or other contributions to support the Project.

**Sub-Task 6.3 – Affordability Gap Analyses:** The Contractor shall conduct affordability gap analyses of the recommended pricing models and service options. The affordability gap analysis shall identify the aggregate gap between pricing and affordability for full broadband penetration covering all individuals, households, and businesses within K&MP. The affordability gap analyses shall take into account all of the findings from the above Tasks and shall include multiple consumer payment scenarios, such as full payment by individuals, households, and businesses in K&MP and at least two different subsidy options.

The Contractor shall develop two tables (one for Khayelitsha and one for Mitchells Plain) that include but are not limited to the following categories and parameters:

- *Categories:* Top five employment sectors; next five employment sectors; top quartile of family income; second quartile of family income; third quartile of family income; and fourth quartile of family income
- *Parameters:* Number of people; number of households; broadband penetration; percent of total broadband market; consumer cost for service option 1 (basic connectivity); consumer cost for service option 2 (basic connectivity and enhanced service offerings); consumer cost for service option 3 (basic connectivity, enhanced and top-line service offerings); consumers' ability to pay for each service option ("Affordability"); and the gap between price and Affordability for each service option

The Contractor shall also provide supporting documentation that identifies qualitative and quantitative background information for each table, as well as estimates and expectations

as to how Affordability will change over the next five years.

**Sub-Task 6.4 – Subsidy Analysis:** The Grantee shall provide the Contractor with information regarding:

1. Current subsidies that the Grantee provides to individuals, households, and businesses in K&MP
2. Estimates of potential revenues and costs associated with the MOFN (excluding K&MP) from 2013 – 2017
3. Any other Grantee, Western Cape Provincial Government, and Government of South Africa budgetary resources that may be available to subsidize the Project

The Contractor shall identify and assess potential sources of subsidies for the Project, including but not limited to: utilizing excess revenues from other parts of the MOFN, other Grantee, Western Cape Provincial Government, and/or Government of South Africa budgetary resources, and support from the private sector and not-for-profit organizations. The Contractor shall also identify and assess different options for arranging and delivering subsidies to support the Project. The Contractor shall provide the Grantee with copies of these assessments, including the Contractor's recommendations for sourcing, arranging, and delivering subsidies to support the Project, for review and comment. Based on the Grantee's comments, the Contractor shall revise or confirm the recommendations for sourcing, arranging, and delivering subsidies to support the Project.

Based on the affordability gap and subsidy analyses, the Contractor shall revise or confirm the updated pricing models and service options. The Contractor shall provide the Grantee with a copy of the revised or confirmed pricing models and service options, along with a report on the overall findings from the affordability gap and subsidy analyses, for review and comment. Based on the Grantee's feedback, the Contractor shall revise or confirm the pricing models and service options and provide the Grantee with a copy of the final pricing models and service options.

**Sub-Task 6.5 – Financing Options:** The Contractor shall provide the Grantee with analyses and recommendations for financing each aspect of the Project. In particular, the Contractor shall:

1. Identify and evaluate different scenarios for the financial and ownership structure of the Project, such as build-operate-transfer, different debt-to-equity ratios, etc.
2. Recommend a financial and ownership structure for the Project.
3. Identify and evaluate potential sources of financing for the Project, including but not limited to:
  1. Grantee, Western Cape Provincial Government, and Government of South Africa budgetary resources
  2. Multilateral lending agencies, such as the World Bank and the African Development Bank
  3. Bilateral credit agencies, such as the Export-Import Bank of the United States

4. Private sector financing mechanisms, such as commercial loans, supplier credits, and private equity investments (especially from ISPs interested in providing internet services in K&MP via the Wi-Fi Network)
5. Any other potential financing sources deemed pertinent by the Contractor and Grantee
4. Meet with representatives from potential financing sources to discuss the Project and gather feedback regarding their interest and capability to provide financial resources for the Project.
5. If possible, obtain a letter of support or written commitment from each interested potential financing source regarding their interest and capability to provide financial resources for the Project.
6. Provide contact information (name, job title, address, telephone, and e-mail) for at least one representative of each potential financing source.
7. Recommend sources of financing for the Project.

**Sub-Task 6.6 – Procurement Options:** The Contractor shall provide the Grantee with analyses and recommendations for procuring goods and services required for the implementation of the Project. In particular, the Contractor shall:

1. Identify, evaluate, and document the advantages and disadvantages of utilizing different tendering/procurement process options, such as request for proposals/quotes, a direct tender process, etc.
2. Review and evaluate the Grantee's procurement policies, processes, and practices, including the Grantee's plans for procuring goods and services required for the implementation of the Project, as well as any relevant South African procurement laws and regulations.
3. Provide the Grantee with recommendations for procuring goods and services required for the implementation of the Project taking into account issues such as life-cycle costing, the use of performance specifications, evaluation of product quality, reliability, durability and warranties, technology dependency and proprietary systems, etc.

**Task 6 Deliverable:** The Contractor shall provide the Grantee with a report of all work performed pursuant to Task 6.

### **Task 7: Preliminary Environmental Impact Assessment**

*Principal Task Location: United States*

The Contractor shall conduct a preliminary environmental impact assessment of the Project, with reference to South African environmental requirements, including those of the Grantee, as well as those of multilateral lending agencies (such as the World Bank and the African Development Bank). The preliminary environmental impact assessment shall: identify anticipated environmental impacts, both positive and negative, associated with the Project; provide recommendations for maximizing positive environmental impacts and minimizing negative environmental impacts; and identify the steps that the

Grantee will need to take subsequent to the Study's completion and prior to implementation of the Project to comply with South African environmental requirements and those of multilateral lending agencies (such as the World Bank and the African Development Bank).

**Task 7 Deliverable:** The Contractor shall provide the Grantee with a report of all work performed pursuant to Task 7.

### **Task 8: Developmental Impact Assessment**

*Principal Task Location: United States*

The Contractor shall conduct a development impact assessment of the Project. The purpose of the development impact assessment is to provide the Project's decision makers and interested parties with a broader view of the Project's potential effects on South Africa. The development impact assessment shall identify the anticipated impacts of the Project in the following categories:

- **Infrastructure:** The Contractor shall identify the anticipated infrastructure impacts of the Project, giving a brief synopsis and concrete examples of infrastructure impacts. Examples of infrastructure impacts related to implementation of the Project may include the installation of optical fiber cables, optical distribution frames, and networking equipment associated with the extension of the MOFN to and expansion of the MOFN within K&MP, data switches, Wi-Fi routers, and networking equipment associated with the Wi-Fi network, and any new ancillary infrastructure required for Project implementation. The Contractor shall provide specific information about the anticipated infrastructure impacts of the Project, such as the length of fiber optic cables and the number of data switches, Wi-Fi routers and other network equipment to be installed, as well as the anticipated impact of this infrastructure on access to affordable, reliable ICT services in K&MP.
- **Human Capacity Building:** The Contractor shall identify the anticipated number and types of local jobs that would be created or retained as a result of the Project. The Contractor shall also identify the number of local people who would receive training and the types of training programs required to implement and sustain the Project. The Contractor shall not include any training performed under these Terms of Reference in the development impact assessment.
- **Technology Transfer and Productivity Enhancement:** The Contractor shall identify the anticipated advanced technologies that would be utilized for the Project. The Contractor shall also identify anticipated efficiencies that would be gained as a result of the Project. Examples of efficiencies related to implementation of the Project may include higher output per resource use, lower costs, or other common measures of efficiency used in the ICT industry, such as increased bit rates or data transfer rates.

- Market Oriented Reforms: The Contractor shall provide a description of any institutional, legal, regulatory, or standards changes that are recommended pursuant to these Terms of Reference and the effect they would have if implemented.
- Other: The Contractor shall identify any other anticipated development impacts or benefits that would result from increasing access to affordable, reliable ICT services in K&MP, such as positive spin-off effects on other sectors of the economy, indirect support for new employment opportunities, improved living standards, etc.

**Task 8 Deliverable:** The Contractor shall provide the Grantee with a report of all work performed pursuant to Task 8.

**Task 9: Regulatory Assessment**

*Principal Task Location: United States*

The Contractor shall conduct an assessment of any institutions, laws, regulations, and standards that will impact the implementation of the Project. In particular, the Contractor shall:

1. Identify and evaluate any institutions, laws, regulations, and standards that will impact the implementation of the Project, including those of the Grantee, the Western Cape Provincial Government, and the Government of South Africa, as well as those of multilateral lending agencies (such as the World Bank and the African Development Bank).
2. Utilize a table format to identify and assess any institutions, laws, regulations, and standards that could positively or negatively impact the procurement, installation, and/or operation of each of the technological delivery options recommended pursuant to Sub-Task 4.2.
3. Identify the steps the Grantee will need to take prior to and during the implementation of the Project to comply with all relevant institutional, legal, regulatory, and standards requirements.
4. Identify any institutional, legal, regulatory, or standards barriers that could prevent the successful implementation of the Project.
5. If necessary, recommended changes to South African institutions, laws, regulations, and/or standards that would support the implementation of digital inclusion projects in South Africa.
6. Prepare a report that documents all of the findings, evaluations, and recommendations from the Contractor's assessment of institutions, laws, regulations, and standards that will impact the implementation of the Project.

**Task 9 Deliverable:** The Contractor shall provide the Grantee with a report of all work performed pursuant to Task 9.

## **Task 10: Implementation Plan**

*Principal Task Location: United States*

The Contractor shall develop an implementation plan that identifies all the steps the Grantee will need to take subsequent to the Study's completion to implement the Project ("Implementation Plan"), such as:

- (A) Compliance with all institutional, legal, regulatory, and standards requirements, including all necessary approvals, certifications, and permits
- (B) Full environmental impact assessments, if necessary, that comply with South African environmental requirements and those of multilateral lending agencies (such as the World Bank and the African Development Bank)
- (C) Financial arrangements
- (D) Procurements of goods and services
- (E) Systems installation, integration, operation, management, and maintenance requirements
- (F) Staffing and training requirements

The Implementation Plan shall include:

- A. Descriptions of all the steps the Grantee and other relevant Project stakeholders will need to take to implement the Project
- B. Final recommendations for pricing models, service options and subsidies, technological delivery options, the project management plan, financial and ownership structure, procurement options, and any other key recommendations for the implementation of the Project
- C. A recommended schedule for implementing the Project, including recommendations for phasing, milestones, and prioritization of investments
- D. Budgetary requirements for each step in the Implementation Plan
- E. An assessment of how the implementation of the Project will impact access to affordable, reliable ICT services in K&MP
- F. Justifications for the investment requirements of the Project based on cost-benefit analyses
- G. Identification of any open concerns from the Grantee or other relevant Project stakeholders regarding the implementation of the Project
- H. Identification of key commitments and offers of support from the Grantee and other relevant Project stakeholders for the implementation of the Project

The Contractor shall provide the Grantee with a draft Implementation Plan for review and comment, gather feedback from the Grantee regarding the draft Implementation Plan, including Grantee requests for changes to the draft Implementation Plan, if any, revise or confirm the draft Implementation Plan as necessary, and provide the Grantee with a copy of the final Implementation Plan.

The Contractor shall deliver a presentation of the final Implementation Plan to the Grantee and other relevant Project stakeholders. The Grantee shall supply the meeting room and audio/visual equipment necessary for the presentation.

**Task 10 Deliverable:** The Contractor shall provide the Grantee with a report of all work performed pursuant to Task 10.

**Task 11: Final Report**

*Principal Task Location: United States*

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 the above tasks, and shall include all deliverables and documents that have been provided to the Grantee. The Final Report shall be prepared in accordance with Clause J of Annex II of the Grant Agreement.

**ANNEX 6**

**U.S. FIRM INFORMATION FORM**

DRAFT



**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 <i>[To be completed by USTDA]</i>	<input type="checkbox"/> Feasibility Study	<input type="checkbox"/> Technical Assistance	<input type="checkbox"/> 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.

Please provide a list of directors and principal officers as detailed in Attachment A. Attached?  Yes  No

Type of Ownership	<input type="checkbox"/> Publicly Traded Company
	<input type="checkbox"/> Private Company
	<input type="checkbox"/> Other (please specify)

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?	<input type="checkbox"/> Yes
	<input type="checkbox"/> No

If so, please provide the name of the U.S. Firm's parent company(s). 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?	<input type="checkbox"/> Yes
	<input type="checkbox"/> No

If yes, U.S. Firm shall complete Attachment C for each subcontractor. Attached?	<input type="checkbox"/> Yes
	<input type="checkbox"/> 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 any 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.
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	<input type="text"/>	Signature	<input type="text"/>
Title	<input type="text"/>		
Organization	<input type="text"/>	Date	<input type="text"/>





**ATTACHMENT B**

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

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

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 <i>[To be completed by USTDA]</i>	
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Activity Title <i>[To be completed by USTDA]</i>	
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Full Legal Name of Prime Contractor U.S. Firm ("U.S. Firm")	
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Full Legal Name of Subcontractor	
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Business Address of Subcontractor (street address only)	
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Telephone Number	
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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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**Subcontractor Point of Contact**

Name	Surname	
	Given Name	

Address	
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Telephone	
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Fax	
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Email	
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**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		Signature	
Title			
Organization		Date	