

**REQUEST FOR PROPOSALS**

**FEASIBILITY STUDY FOR THE**

**DATA CENTER MODERNIZATION AND CONSOLIDATION PROJECT**

Submission Deadline: **12:00 P.M. local time (Romania)**

**LOCAL TIME**

**December 9, 2013**

Submission Place: Directorate for Communication and Information Technology  
(Directia pentru Comunicatii si Tehnologia Informatiei)  
Ministry of Internal Affairs of the Government of Romania  
Piata Revolutiei nr.1 A, sect. 1  
Bucharest, Romania  
E-Mail: [bogdan.tohaneanu@mai.gov.ro](mailto:bogdan.tohaneanu@mai.gov.ro) and [grup.ustda@mai.gov.ro](mailto:grup.ustda@mai.gov.ro)

SEALED PROPOSALS SHALL BE CLEARLY MARKED AND RECEIVED PRIOR TO THE TIME AND DATE SPECIFIED ABOVE. PROPOSALS RECEIVED AFTER SAID TIME AND DATE WILL NOT BE ACCEPTED OR CONSIDERED.

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## **Section 1: INTRODUCTION**

The U.S. Trade and Development Agency (USTDA) has provided a grant in the amount of US\$400,600 to the Romanian Ministry of Internal Affairs (the “Grantee”) in accordance with a grant agreement dated August 9, 2013 (the “Grant Agreement”). This Grant will fund a feasibility study (“Feasibility Study”) on the proposed Data Center Modernization and Consolidation project (“project”) in Romania (“Host Country”). 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**

In order to reduce costs, improve efficiency, and increase the likelihood of receiving untied EU structural funds during the upcoming 2014-2020 funding cycle, Romanian public sectors entities will be undertaking a number of ICT-focused projects in the coming months and years. Currently, the Grantee’s data gathering, use, storage, and management are constrained by a number of inefficiencies. Many of these inefficiencies result from limited operational budgets and staff, along with data centers and servers that are reaching the end of their useful lives and are operated autonomously by the Grantee’s central and subordinate units. The Grantee believes that the current situation, characterized by a proliferation of independent and autonomous server locations and small data centers operated and/or accessed by 19 of the Ministry’s central and support units is inefficient, unnecessarily costly, and difficult to manage. This situation puts data and electronic government (eGov) systems at great risk for loss of data and jeopardizes government operations. In addition, lack of real-time access to data, lack of standardization, and limited integration or inter-operability prevents effective information sharing between Grantee components and between Grantee and other government entities. There is also a high risk of data loss because few, if any, disaster recovery sites exist, while current access and security protocols need review and revision. The subsequent risk and inefficiencies result in frequent manual processing of information, limited eGov applications, limited potential for audit and compliance governance, and difficulty in meeting European Union (EU) standards.

The Grantee recognizes the need to modernize existing ICT infrastructure to reduce budgetary allocations in this area, as well as to provide an agile infrastructure that will support the development of eGov services to industry and citizens. In addition, modernizing the ICT infrastructure will enable the Grantee to meet integration and interoperability compliance requirements that have been established by the EU and to foster Romania’s potential participation in the Shengen Agreement in mid-late 2013, which would allow Romania to enter one common EU border security space.

In order to address these issues, the Grantee is planning ICT infrastructure projects including a data center and systems consolidation initiative, government interoperability framework, and a “single window” for user access to the Grantee’s data and services. The Grantee requested that USTDA fund a feasibility study covering the Data Center Modernization and Consolidation project. As part of this project, the Grantee is planning the consolidation of a large number of currently disparate data centers, and servers used by various agencies within the Grantee into a consolidated and modernized facility, offering disaster management and continuity of operations. The Grantee has a broad mandate from the Government of Romania to carry out the Data Center

Modernization and Consolidation Project in order to realize the expected efficiencies and capabilities.

## **1.2 OBJECTIVE**

This Feasibility Study will help the Grantee to assess the technical, economic, and financial feasibility of migration of existing independent data centers into a single consolidated data center. The single center would have space available for co-location and use by other organizations, which may be needed for disaster recovery or other requirements including implementing a government interoperability framework for data systems and application integration. The goal of the project is more effective delivery of services to government, business, and citizens while at the same time yielding substantial cost savings. 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\$400,600. **The USTDA grant of \$US400,600 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\$400,600 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 Data Center Modernization and Consolidation Project Feasibility Study

### **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\$400,600.

## **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. Also, the Grantee shall not support any kind of 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.

In accordance with Romanian Law, work on Romanian classified information must be performed by organizations and individuals with the required clearance, which must be a Romanian citizen or entity. Therefore the Contractor's subcontractors must have the required clearance. Work on Romanian classified information performed by a Romanian subcontractor remains subject to the USTDA Nationality Requirements listed in Annex 3 including the requirement that no more than 20% of the grant funds may be used to pay for work performed by host country subcontractors.

## 2.12 LANGUAGE OF PROPOSAL

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

## 2.13 PROPOSAL SUBMISSION REQUIREMENTS

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

Directorate for Communication and Information Technology (Directia pentru  
Comunicatii si Tehnologia Informatiei)  
Ministry of Internal Affairs of the Government of Romania  
Piata Revolutiei nr.1 A, sector 1  
Bucharest, Romania  
E-Mail: [bogdan.tohaneanu@mai.gov.ro](mailto:bogdan.tohaneanu@mai.gov.ro) and [grup.ustda@mai.gov.ro](mailto:grup.ustda@mai.gov.ro)

**An Original and eight (8) copies of your proposal (hard copy and editable electronic format on CD/DVD/USB stick) must be received at the above address no later than 12:00 PM local time, on December 9, 2013.**

Proposals may be either sent by mail, overnight courier, or hand-delivered. Whether the proposal is sent by mail, 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 will be returned unopened. The Grantee will promptly notify any Offeror if its proposal was received late.

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

## 2.14 PACKAGING

The original and each copy of the proposal must be sealed to ensure confidentiality of the information. The proposals should be individually wrapped and sealed, and labeled for content including the name of the project and designation of "original" or "copy number x." The original

and eight (8) copies should be collectively wrapped and sealed, and clearly labeled, including the contact name and the name of the project.

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

## **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 ninety (90) days after the proposal due date, and Offeror may withdraw or modify this proposal at any time prior to the due date upon written request, signed in the same manner and by the same person who signed the original proposal.

## **2.18 EXCEPTIONS**

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

## **2.19 OFFEROR QUALIFICATIONS**

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

## **2.20 RIGHT TO REJECT PROPOSALS**

The Grantee reserves the right to reject any and all proposals. The Grantee reserves the right to reject any proposal that does not contain the proof that the Offeror or subcontractor(s) have commenced the proceedings to obtain the industrial security authorization, in accordance with the Romanian Law in regards to the processing of Romanian classified information.

## **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.

As stated in section 2.11 above, in accordance with Romanian Law, work on Romanian classified information must be performed by organizations and individuals with the required clearance, which must be a Romanian citizen or entity. Therefore the Contractor's subcontractors must have the required clearance. Work on Romanian classified information performed by a Romanian subcontractor remains subject to the USTDA Nationality Requirements listed in Annex 3 including the requirement that no more than 20% of the grant funds may be used to pay for work performed by host country subcontractors.

## **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 Grantee's legal authorized representative 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\$400,600, which is a fixed amount.

Offerors shall submit one (1) original and eight (8) copies (**hard copy and editable electronic format on CD/DVD/USB stick**) of the proposal. Proposals received by fax 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.

Proof that the Offeror or subcontractor(s) have commenced the proceedings to obtain the industrial security Authorization

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; whether they possess clearance to work on Romanian classified information; 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 a subcontractor(s) is being used, similar

information must be provided for the prime and each subcontractor firm proposed for the project. The Offeror shall provide information with respect to relevant experience and qualifications of key staff proposed. The Offeror shall include letters of commitment from the individuals proposed confirming their availability for contract performance.

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

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

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

### **3.6 ROMANIAN CLASSIFIED INFORMATION**

The proposal must contain the proof that the Offeror or subcontractor(s) have commenced the proceedings to obtain the industrial security authorization.

In addition, the offeror shall provide confirmation in writing that it and its subcontractor(s) will abide by Romanian Law in regards to the processing of Romanian classified information provided for the feasibility study by the Grantee.

The Contractor must present the industrial security authorization before signing the contract.

#### Section 4: AWARD CRITERIA

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

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

<b>Criterion</b>	<b>Maximum Points</b>
Expertise and skills of proposed personnel relevant to the Feasibility Study	30
Proposed overall approach to the Feasibility Study and to the individual tasks	20
Relevant international experience and the ability to work successfully with international clients	15
Experience in Romania or the region and capabilities of local support	15
Proposed approach for developing the analysis and recommendations for the migration plan from the existing data centers to the single Ministry of Internal Affairs consolidated DataCenter	15
Proposed approach in providing training, workshops, conferences, and study visits to existing and the proposed locations for the new DataCenter	5
<b>Total:</b>	<b>100</b>

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

Price will not be a factor in contractor selection.

## **ANNEX 1**

Directorate for Communication and Information Technology (Directia pentru Comunicatii si Tehnologia Informatiei)  
Ministry of Internal Affairs of the Government of Romania  
Piata Revolutiei nr.1 A, sector 1  
Bucharest, Romania  
E-Mail: [bogdan.tohaneanu@mai.gov.ro](mailto:bogdan.tohaneanu@mai.gov.ro) and [grup.ustda@mai.gov.ro](mailto:grup.ustda@mai.gov.ro)

## ROMANIA: DATA CENTER MODERNIZATION AND CONSOLIDATION PROJECT FEASIBILITY STUDY

POC: Jennifer Van Renterghem, USTDA, 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901, Email: [RFPquestions@ustda.gov](mailto:RFPquestions@ustda.gov), Tel: (703) 875-4357, Fax: (703) 875-4009. Data Center and Consolidation Project Feasibility Study. 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 for data center modernization and consolidation for the Romanian Ministry of Internal Affairs.

Currently, the Ministry of Internal Affairs' (MAI) data gathering, use, storage, and management are constrained by a number of inefficiencies. Many of these inefficiencies result from limited operational budgets and staff, along with data centers and servers that are reaching the end of their useful lives and are operated autonomously by the MAI's central and subordinate units. The MAI believes that the current situation, characterized by a proliferation of independent and autonomous server locations and small data centers operated and/or accessed by 19 of the Ministry's central and support units is inefficient, unnecessarily costly, and difficult to manage. This situation puts data and electronic government (eGov) systems at great risk for loss of data and jeopardizes government operations.

In order to address these issues, the MAI is planning ICT infrastructure projects including a data center and systems consolidation initiative, government interoperability framework, and a "single window" for user access to the Grantee's data and services. As part of this project, the MAI is planning the consolidation of a large number of currently disparate data centers, and servers used by various agencies within the MAI into a consolidated and modernized facility, offering disaster management and continuity of operations. The MAI has a broad mandate from the Government of Romania to carry out the Data Center Modernization and Consolidation Project in order to realize the expected efficiencies and capabilities.

This Feasibility Study would help the MAI to assess the technical, economic, and financial feasibility of migration of existing independent data centers into a single consolidated data center. The single center would have space available for co-location and use by other organizations, which may be needed for disaster recovery or other requirements including implementing a government interoperability framework for data systems and application integration. The goal of the project is more effective delivery of services to government, business, and citizens while at the same time yielding substantial cost savings.

The U.S. firm selected will be paid in U.S. dollars from a \$400,600 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/desk study report are available from USTDA, at 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901. To request the RFP in PDF format, please go to: <https://www.ustda.gov/businessopps/rfpform.asp>. Requests for a mailed hardcopy version of the RFP may also be faxed to the IRC, USTDA at 703-875-4009. In the fax, please include your firm's name, contact person, address, and telephone number. Some firms have found that RFP materials sent by U.S. mail do not reach them in time for preparation of an adequate response. Firms that want USTDA to use an overnight delivery service should include the name of the delivery service and your firm's account number in the request for the RFP. Firms that want to send a courier to USTDA to retrieve the RFP should allow one hour after faxing the request to USTDA before scheduling a pick-up. Please note that no telephone requests for the RFP will be honored. Please check your internal fax verification receipt. Because of the large number of RFP requests, USTDA cannot respond to requests for fax verification. Requests for RFPs received before 4:00 PM will be mailed the same day. Requests received after 4:00 PM will be mailed the following day. Please check with your courier and/or mail room before calling USTDA.

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

Interested U.S. firms should submit their Proposal in English directly to the Grantee by 12:00 PM local time, December 9, 2013 at the above address. Evaluation criteria for the Proposal are included in the RFP. Price will not be a factor in contractor selection, and therefore, cost proposals should NOT be submitted. The Grantee reserves the right to reject any and/or all Proposals. The Grantee also reserves the right to contract with the selected firm for subsequent work related to the project. The Grantee is not bound to pay for any costs associated with the preparation and submission of Proposals.

## ANNEX 2

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

### **Ministry of Interior**

The MAI and the General Directorate for Communication and Information Technology developed an ICT Strategy regarding the modernization and efficiency measures for the ICT

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<sup>7</sup> <http://www.clujit.ro/acasa/>

<sup>8</sup> CLUJ IT Association proposal to USTDA, page 3.

infrastructure. This Strategy identified several targets for the future, including, but not limited to:

- Identify and implement measures that ensure the modernization, development and efficient exploitation of information systems
- Facilitate national and international cooperation by providing information systems interoperability
- Increasing security assurance for information and communication systems
- Information systems and IT&C services consolidation and adopt cloud computing models in the Ministry
- Increasing transmission capacity in the existing network communication systems
- Ensure business continuity and availability of all the critical data and information systems

In order to meet many of these strategic objectives, the MAI submitted a proposal to USTDA, seeking grant funding for planning and building a new data center, which would host the main information technology (IT) systems required for the “insurance of the information, data and documents exchange between the subordinate structures, and also the formation of a consolidated platform of integration and interoperability within the Ministry institution which can assure the integration hub between the various systems and applications of the subordinated structures”.<sup>9</sup>

Prior to travel, the DMC reviewed the proposal, and held a conference call with the MAI. It was apparent that both the IT department and MAI senior decision makers were supporting the project concept and the DMC arranged to meet with MAI, and to tour their current data center operations. While the MAI proposal comprehensively described the need and purpose for the data center, the Feasibility Study’s (FS) Terms of Reference, budget, staffing plan and related parameters needed to be developed.

The DMC affirmed MAI’s plans, but noted the potential for the single consolidated data center to have space available for colocation for use by other organizations as needed for disaster recovery or other requirements (e.g. private suites, shared workspace and combinations of both). Further, implementing a government interoperability framework for data systems and application integration would ideally yield more effective delivery of services to government, business, and citizens while at the same time yielding substantial cost savings.

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<sup>9</sup> MAI FS proposal to USTDA, provided by CM to the DMC.

The MAI concurred with this focus and the DMC prepared the ToR, budget, staffing plan and related project documents for MAI's complete grant request to USTDA, and these project documents are contained within this DM report.

Importantly, after the DMC returned to the US, MAI advised USTDA that a security clearance / authorization was required for the FS Contractor. USTDA responded with official correspondence, requesting details on the security clearance process and requirements, and MAI responded with the information that is contained in Attachment I of this DM report.

The DMC reviewed this material and the referenced website, including the differing forms, circumstances and timelines associated with obtaining either an industrial security authorization or facility security clearance; following this review, the DMC advised USTDA by e-mail that the process to obtain a clearance may take from 60 to perhaps 180 working days, and that USTDA needed to consider how this process may affect timelines, expenses and the Contractor (designation of staff to tasks), once USTDA issues a contract number to the selected FS contractor. The DMC further recommended that the MAI security clearance requirement be made clear to all FS bidders, so that all potential Contractors could consider the resources, costs and timelines associated with obtaining a Romanian security clearance prior to launching work on the MAI FS.

## Implementation Financing

According to the US Department of Commerce 2012 Country Commercial Guide for Romania<sup>11</sup>, in 2009-2013, the EU allocated Euro 190.5 million for the implementation of IT systems in the Romanian public authorities. The EU also allocated approximately 27.5 billion euro to Romania for projects in areas ranging from transport and rural development, to energy and environment.<sup>12</sup> (Note: aspects of these funds may apply to portions of the three recommended USTDA projects.)

The Romanian government decided to facilitate IT spending and allocated Euro 500 million for eRomania projects, which will be financed from EU funds (40-50%), central budget (20%) and public private partnerships (30-40%). In 2010-2011, the Romanian Ministry of Communications

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<sup>11</sup> [http://export.gov/romania/static/2012%20CCG%20ROmania\\_Latest\\_eg\\_ro\\_031139.pdf](http://export.gov/romania/static/2012%20CCG%20ROmania_Latest_eg_ro_031139.pdf)

<sup>12</sup> [http://export.gov/romania/static/2012%20CCG%20ROmania\\_Latest\\_eg\\_ro\\_031139.pdf](http://export.gov/romania/static/2012%20CCG%20ROmania_Latest_eg_ro_031139.pdf)

and Information Society also approved Euro 147 million for financing of several IT projects in the SME sector, 70% being covered by EU funds. All of these resources / budget allocations makes “government” an important player in the Romanian ICT market, and a real resource for the recommended projects.

The MAI, Romanian Government and MoJ all referenced the “government” (national budget allocations) as well as the EU as sources for project funds.

Both the Romanian Government and MAI are in strong positions to advocate for national budget funds. MAI manages public order and safety as well as public administration for the country, and their FS / Project affects critical institutions such as the National Schengen Information Systems Center, Border Police, General Inspectorate for Immigration, and Directorate for Persons Records & Data Base Management, among other critical national resources. Further, their current infrastructure is the most vulnerable (e.g. in need of modernization). For these reasons, the DMC believes they are therefore in a “priority” funding position.

The Romanian Government is also in a strong position, as the follow-on Project provides visible and quantifiable benefits, relative to the country’s legislative workflow and processes. Further, stakeholders who would vote for the budget allocation would probably be direct users / beneficiaries of the implemented Project, which should result in more direct support.

The EU provides cohesion funds to member states and sub-state regions whose level of development is below the EU average. As Romania is a member of the EU, from 2007 – 2013, the country benefited from approximately USD 26.3 billion in structural and cohesion funds.<sup>13</sup>

The EU Structural and Cohesion funds are provided through the Sectoral Operational Commission (SOPs), and are organized by sector (Transport, Environment, Regional Development, Economic Competitiveness, Human Resources, Technical Assistance and Administration Development). According to the Romanian Authority for Coordinating Structural Instruments (ACIS), at the end of July 2011, financing agreements with beneficiaries had been signed for just over 55% of the funds (US\$ 14.2 billion) resulting in (a) close to ½ of the US \$23.2B budget remaining for 2012/ 2013, and (b) a new budget being available as of 2014. This timing bodes extremely well, as the USTDA FS results would complete in this timeframe, thereby generating project requests for funding at the start of a fresh budget cycle.

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<sup>13</sup> Ibid.

According to the US Department of Commerce Country Commercial Guide (CCG)<sup>14</sup>, American companies can participate directly in projects funded by the EU or in partnership with a company from an EU member country.

The 2012 CCG noted the Romanian authorities are now discussing the 2014 to 2020 grant funding program with the EU. The CCG did note that Romania's public sector is still developing its capacities for developing projects, obtaining EU funds, and administering projects successfully. Therefore, USTDA's support for the recommended FSs can help Romania to obtain EU funds, as the Romanians would have support in developing projects and reaching out to the EU / financing sources.

Lastly, the CCG noted that the EU funds "translated into effective infrastructure projects, will be an important support for GDP growth".<sup>15</sup>

The Overseas Private Investment Corporation (OPIC) began operations in Romania in 1992 and continues to actively financing projects in-country<sup>16</sup>. The European Bank for Reconstruction and Development (EBRD) is the single largest investor (debt plus equity) with approximately US \$7.2B invested to date.<sup>17</sup> The EBRD noted that they are keen to finance private sector projects in Romania (especially data centers), and would consider ICT public-private partnerships as well. Relative to the MAI project, MAI would not consider any private sector ownership, as data regulation and security protocols are extremely rigid, given their organizational mandate and functions. Similar security concerns exist for the Romanian government Project. However, with Romania's booming ICT sector, the EBRD remains an excellent potential resource, should US firms develop ICT public-private project of a less sensitive nature.

The European Investment Bank (EIB) has signed about 30 projects between 2008 and 2010, for a total value of US \$4B; their areas of focus have included banking, communications, energy, and the environment, to manufacturing and services, including support for small and medium-sized companies via local financial institutions, and the development of a knowledge economy. This resource may apply to aspects of the USTDA-recommended projects herein. In 2012, EIB loan signatures amounted to EUR 335M, which accelerated the total EIB lending commitment to Romania to approximately EUR 4.3B; 25% of their 2008 - 2012 loans were for industry, services and telecommunications.<sup>18</sup> The EIB does not appear to "tie" its loans to a specific requirement of EU-sourced equipment<sup>19</sup>, especially as the Bank works with other banks, and may only finance up to 50% of the total project cost. However, the Bank's policy is to "ensure

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<sup>14</sup> Ibid.

<sup>15</sup> Ibid.

<sup>16</sup> [http://www.opic.gov/sites/default/files/docs/europe/BL\\_Romania-06-30-1992.pdf](http://www.opic.gov/sites/default/files/docs/europe/BL_Romania-06-30-1992.pdf)

<sup>17</sup> Country Commercial Guide for Romania, 2012.

<sup>18</sup> [http://www.eib.org/attachments/country/factsheet\\_romania\\_2012\\_en.pdf](http://www.eib.org/attachments/country/factsheet_romania_2012_en.pdf)

<sup>19</sup> <http://www.eib.org/infocentre/faq/index.htm#who-can-benefit-from-an-eib-loan>

that its funds are used rationally, in the interests of the project it finances and in the interests of the EU.”<sup>20</sup> Therefore, US suppliers who are pursuing opportunities that may be EIB funded are encouraged to contact the EIB directly and to review the EIB Guide to Procurement<sup>21</sup>, as every project financing structure (and subsequent procurement guidelines) is unique, and must be assessed on a one-to-one basis.

Lastly, the US Export-Import Bank (Ex-Im) provides guarantees and direct loans for U.S. exports to Romania, with most of the credit having been for exports to the Romanian government, private sector and sub-sovereign financing.

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

Romania’s ICT sector is sizeable and attractive to foreign competitors in virtually all areas. For the MoI and Romanian Government projects, foreign competition is most likely to come from the Business Solutions divisions of major European ICT providers, who may include the business consulting arms of large national or multi-national telecom operators. Detecon, the consulting division of Germany’s Deutsche Telekom, has been awarded a number of e-government-related contracts in European countries (notably Germany and Spain), and aggressively bids on e-government-related projects.

Foreign System Integrators or the corresponding divisions of large ICT firms (such as Siemens IT Solutions and Services (SIS)) may also pursue these ICT / data center implementations. Typically, telecom operators would provide the underlying networking infrastructure while System Integrators are more oriented towards implementing data centers, but it is also likely that firms of both types would seek to partner or form consortia in order to be able to bid on differing project components.

SAP (Germany) is a major competitor; on January 29, 2013, the business software provider announced that its 2012 annual turnover soared 40% in Romania to approximately 23M Euros (\$US 31M). They noted “there is stronger demand for business intelligence or enterprise performance management solutions, necessary for profit increase, cost management or budgeting and planning activities within a company”<sup>22</sup>. In March 2013, SAP announced its opening of a second IT center, noting “At present, more than 60 consultants work in Timisoara, while our target is to employ more than 400 IT specialists by 2014 in the SAP Nearshore Centers in Romania”.<sup>23</sup>

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<sup>20</sup> Ibid.

<sup>21</sup> <http://www.eib.org/infocentre/publications/all/guide-to-procurement.htm>

<sup>22</sup> <http://wire.seenews.com/news/it-co-sap-romania-boosts-turnover-by-40-in-2012-331146>

<sup>23</sup> <http://wire.seenews.com/news/sap-romania-opens-it-center-in-timisoara-341656>

Ericsson (Swedish) is a major component competitor; they supply products and services in the AC power and UPS, connectivity, DC power, infrastructure management and related network power areas.<sup>24</sup>

Further, about 90% of the 1,000 IT companies in Romania are foreign-owned. According to the US Department of Commerce<sup>25</sup>, foreign companies backed up the big investors in the Romanian automotive and energy sectors, providing support and a broad range of different IT services. As noted previously, companies (such as HP, Siemens and IBM) have development and support centers in Romania, which are designed to serve the entire region of CEE or global operations. There is still a growing interest of global IT names (including Google and Intel) to launch R&D and support activities in Romania to serve their business needs.

Although Chinese firms are primarily focusing on Africa and lesser-developed countries, they are investing in Romania. In 2011, Huawei Romania, a subsidiary of Huawei Technologies, announced plans to open a global support center in Romania. The Romanian company will employ 1,500 employees by the end of 2014. Huawei reportedly entered the Romanian market in 2004, and in 2010, Huawei Romania posted a turnover of EUR 69.2 million, a 140 percent increase from 2009.<sup>26</sup>

The US is the 13<sup>th</sup>-ranked foreign investor nation in Romania, with US-source investment representing 2.1% of Romania's total foreign direct investment (FDI).<sup>27</sup> And despite all the competition, virtually all major U.S. firms representatives with whom the DMC spoke expressed a degree of confidence in their ability to maintain market share, and all indicated that USTDA-sponsored FSs of the type contemplated were welcome as a potential means of forestalling further gains by foreign competitors.

## **Developmental Impact**

Each of the three recommended ICT DM projects have positive developmental impacts, namely:

*Infrastructure:* Efficient data storage, access and management, and data centers contribute to the improvement and security of the physical, financial and social infrastructure of all countries. ICT has evolved from a “back office” tool that a “technical support staffmember” managed to become a leading business resource. Throughout all enterprises, management information

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<sup>24</sup> <http://www.emersonnetworkpower.com/EN-US/PRODUCTS/ACPOWER/Pages/default.aspx>

<sup>25</sup> Country Commercial Guide for Romania, 2012.

[http://export.gov/romania/static/2012%20CCG%20Romania\\_Latest\\_eg\\_ro\\_031139.pdf](http://export.gov/romania/static/2012%20CCG%20Romania_Latest_eg_ro_031139.pdf)

<sup>26</sup> <http://www.romania-insider.com/chinese-manufacturer-huawei-to-open-support-center-in-romania/33849/>

<sup>27</sup> Country Commercial Guide for Romania, 2012.

systems (MIS) professionals' roles have evolved to leadership positions (Chief Information Office; Chief Technology Officer; others) that reflect the vital financial and economic role that ICT assets provide to institutions and the services that are provided.

Infrastructure: Efficient data storage potentially supports several Petabytes of data, with disaster recovery backup and applications continuity; access and management using standardized single login for authentication and systems authorization, and at least two modern, well-designed data centers contribute to the improvement and security of the physical, financial and social infrastructure of Romania. ICT in Romania has evolved from a "back office" tool that a "technical support staff member" managed to become a leading eGovernment and business resource. Throughout both the government and all enterprises, management information systems (MIS) professionals' roles have evolved to leadership positions (Chief Information Office; Chief Technology Officer; others) that reflect the vital financial and economic role that ICT assets provide to institutions, and the services that are provided within the government, private sector, academic community, and citizens.

*Human Capacity Building (including jobs and training):* Each of the projects involves the migration of paper-based processes to electronic / digital tools, and the Romanian Government project will provide numerous professionals the opportunity to use valuable time to assess and utilize data (for current and future planning) as opposed to lining up to copy paper on duplication machines. ICT professionals will gain valuable knowledge regarding digital archiving and document management; further, the new systems will prepare the Government for cloud computing, which brings an even greater access to online and global internet tools and services. Each of these capacity building elements will increase human capacities on the job, and provide a "digital education" with enormous multiplier effects on individuals' abilities to use ICT in their everyday lives (e.g. business and home management (e-banking, e-government, social networking, etc.)).

Additional benefits of each project will include temporary jobs in construction of the data centers, as well as permanent jobs in software development, enterprise architecture, systems integration, and customer service.

*Technology Transfer and Productivity Improvements:* Video conferencing, improved document access and management, and data center consolidations all serve as vehicles for improving business operations, service efficiency and customer outreach. As Romanian government workers climb the ICT learning curve, they will be able to more effectively use database systems, customer relationship and case management software, e-commerce (on line government / payment of fees), and other ICT competences to more effectively manage daily office tasks.

*Increased Transparency and Efficiency:* Romania's physical ICT assets are dated, yet Romanian ICT professionals are fully aware of the efficiencies and cost-savings that effective data storage, access and management provide. They are aware of the cost inefficiencies that decentralized and duplicated data storage create, in addition to the inherent dangers when an organization lacks a business continuity / disaster management plan and site.

### **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.

All project activities that are recommended in this DM report should not be expected to cause adverse harm to the environment. However, as the MAI project includes an assessment of sites for a data center (which includes digging, ducting and civil works during the implementation), the recommended ToR includes a preliminary environmental impact assessment, as per USTDA's requirements.

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

Each of the three recommended ICT DM projects should sustain and / or create jobs for US citizens.

The projects do not appear to provide any financial incentive to a business enterprise currently located in the United States to: (a) induce that enterprise to relocate outside the United States if such incentive or inducement is likely to reduce the number of employees of such business enterprise in the United States because United States production is being replaced by such enterprise outside the United States; (b) provide assistance for any project or activity that contributes to the violation of internationally recognized workers rights; and (c) provide direct assistance for establishing or expanding production of any commodity for export by any country other than the United States, if the commodity is likely to be in surplus on world markets at the time the resulting productive capacity is expected to become operative and if the assistance

will cause substantial injury to United States producers of the same, similar, or competing commodity.

## Justification

Romania is a market with tremendous potential and a strategic location, but after several years of strong growth, the country slumped into a deep recession in 2009, with GDP contracting by more than 7%.<sup>28</sup> A US \$27.4B rescue by the IMF has stabilized the economy and the GDP forecast for 2012 now shows weak positive growth (1.7%) – which is a modest but good recovery indicator. Romania is meeting the terms of the IMF agreement, which includes implementing a tough austerity program to reduce its budget deficit; among other measures, there have been cuts of as much as 25% in public sector salaries, staff reductions in all government agencies, and cuts in project funding. Nevertheless – or in fact because of these important actions - the Commerce Department notes “despite the weak economic conditions, there are opportunities for American business in areas such as energy, agricultural equipment, environmental technologies, infrastructure, and ICT”.<sup>29</sup>

The government cuts have affected all three institutions, both in terms of project and staff support; nevertheless, the respective organizations are continuing to work with identified priorities to ensure that top needs are addressed.

## Recommendations

The DMC recommends that USTDA support and / or follow-up on the following projects and activities:

- USTDA should support the Ministry of Interior, Romanian Government, and Ministry of Justice projects as outlined within this final DM report.
  - The Ministry of Interior has requested that the FS Contractor obtain a security clearance / authorization; information provided by MAI regarding this process can be found in Attachment I. As per the e-mail on file with USTDA<sup>30</sup>, the DMC noted that USTDA needed to consider how this process may affect timelines, expenses and the Contractor (designation of staff to tasks) once USTDA issues a contract number to the selected FS contractor. The DMC further recommended that the MAI security clearance requirement be made clear to all FS bidders, so

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<sup>28</sup> [http://export.gov/romania/static/2012%20CCG%20Romania\\_Latest\\_eg\\_ro\\_031139.pdf](http://export.gov/romania/static/2012%20CCG%20Romania_Latest_eg_ro_031139.pdf)

<sup>29</sup> [http://export.gov/romania/static/2012%20CCG%20Romania\\_Latest\\_eg\\_ro\\_031139.pdf](http://export.gov/romania/static/2012%20CCG%20Romania_Latest_eg_ro_031139.pdf)

<sup>30</sup> E-mail from DMC to Josh Kaplan and Scott Greenip, USTDA, May 2013.

that all potential Contractors could consider the resources, costs and timelines associated with obtaining a Romanian security clearance prior to launching work on the MAI FS.

- In April 2013, USTDA advised that the Ministry of Justice project is ineligible for USTDA support. Details can be obtained from the USTDA Country Manager for Romania.
- USTDA should support a Contractor to update the technical component of a project tender that automates the policy management and tracking system on behalf of the Romanian government. Support of this ICT activity will accelerate US export opportunities as the project complements the USTDA Romanian Government project that is recommended above. Further, the Romanian government has indicated a willingness to delay this complementary project, to ensure that technology standards and recommendations are synergistic (and up-to-date), relative to the implementation.
- Should RoEduNet submit a revised proposal that addresses the issues discussed within this DM report (along with other project issues that may arise), USTDA should consider funding a Desk Study or have another ICT DMC review this innovative project concept for potential grant support.

### **Project Portfolio Assessment**

*This report section has been removed for confidentiality reasons.*

### **Recommended Projects: Terms of Reference / Budget / US Export Potential / Qualifications**

#### **Ministry of Interior – Terms of Reference and Budget**

##### **Data Center Modernization and Consolidation Feasibility Study Project**

The Romanian Ministry of Interior (the “Grantee”) is seeking assistance with a high-priority project, namely planning the consolidation of a large number of currently disparate Data Centers, and [small ad hoc installations of servers and storage](#) used by various agencies within the Ministry into a consolidated and modernized facility, offering disaster management and continuity of operations (henceforth the “Consolidation and Modernization Project”).

The Grantee recognizes the need to modernize existing information and communication technology (ICT) infrastructure to reduce budget allocations for ICT, as well as to provide an agile infrastructure that will support the development of eGovernment services to government, business, and citizens. In addition, modernizing the ICT infrastructure will enable the Grantee to meet integration and interoperability compliance requirements that have been established by the EU and Romania's potential participation in the Shengen Agreement (anticipated after March 2013).

Currently, the Grantee information gathering, use, storage, and management is constrained by a number of shortfalls. Limited budgets, staff, and end of life data centers and [small ad hoc installations of servers and storage](#) operated autonomously by the Grantee's central and subordinate units put data and eGovernment systems at great risk for loss of data and government operations. In addition, lack of real-time access to data, lack of standardization, and limited integration or interoperability prevents effective information sharing. The resulting risk and inefficiencies result in frequent manual processing of information, limited eGovernment applications, limited potential for audit and compliance governance, and difficulty in meeting EU standards.

Planned infrastructure projects include constructing a primary data center and backup facility, as well as data center consolidation among government ministries and agencies.

The Grantee has a broad mandate to carry out the Consolidation and Modernization Project. The Grantee believes that the current situation, characterized by a proliferation of independent and autonomous small data centers operated and / or accessed by 19 of the Grantee's central and support units is inefficient, unnecessarily costly, and difficult to manage. There is also a high risk to national data assets as few, if any, disaster recovery sites exist, while current access and security protocols need review and revision.

The Grantee wishes to analyze the benefits for migration of existing independent data centers into a single consolidated data center with space available for colocation for use by other organizations as needed for disaster recovery or other requirements (e.g. private suites, shared workspace and combinations of both), and implementing a government interoperability framework for data systems and application integration would have major benefits. It would ideally yield more effective delivery of services to government, business, and citizens while at the same time yielding substantial cost savings.

The Consolidation and Modernization Project will assess the current and anticipated future needs of the four central units (the General Directorates for IT&C, Operational Management, Human Resources Management and Finance), and the 15 subordinated units:

- National Schengen Information Systems Center
- Romanian Police
- Romanian Border Police
- Romanian Gendarmerie
- General Inspectorate for Immigration
- Directorate for Persons Record & Data Base Management
- General Directorate for Passports
- National Agency Against Drugs
- General Inspectorate for Emergency Situations
- Directorate for Driving Licenses and Vehicle Registration
- General Inspectorate for Aviation
- National Archives
- Police Academy
- Agency for Retired Ministry of Interior Personnel
- National Agency Against Human Trafficking

The primary objectives of the Grantee's Data Center Modernization FS are to:

- Design a data center to ensure data consolidation and systems integration for critical existing and future information technology (IT) systems, with space for colocation for use by other organizations as needed for disaster recovery or other requirements that include, but are not limited to:
  - PKI infrastructure (existing)
  - Citizen Contact Center (ongoing implementation)
  - Citizen eRegistry (ongoing implementation)
  - Civil Status and eID cards (future),
  - Driving Licenses and Vehicle Certificates System (existing)
  - ePassports System (existing)
  - Border and Immigration System (existing)
  - Criminal Records (ongoing implementation)
  - National eArchiving System (future)
  - e-Administration system (future)
  - ERP & Document management system (future)
  - Platform for identity and access management to applications and public services (future)
  - Integration platform for data, applications and services in the Ministry.

The results and recommendations of the Consolidation and Modernization Project will provide a feasibility plan that will ideally:

- Eliminate duplication of data used in the Grantee's organization
- Prevent redundant collection of information about citizens' data
- Improve and enrich information from registers managed by the Grantee
- Assure data security: encryption, auditing, access control
- Improve services to citizens, businesses and public administration
- Provide access to services in an integrated methodology from all of the Grantee's structures
- Optimize information sharing and business flow
- Centralize management of identity and access to applications and services provided by the new Data Center
- Reduce resolution times by automating processes requests
- Lower cost for managing public services
- Provide availability 24 hours a day, 7 days a week
- Provide space for colocation use by other organizations as needed for disaster recovery or other requirements
- Ensure energy efficiency by employing "green" data center practices

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

Upon signing the Contract, the Grantee shall provide the Contractor with all available information related to the development of the Consolidation and Modernization Project.

Not less than one (1) month prior to the Contractor's initial working mission to Bucharest, the Contractor shall develop and forward to the Grantee a Preliminary Information Request (PIR). The purpose of the PIR is to provide the Contractor with an advance picture of the "situation on the ground" and thus to enable more focused and more efficient use of time during the first and subsequent in-country tasks.

It is anticipated that the PIR will focus on the anticipated participating institutions, and will seek to obtain the following information from each such institution: name of institution and of any participating subsidiary or affiliate organizations; number of employees; number of dedicated ICT personnel; and number, type and size of ICT facilities targeted for consolidation or disaster recovery purposes, with particular attention to numbers, types and configurations of servers.

Without necessarily being definitive, the following list is representative of the type of information to be requested and ideally supplied for each server and/or storage solution:

- Server Operating System(s)
- Year installed
- Application(s) hosted / major functions, particularly “mission-critical” ones
- Scope of use (e.g., department, headquarters building, institution-wide, ...)
- Required availability (e.g., 8 x 5, 10 x 5, 24 x 7, ...)
- Number of users (broken down by application or task to the extent possible)
- Transaction volumes
- Networking/connectivity requirements and networking technology employed
- Average CPU utilization
- Existing customization (if any)
- Existing virtualization (if any)
- Responsibility for operation, maintenance, support, availability, updating, backup

In addition, the survey should include other supporting equipment such as switches, routers, and firewalls:

- Switch or type
- Number and type of ports
- Switch or router age – still in warranty or not
- Firewall make
- Existing traffic levels
- External communications capacity (E1, E3, Ethernet, etc)

The Grantee shall provide reasonable assistance to the Contractor in obtaining the above information prior to the Contractor’s initial working mission. At the same time, it is understood that the breadth, depth, timeliness, etc., of the information obtained from the institutions concerned will not necessarily be uniform or available. The Grantee will furnish the information to the Contractor not less than ten (10) days prior to the Contractor’s initial working mission to Romania.

The Contractor shall collect and organize all information, and perform comprehensive secondary research regarding industry trends, key competitors, and global best practices in consolidating and managing data centers, and for providing space for colocation use by other organizations as needed for disaster recovery or other requirements.

The Contractor shall discuss and finalize the schedule and any related concerns and logistics relative to the forthcoming tasks and deliverables with the Grantee.

**Task 1 Deliverable.** An Inception Report, presenting the findings of Tasks 1, and describing the progress in collecting data, and problems encountered or foreseen. Any impacts on the projected work schedule or deployment of Contractor personnel shall also be described in the Inception Report. Any pertinent initial observations or findings shall also be included.

## **Task 2: Review Existing Data Center and ICT Environment**

### **Task 2.1 - Review of Project Objectives and Baseline Data**

The Contractor shall conduct a working mission to Bucharest to meet with the Grantee to discuss the Project's objectives and the logistics and practicalities of the execution of the Study.

The Contractor shall become familiar with the organization, functions, responsibilities, capabilities and current profile of activities of the Grantee, with particular reference to the Consolidation and Modernization Project.

The Contractor and Grantee shall review and update the listing of the data centers and [small ad hoc installations of servers and storage](#) subject to consolidation. The Grantee shall identify any data centers and [small ad hoc installations of servers and storage](#) (e.g., PKI systems) that will not be involved in the consolidation and modernization plan.

The Contractor and Grantee shall review and agree upon information and data that has been obtained to date and is still required for the Project, and shall specify how such data shall be collected, together with the roles that the Grantee and Contractor will play in terms of its acquisition. The Contractor and Grantee shall develop a mutually agreeable schedule for the collection of any such data.

### **Task 2.2 - Information Gathering**

The Contractor shall conduct structured interviews with qualified representatives of the Grantee's central and subordinate units subject to consolidation and address potential needs for disaster recovery. It is anticipated that such representatives will primarily be senior ICT professionals at these Centers and / or the institutions with which they are affiliated, although the interviewees may include (in consultation with the Grantee and by mutual agreement) representatives of other public-sector organizations (including the Grantee itself) or private-sector companies that are able to provide additional relevant input and perspective.

The objective of the interviews is to gather baseline data regarding ICT infrastructure and facilities targeted for inclusion in the Consolidation Project, as well as current and foreseeable future applications, current and projected transaction volumes, backup / disaster recovery requirements, workflow processes, service delivery and interfaces to the general public, requirements for interfacing with other public-sector institutions, and existing ICT staffing. Particular problems or shortfalls in these areas that are likely to impact the Consolidation and Modernization Project should be noted and described in appropriate detail.

The Contractor and Grantee shall agree on the list of interviewees (and alternate interviewees should they be necessary) and on the general outline and areas of emphasis of the interview schedule. The number of such interviews shall include all agencies operating data centers and [small ad hoc installations of servers and storage](#), as well as other stakeholders whose operations would be impacted by data center consolidation, disaster management and continuity planning, cloud computing, and interoperability.

The Grantee shall make reasonable efforts to assist the Contractor in gaining access to prospective interviewees.

### **Task 2.3 - Site Visits and Surveys**

The Contractor shall conduct visits to the Grantee's data centers, [small ad hoc installations of servers and storage](#), and independent server operations to obtain a first-hand view of their operation and to supplement the information obtained in Sub-Task 2. All operational sites should be included in the survey, with the exception of sites with high security or classified processing (e.g., PKI Management). This subtask may be combined with Sub-Task 2.2 as appropriate and practicable. The Grantee shall make reasonable efforts to assist the Contractor in arranging site visits.

The Contractor shall evaluate the Grantee's current data center environment and include all of the Grantee's central and subordinate unit facilities, communication capacity, human capacity and staffing, security, operations process, maintenance, applications, as well as disaster management and operating continuity.

To define the Grantee's baseline environment the Contractor shall develop a checklist and perform an in depth survey of each operating facility, recording results of the survey in a format which will allow easy analysis on status from a variety of viewpoints.

Task 2.3 methodology shall include:

- Record the number of IC&T users per organization
- Site survey of each central unit and 15 subordinate's data center, [small ad hoc installations of servers and storage](#), or server operation
- Identify staffing, training, and positions of IC&T personnel within each agency
- Review of all Grantee, including four central units and nine subordinated units' disaster recovery and business continuity plans
- Identify hardware types and capacity of server, storage, switching, routing equipment
- Estimate current usage volumes on server/storage equipment
- Record bandwidth capacity and usage for both internal and external communications
- Identify major applications used by each agency, including database type
- Identify applications developed internally (non-COTS)
- Identify application and database external interfaces with other agencies
- Identify any existing use of virtualization, cloud computing capacity, or facility outsourcing
- Review operations process, audit, and governance, including documentation

The Contractor will prepare an audit and assessment in the following specific areas:

**Data Center and [Small Ad Hoc Installations of Servers and Storage](#):**

A standardized data center survey checklist should be used to record all elements of the data center, including:

- Type of building where the data center is located (mixed-use or dedicated)
- Type, capacity, and delivery of cooling equipment
- Power available to site
- Back up power generation capacity, including fuel capacity and operation hours without refueling
- Indicate if power is dedicated to the data center or if shared by other building tenants or offices
- Indicate if raised floor or solid floor
- Identify use of cabling (ladder rack, under floor, etc.)
- Assess general condition of data center

**Communication and Connectivity:**

Identify and record types/vendors/capacity of switching, routing, optical, and transmission equipment. Contractor will also identify the telecom carrier or network providing access and connectivity to each data center. Identify topology of LANs and external connections.

### **Servers, Storage, and Virtualization:**

The survey shall include types (including by manufacturer) and capacity of all server, storage, hardware and network infrastructure of the virtualization system. If virtualization is used, Contractor should identify the type virtualization used (e.g., VMWare), and the approximate number of virtual machines. If Cloud computing (Infrastructure as a Service (IaaS)) is used, indicate the hypervisor, orchestration engine, and approximate number of virtual machines provisioned.

### **Interoperability and External Interfaces:**

Contractor shall audit external interfaces for applications running in data centers. This will include internal application to application interfaces, as well as external interfaces. Contractor should include any standards used, such as European Union (EU), Shengen, or World Health Organization (WHO) where used to provide interoperability with either internal or external interfaces.

### **Standards, Audits, and Governance:**

Contractor shall record all standards used within data center and application environment, including data center construction, operations, security, data management, or national and international.

Contractor will list requirement and actual completion of audits and governance process for all operations and facility management.

**Interim Deliverable 2:** A Report covering the Data Operations and Connectivity Needs Assessment as described above. Survey results shall be prepared in the form of tables for quantitative results, and narrative for qualitative results, or those items requiring detailed explanations. The Contractor shall submit two (2) copies of a draft version of this Report to the Grantee. The Grantee shall be given reasonable time to review the Draft Report and to propose modifications or amendments (if any) for incorporation into the final version of the Report. In the event that substantive modifications or amendments are proposed, the Contractor shall prepare and submit to the Grantee two (2) revised copies of the Report, duly incorporating the proposed modifications or amendments.

### **Task 3 - Establish Target Architecture and Plan**

The Contractor will coordinate with the Grantee to identify the business goals and strategic drivers of the Grantee to establish a target architecture and Ministry ICT capability. Contractor will secure endorsement of the target architecture by the Grantee prior to starting Task 4.

Based on the stakeholder concerns, business capability requirements, scope, constraints, and principles, create a high-level view of the baseline and target IT&C architectures. The Architecture Vision covers the breadth of scope identified for the Consolidation and Modernization Project, at a high level. Contractor shall create a simple solution concept diagram that illustrates concisely the major components of the solution and how the solution will result in benefits for the Grantee's four central units and 15 subordinated units.

Develop target descriptions for the Grantee's business architecture, as needed to support the Grantee's architecture vision. The scope and level of detail to be defined will depend on the relevance of the business elements to attaining the target architecture vision, and on whether architectural descriptions exist.

This step generates the first, high-level definitions of the baseline and target environments, from a business, information systems, and technology perspective.

Task 3 Methodology shall include:

- Defining high level data center requirements
- Promoting design criteria using energy efficiency and "green" technologies for electrical distribution, cooling systems, and computer room layouts
- Defining high level requirements for virtualization, and cloud computing components as identified within the scope of the consolidation project
- Defining requirements for disaster recovery and operations continuity
- Defining requirements for interoperability and standardization
- Defining compliance, audit, and governance requirements
- Defining the target architecture value propositions and desired key performance indicators
- Developing a justification for the architectures and changes required
- Producing a value proposition for each of the stakeholder groupings
- Reviewing and agree the value propositions with the sponsors and stakeholders concerned
- Defining the performance metrics and measures to be built into the enterprise architecture to meet the business needs

### **Task 3.1 - Collect Target Architecture Requirements**

Contractor shall work with the Grantee to collect and identify all required components and visions from the four central units and 15 subordinated units and relying organizations.

Areas of primary concern for four central units and 15 subordinated units will fall within the following categories:

- Central or consolidated data center
- Energy efficiency
- Connectivity or telecom/bandwidth
- Disaster management and continuity of operations
- Data and applications interoperability
- Virtualization and potential of cloud computing
- Standardization
- Compliance (including PII data)
- Human resources, including new or special skill sets

### **Task 3.2 - Develop High Level Target Architecture**

The contractor shall arrange one or more workshops to engage the Grantee's four central units and 15 subordinated units, subordinate ICT managers, and relying organization managers to use target architecture requirements to develop a high level target architecture.

High level target architecture will accommodate as a minimum, resources that are common to all organizations. Unique target requirements may be established as a second priority, or as an exception as determined by the Grantee.

High level architecture will address facility requirements, connectivity requirements, disaster management requirements, and potentially shared compute, storage, and application resources.

Special consideration should be given to ensuring target architecture promotes energy efficiency. This is through use of energy efficient or "green" equipment supporting electrical distribution, cooling systems, and computer room layouts. Design should incorporate best-practices such as hot or cold aisle containment, air side economization, variable speed fans, and other practices which limit the amount of energy loss.

High level architecture will ensure all priority organizational business needs and requirements are met by components included within the architecture.

Contents of the high level target architecture will include:

- Project scope
- Project goals, objectives, and constraints
- Architecture principles
- Baseline Architecture
- High Level Target Architecture Model, including:
  - Business Architecture models
  - Data Architecture models
  - Application Architecture models
  - Technology Architecture models (including facility and virtualization)
- Rationale and justification for architectural approach

### **Task 3.3 - Stakeholder Approval**

Contractor and Grantee will present output from the high level target architecture to both project executive sponsor and stakeholders from each supported agency and relying agency.

A workshop shall be arranged by Contractor to deliver the target architecture.

If the central units and 15 subordinated units require changes, those changes should be incorporated into the high level target architecture.

**Interim Deliverable 3** - Contractor will deliver a high level target architecture providing a detailed set of stakeholder requirements, facility requirements, best practices in energy efficiency, common and critical standards, interoperability requirements, security, disaster management, compliance and governance, human resources needed to fulfill target architecture objectives. Contractor will obtain Grantee's written agreement with the target architecture plan prior to starting Task 4.

### **Task 4: Perform Gap Analysis**

The Contractor shall conduct a Gap Analysis. The Contractor shall take the baseline capabilities established in Task 2, the Target Architecture defined in Step 3, and create a map of shortfalls and development requirements needed to bring the Grantee up to the target architecture.

## Gap Analysis Methodology

The target architecture must support all of the essential information processing needs of the organization today, and be flexible enough to meet long term vision requirements established by four central units and 15 subordinated units. The most critical source of gaps that should be considered are the Grantee's concerns that have not been addressed in prior architectural work, sources of high risk (such as disaster management), and construction scope or sizing requirements.

- Facility requirements
- Disaster management
- Supporting hardware (e.g., servers, switching/routing, storage)
- Applications
- Human capacity
- Standards
- External interfaces

The Contractor shall produce the Gap Analysis in a tabular format, showing the baseline, target, and gap. The gaps will identify specific development requirements for the Grantee's Consolidation and Modernization Project. The GAP Analysis will also identify items in the baseline that will be either eliminated or decommissioned in the process of meeting the Target Architecture.

**Interim Deliverable 4** - Contractor shall create a detailed GAP Analysis identifying the baseline architecture, target architecture, development requirements (gaps), and items in the baseline architecture that will be decommissioned or eliminated during the course of the project.

## Task 5 - Project Solution Development

The Contractor shall determine how to deliver the Grantee's Modernization Project architecture. The Contractor shall take into account the complete set of gaps between the Target and Baseline Architectures identified in Task 4, and logically develop solutions as needed to address those GAPS. Through this effort, the Contractor shall build a best-fit roadmap that is based upon the stakeholder requirements, government business transformation readiness, identified opportunities and solutions, and to identify implementation constraints. The key is to focus on the final target while realizing incremental business value.

Solution development acknowledges that the target architecture cannot be accomplished in a single step, and will thus accommodate a series of prioritized transition phases that will allow a

road map of both development and implementation steps needed to fulfill the requirements of the target architecture.

### **Subtask 5.1 - Solution Development**

- Facility requirements. The Grantee desires to construct a new data center to accommodate IT equipment and communications equipment needed to fulfill requirements of the Grantee and other relying organizations. Facility planning will include all data center construction requirements and capacity requirements identified in the GAP Analysis. Facility planning is done referencing international or specific data center planning standards or recommendations, such as TIA 942-2, BICSI 002-2011, Uptime Institute Tier Standards, or other acceptable data center planning references.
- Disaster management. The Grantee requires a comprehensive disaster recovery and continuity of operations plan. This plan will include the requirement for an alternate processing facility, data backup, continuity operations support hardware and network or communications connectivity, and operations continuity.
- Supporting hardware (e.g., servers, switching/routing, storage). The Grantee requires a plan identifying required hardware needed to support colocation, virtualization, and the potential of cloud computing within the data center. The actual amount of computer, storage, and communications equipment capacity is based on the results of stakeholder surveys and the previous analysis of baseline vs. target architectures.
- Applications. While it is anticipated that individual stakeholder organizations will have unique applications supporting their individual functions, the Grantee's Consolidation and Modernization Project will also require consideration of new software and applications to support virtualization, cloud computing, shared data and applications, as well as upgraded facility management (BMS), network management (NMS), and customer management (including provisioning). Each application identified in the GAP Analysis must be identified and applications requirements established for future tender.
- Human capacity. The Grantee's Consolidation and Modernization project will require new technical skills, as well as service delivery and orchestration skills. A high level training program or skills development program is required to ensure operations and customer service plans meet all stakeholder needs. This may require development of a new organization chart or reporting structure.

- Standards. All data center, disaster management, application development and interoperability require reference to standards. International, national, or local standards (where other standards do not exist or a unique requirement justifies creation of a local standard) must be referenced in all aspects of development. Where a standard does not exist, that requirement will clearly identify there is a lack of standard, and need to develop a local “provisional standard” to allow reference for design or operations process. In addition, where possible, equipment should be purchased from a single or limited number of vendors to enhance the ability for the Grantee to maintain volume purchasing agreements, strong service level agreements, and the ability to quickly employ equipment spares when facility, server, storage, or communications equipment fails and needs rapid replacement.
- External interfaces, interoperability, or application/data dependencies. The Grantee’s Consolidation and Modernization project will address the need for the Grantee and its organizations to develop data and applications that are interoperable, or allow application level integration with common data sources. Applications and virtualization or cloud computing infrastructure may comply with a “Cloud First” or “Virtualization” first policy. This will enhance the potential of developing standardized data bases, programming interfaces, security (including authentication and authorization), and supporting development of a service-oriented architecture (SOA) and government interoperability framework.

### **Subtask 5.2 - Transition Architecture and Steps**

A Transition Architecture shows the enterprise at an architecturally significant state between the Baseline and Target Architectures. Transition Architectures are used to describe transitional actions necessary to reach the Target Architecture.

The Grantee’s Consolidation and Modernization Project is complex, and will require a series of transition steps based on both an identified critical path, as well as prioritizing development and implementation requirements identified in the GAP Analysis.

Transition architectures and steps include:

- Overall transition strategy
- Definition of transition states
- Business Architecture for each transition state
- Data Architecture for each transition state
- Application Architecture for each transition state

- Technology Architecture for each transition state
- Identifying stakeholders and cross agency system dependencies at each step

The Transition Strategy will include the following components (with select examples):

**NOTE:** Specific steps within the transition architecture are developed following the GAP Analysis. The following information provides a template for identifying and building transition architectures.

- Baseline Architecture
- Transition Architectures
  - Segment Architecture - Data Center Construction and Development
    - Sub-Project 1
    - Sub-Project 2
    - Sub-Project 3
    - Sub-Project 4
  - Segment Architecture - Disaster Management and Continuity Development
    - Sub-Project 5 - Develop interim backup solution and site
    - Sub-Project 6 - Identify permanent backup and continuity of operations site
    - Sub-Project 7 - Develop disaster management and continuity of operations standards
  - Segment Architecture - Supporting Hardware (e.g., servers, switching/routing, storage) identification, procurement, and installation
    - Sub-Project 8
    - Sub-Project 9
    - Sub-Project 10
  - Segment Architecture - Applications identification, procurement, and installation
    - Sub-Project 11
    - Sub-Project 12
    - Sub-Project 13
  - Segment Architecture - Human capacity - recruiting, training
    - Sub-Project 14
    - Sub-Project 15
    - Sub-Project 16
  - Segment Architecture - Standards identification and governance
    - Sub-Project 17
    - Sub-Project 18
    - Sub-Project 19

- Cross Agency Dependency Identification
- Interim Target Architectures
- Target Architecture

**NOTE:** See Attachment “A” for a sample plan

### **Subtask 5.3 – Transition Architecture Workshop**

The Contractor shall prepare a one day workshop and visual presentation for the Grantee which shall focus upon sharing the Project process to date and the candidate transition architecture plan. The Contractor shall provide three (3) case examples of data center, disaster recovery and operational continuity best practices for organizations that are similar in size and complexity to the Grantee. The Contractor shall facilitate a group discussion and shall record suggested ideas and / or requirements.

**Interim Deliverable 5.** Contractor shall prepare solutions listed in Subtask 5.1. Contractor shall prepare a transition architecture and subproject (steps) to guide the Grantee and relying organizations in meeting Target Architecture objectives. Contractor shall prepare the presentation and deliver the workshop as listed in Subtask 5.3.

### **Task 6: Financial / Economic Analysis**

The Contractor shall prepare an economic / financial analysis of the Consolidation and Modernization Project.

The principal objective of the economic / financial analysis is to estimate, to the extent practicable and for the Grantee’s budgetary and planning purposes, the cost of implementation of the proposed Data Center.

The principal cost elements to be taken into consideration are:

- Equipment costs for equipping of the Data Center with mechanical and electrical infrastructure
- Estimated costs for required networking systems and equipment
- Estimated costs for major new systems to be installed in the Data Center, rather than migrated, if any
- Estimated costs (which may be benchmarked) for migration to virtualization, under reasonable assumptions about the eventual virtualization configuration

- Estimated construction costs for building new national data center facility
- Estimated service agreement costs as needed to maintain facility and IT equipment

Estimated costs for the ongoing operation of the Data Center are outside the scope of the Project.

The Grantee reports that it does not presently have either the relevant data or a suitable methodology for baselining the current cost of operating the various data centers and [small ad hoc installations of servers and storage](#). Accordingly, the Grantee is not currently in a position to estimate the likely cost savings that will accrue from the Consolidation and Modernization Project, through a comparison of the “as is” and “to be” environments. The Contractor shall develop and furnish the Grantee with an appropriate methodology and procedures, which the Grantee can utilize for collecting relevant cost data from current data centers and [small ad hoc installations of servers and storage](#) operations. The Contractor shall estimate the life cycle costing for the purpose of estimating and planning current operations, the likely savings in both hard costs (such as the cost of IT hardware and software and networking infrastructure) and soft costs (the costs associated with overheads such as IT management, power consumption, and data center operations/labor) that will accrue over a medium- to long-term time horizon (e.g., five to seven years).

The Contractor shall prepare a comparison of operational costs prior to consolidation and upon consolidation.

**Task 6 Deliverable:** A Report presenting the findings of the economic / financial and life cycle costing analysis as described above, suitably documenting the assumptions that are made in arriving at the cost estimates. The Report shall also include the methodology and procedures for collecting relevant cost data from data centers and [small ad hoc installations of servers and storage](#), as described above. The Contractor shall submit the draft version of this Report to the Grantee. The Grantee shall be given reasonable time to review the Draft Report and to propose modifications or amendments (if any) for incorporation into the final version of the Report. In the event that substantive modifications or amendments are proposed, the Contractor shall prepare and submit to the Grantee a revised copy of the Report, duly incorporating the proposed modifications or amendments.

### **Task 7: Regulatory**

The Contractor shall discuss any regulations that would impact the Consolidation and Modernization Project’s viability or prognosis to move forward.

**Task 7 Deliverable:** A Report presenting the findings of the regulatory analysis.

**Task 8: Conduct a Preliminary Environmental and Development Impact Analysis**

The Contractor shall conduct a preliminary review of the project's anticipated impact on the environment with respect to local and international standards and requirements (for example multilateral development banks). This review shall identify potential negative and positive impacts, discuss the extent to which the negative impacts can be mitigated and develop plans for a full environmental impact assessment when the project moves forward to the implementation stage. This review shall highlight the positive impacts, including power savings, that greenfield data centers provide. In this assessment, the Contractor shall analyze the power requirement for the data center and its impact on the environment.

The Contractor shall assess the development benefits associated with the project and the methodology for measuring those benefits. The Contractor shall include examples of the development benefits that would be expected in the host country if the project is implemented as outlined in the FS. The Contractor shall focus on examples from the categories listed below and shall develop a methodology for assessing these impacts over time. The Contractor shall only list benefits in the categories that are applicable to the project. The categories to be considered are as follows:

- Infrastructure (e.g. data center capacity)
- technology transfer and productivity,
- revenue creation,
- human capacity building,
- market oriented reform (if applicable), and
- financial and economic security.

**Task 8 Deliverable**

8.1 A Report presenting the findings of the preliminary environmental analysis.

8.2 A Report presenting the findings of the preliminary developmental impact analysis.

**Task 9: Identify Potential U.S. Suppliers**

The Contractor shall provide a list of the procurements that are likely to be subject to competitive tenders in which international suppliers can participate and a list of the equipment and services that are likely to be imported for project implementation.

## **Task 9 Deliverable**

9.1 Prepare the list of U.S. Suppliers, including a list of the procurements that are likely to be subject to competitive tenders in which international suppliers can participate, and a list of the equipment and services that are likely to be imported for project implementation.

## **Task 10: Assess Financing and Investment Resources**

The Contractor shall identify and determine requirements and procedures for potential financing resources for the data center project, including assessing the Grantee's internal financing options and established lines of credit, funding from the Romanian State Budget, EU Structural Funds, the European Bank for Reconstruction and Development (EBRD), World Bank, as well as European banks, and US, regional and multi-lateral financing institutions. The Contractor shall contact the Export-Import Bank of the United States (Ex-Im) and the Overseas Private Investment Corporation (OPIC) to assess their ability to finance and / or insure potential U.S. businesses that invest in or locate their data in the Grantee's data center.

### **Task 10 Deliverable.**

10.1 Prepare a written summary of the Grantee's potential financing resources for the data center project including all contacts, willingness to fund, type of financing and any other related financing and investment parameters.

## **Task 11: Prepare an Implementation Plan**

10.1 Prepare a timeline and implementation plan that correlates to the deliverable in Task 5 - Project Solution Development. The Contractor shall prepare and deliver a final presentation that identifies the final recommendations and Project findings to the Grantee.

### **Task 11 Deliverable.**

11.1 Prepare the timeline and implementation plan including different phases and budget for each phase. The plan should also include a facility, staffing and operations planning forecast.

11.2 Prepare and deliver a final presentation that identifies the final recommendations and Project findings to the Grantee.

## **Task 12: Prepare the Request for Proposal (RFP)**

12.1 The Contractor shall prepare the engineering design, construction, supply, installation, commissioning, and maintenance support plan and develop RFP specifications for development and construction of the Consolidation and Modernization Project. The Contractor shall ensure that the RFP is consistent with the Grantee's project objectives and that the RFP clearly

requests a response regarding all technical and operational parameters required, including but not limited to:

- Functional requirements (specification for the data center, including maintenance, security, and fire protection).
- Technical requirements (including scalability, disaster management, monitoring).
- Financial requirements (cost (initial and ongoing), training, etc.)
- Organizational requirements (staffing, department management and / or reorganizations)
- Business requirements (operations, processes, activities, documentation)
- Training Needs
- Implementation and construction time frame, plan and schedules
- Commissioning schedule and plan
- Deliverables
- RFP bidding rules and evaluation criteria
- Sample Contract (should vendor be selected)
- Other points to be determined by the Contractor and Grantee

The Contractor will work with the Grantee to finalize the RFP for external distribution and to define final data center requirements and issues, including any staffing and training needs that must be addressed by bidders as part of the data center implementation. The Contractor will ensure that the Grantee is fully informed and active in the RFP planning and release process. The Contractor will work with the Grantee to create a short list of vendors who will receive the RFP and will ensure that procedures are in place to allow the RFP process to be fair, open and transparent.

The Contractor will work with the Grantee to develop the RFP evaluation criteria and methodologies and ensure that state-of-the-art international RFP evaluation procedures are in place for evaluating vendors' responses to the RFP. The Contractor will develop a timeline for the RFP release, receipt of responses and evaluation, and document the anticipated timeline for the final negotiation and project award. The Contractor will document any concerns that can support or hinder the RFP release and follow-on procurement process.

## **Task 12 Deliverable.**

**12.1** Prepare the RFP specifications for the Grantee's data center defining the final Grantee solution requirements and issues, including any staffing and training needs that must be addressed as part of the data center construction and operation. Deliver a short list of vendors, with contact information, and document procedures to ensure that the RFP process will be fair, open and transparent.

Prepare RFP evaluation criteria and methodologies and a timeline for the RFP release, receipt, and evaluation, and the anticipated timeline for the final negotiation and project award. Document any concerns that can support or hinder the RFP release and follow-on procurement process.

## **Task 13: Prepare the Final Report**

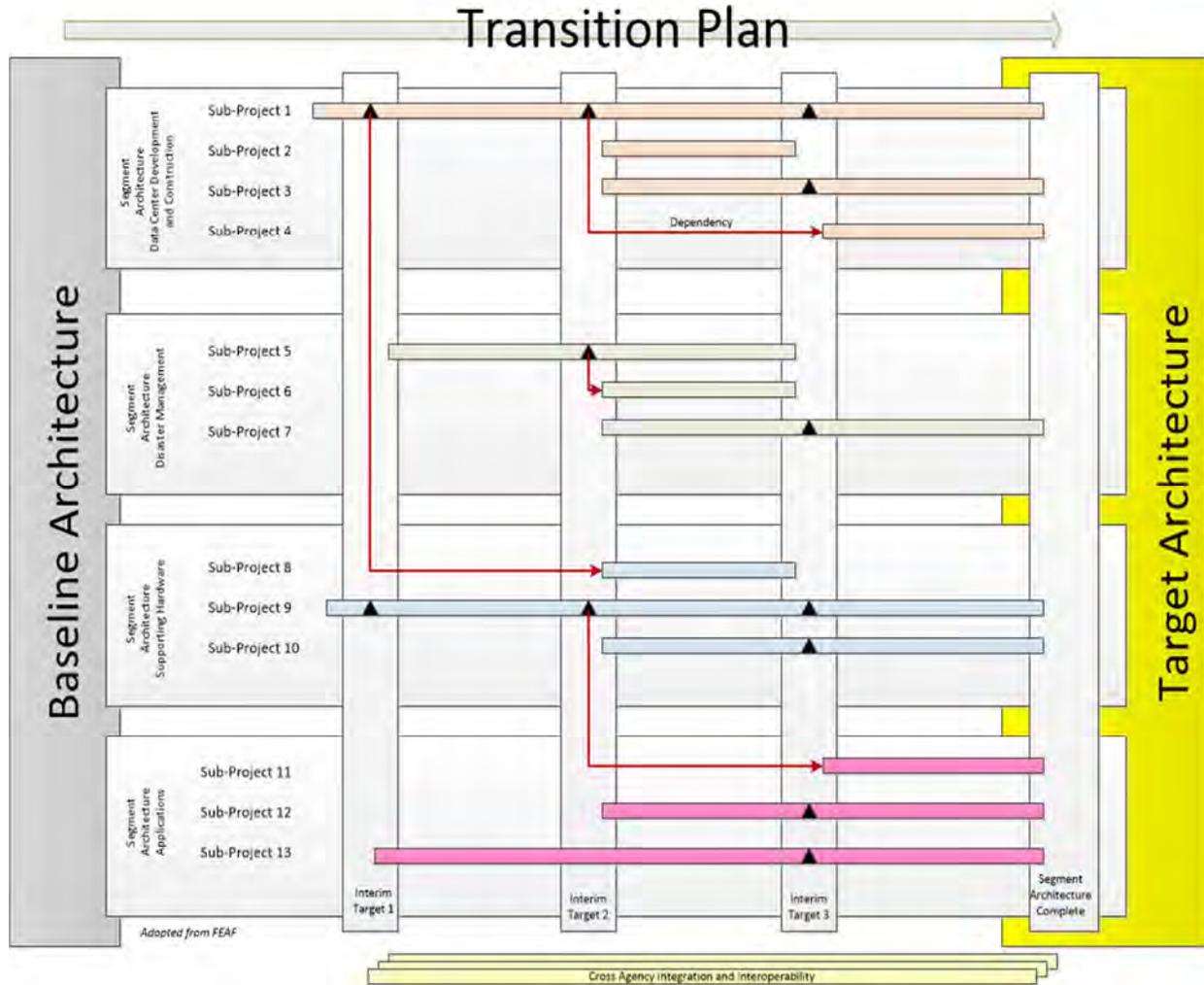
The Contractor shall prepare and deliver to the Grantee and USTDA a substantive and comprehensive final report of all work performed under the Terms of Reference ("Final Report"). The Contractor shall first prepare a Draft Final Report for submission to the Grantee. The Contractor shall give adequate time to the Grantee to review the Draft Final Report and to propose modifications or amendments (if any) for incorporation into the Final Report.

The Final Report shall be organized in accordance with the sequence of tasks performed, as described above, shall comprise a substantive and comprehensive report of the work performed in Tasks 1 through 12, and shall include all deliverables and documents that have been provided to the Grantee. The Final Report shall give an account of problems that were encountered in the course of the Study and of any problems that can reasonably be anticipated in the future, together with any corresponding recommendations. The Final Report shall be prepared in accordance with Clause I of Annex II of the Grant Agreement.

## **Task 13 Deliverable.**

**13.1** 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 I of Annex II of the Grant Agreement.

### Attachment A - Transition Architecture and Implementation Plan Template



**Romania Ministry of Interior**  
**Data Center Modernization and Consolidation Feasibility Study Project**

<u>I. Labor</u>	Number of Team Members	Daily rate	Number of Days*	Total remuneration
<b><u>Task 1: USA</u></b>				
Project Manager		1400	5	\$7,000
Telecom / Network Specialist		1250	3	\$3,750
Data Center Planning and Design Specialist		1250	3	\$3,750
Enterprise Architect		1250	4	\$5,000
ICT Operations Specialist		1200	2	\$2,400
Financial and Economic Analyst		1200	1	\$1,200
Local Contractor		800	3	\$2,400
Project/Administrative Assistant (US only - home office project support)		600	4	\$2,400
<b>Subtotal</b>				<b>\$27,900</b>
<b><u>Task 2: Romania</u></b>				
Project Manager		1400	14	\$19,600
Telecom / Network Specialist		1250	14	\$17,500
Data Center Planning and Design Specialist		1250	14	\$17,500
Enterprise Architect		1250	14	\$17,500
ICT Operations Specialist		1200	7	\$8,400
Financial and Economic Analyst		1200	0	\$0
Local Contractor		800	10	\$8,000
Project/Administrative Assistant (US only - home office project support)		600	3	\$1,800
<b>Subtotal</b>				<b>\$90,300</b>
<b><u>Task 3: Romania</u></b>				
Project Manager		1400	7	\$9,800
Telecom / Network Specialist		1250	4	\$5,000
Data Center Planning and Design Specialist		1250	7	\$8,750
Enterprise Architect		1250	7	\$8,750
ICT Operations Specialist		1200	4	\$4,800
Financial and Economic Analyst		1200	0	\$0
Local Contractor		800	7	\$5,600
Project/Administrative Assistant (US only - home office project support)		600	0	\$0
<b>Subtotal</b>				<b>\$42,700</b>
<b><u>Task 4: Romania</u></b>				
Project Manager		1400	4	\$5,600
Telecom / Network Specialist		1250	4	\$5,000
Data Center Planning and Design Specialist		1250	4	\$5,000
Enterprise Architect		1250	4	\$5,000
ICT Operations Specialist		1200	4	\$4,800
Financial and Economic Analyst		1200	0	\$0
Local Contractor		800	4	\$3,200
Project/Administrative Assistant (US only - home office project support)		600	0	\$0
<b>Subtotal</b>				<b>\$28,600</b>

<b><u>Task 5: Romania</u></b>			
Project Manager	1400	7	\$9,800
Telecom / Network Specialist	1250	3	\$3,750
Data Center Planning and Design Specialist	1250	7	\$8,750
Enterprise Architect	1250	7	\$8,750
ICT Operations Specialist	1200	3	\$3,600
Financial and Economic Analyst	1200	7	\$8,400
Local Contractor	800	3	\$2,400
Project/Administrative Assistant (US only - home office project support)	600	2	\$1,200
<b>Subtotal</b>			<b>\$46,650</b>
<b><u>Task 6: USA</u></b>			
Project Manager	1400	1	\$1,400
Telecom / Network Specialist	1250	1	\$1,250
Data Center Planning and Design Specialist	1250	1	\$1,250
Enterprise Architect	1250	1	\$1,250
ICT Operations Specialist	1200	1	\$1,200
Financial and Economic Analyst	1200	3	\$3,600
Local Contractor	800	1	\$800
Project/Administrative Assistant (US only - home office project support)	600	0	\$0
<b>Subtotal</b>			<b>\$10,750</b>
<b><u>Task 7: USA</u></b>			
Project Manager	1400	1	\$1,400
Telecom / Network Specialist	1250	0	\$0
Data Center Planning and Design Specialist	1250	0	\$0
Enterprise Architect	1250	1	\$1,250
ICT Operations Specialist	1200	0	\$0
Financial and Economic Analyst	1200	0	\$0
Local Contractor	800	1	\$800
Project/Administrative Assistant (US only - home office project support)	600	0	\$0
<b>Subtotal</b>			<b>\$3,450</b>
<b><u>Task 8: USA</u></b>			
Project Manager	1400	1	\$1,400
Telecom / Network Specialist	1250	0	\$0
Data Center Planning and Design Specialist	1250	0	\$0
Enterprise Architect	1250	0	\$0
ICT Operations Specialist	1200	0	\$0
Financial and Economic Analyst	1200	0	\$0
Local Contractor	800	1	\$800
Project/Administrative Assistant (US only - home office project support)	600	0	\$0
<b>Subtotal</b>			<b>\$2,200</b>

**Task 9: USA**

Project Manager	1400	0.5	\$700
Telecom / Network Specialist	1250	1	\$1,250
Data Center Planning and Design Specialist	1250	1	\$1,250
Enterprise Architect	1250	1	\$1,250
ICT Operations Specialist	1200	1	\$1,200
Financial and Economic Analyst	1200	1	\$1,200
Local Contractor	800	0	\$0
Project/Administrative Assistant (US only - home office project support)	600	1	\$600
<b>Subtotal</b>			<b>\$7,450</b>

**Task 10: USA**

Project Manager	1400	2	\$2,800
Telecom / Network Specialist	1250	0	\$0
Data Center Planning and Design Specialist	1250	0	\$0
Enterprise Architect	1250	2	\$2,500
ICT Operations Specialist	1200	1	\$1,200
Financial and Economic Analyst	1200	2	\$2,400
Local Contractor	800	2	\$1,600
Project/Administrative Assistant (US only - home office project support)	600	0	\$0
<b>Subtotal</b>			<b>\$10,500</b>

**Task 11: Romania**

Project Manager	1400	7	\$9,800
Telecom / Network Specialist	1250	2	\$2,500
Data Center Planning and Design Specialist	1250	7	\$8,750
Enterprise Architect	1250	7	\$8,750
ICT Operations Specialist	1200	2	\$2,400
Financial and Economic Analyst	1200	1	\$1,200
Local Contractor	800	3	\$2,400
Project/Administrative Assistant (US only - home office project support)	600	0	\$0
<b>Subtotal</b>			<b>\$35,800</b>

**Task 12: USA**

Project Manager	1400	2	\$2,800
Telecom / Network Specialist	1250	1	\$1,250
Data Center Planning and Design Specialist	1250	3	\$3,750
Enterprise Architect	1250	1	\$1,250
ICT Operations Specialist	1200	1	\$1,200
Financial and Economic Analyst	1200	0	\$0
Local Contractor	800	2	\$1,600
Project/Administrative Assistant (US only - home office project support)	600	1	\$600
<b>Subtotal</b>			<b>\$12,450</b>

**Task 13: USA**

Project Manager	1400	1	\$1,400
Telecom / Network Specialist	1250	1	\$1,250
Data Center Planning and Design Specialist	1250	1	\$1,250
Enterprise Architect	1250	1	\$1,250
ICT Operations Specialist	1200	1	\$1,200
Financial and Economic Analyst	1200	1	\$1,200
Local Contractor	800	1	\$800
Project/Administrative Assistant (US only - home office project support)	600	3	\$1,800
<b>Subtotal</b>			<b>\$10,150</b>

**Total I. Labor** **\$328,900**

**II. Other costs**

				<b>Total</b>
<b>Travel</b>				
International Airfare	9	2200		\$19,800
Ground Transportation: to/from international airport in USA	9	120		\$1,080
Ground Transportation: to/from international airport in Bucharest	9	40		\$360
Ground Transportation: Romania		10	167	\$1,670
Per Diem: Romania (US \$255/Bucharest)		255	167	\$42,585
Medex Frontier Insurance	6			960
DBA Insurance @ \$2.15 per \$100 of in-country compensation				\$4,267
Project Communications (telephone, fax, internet)				\$1,000
<b>Subtotal</b>				<b>\$71,722</b>
<b>Total Other Cost</b>				<b>\$71,722</b>
<b>TOTAL BUDGET</b>				<b>\$400,622</b>

All labor rates are fully loaded; in the US, the Contracting Team are expected to work a five day workweek (M-F) with occasional weekend work as needed/identified in this budget and associated Terms of Reference.  
 Medex Frontier Insurance @ \$80/month (or \$35/first 10 days+\$3.50/addl. day)  
 Foreign per-diem rates sourced from www.state.gov (April 1, 2013).

**Ministry of Interior – US Export Potential**

The MAI Data Center Modernization and Consolidation Feasibility Study Project will assess a large number of currently disparate Data Centers, and [small ad hoc installations of servers and storage](#) used by various agencies within the Ministry and ideally create a plan for a consolidated and modernized facility, offering disaster management and continuity of operations. This Feasibility Study should result in opportunities for US exporters and investors in the product and service categories that are shown below.

NOTE: As discussed with MAI, this is based on an assumption of a 2MW data center. The data center is “greenfield,” requiring complete construction.

Further assumptions are based on requirements for inter-facility/agency networking (metropolitan area network), implementation of large storage sets and archives, cloud computing and virtualization, and business continuity / disaster recovery (BCDR) capacity.

This does not include operational expenses such as the cost of communications services.

This Feasibility Study should result in opportunities for US exporters and investors in the product and service categories that are shown below.

<b>Product Category</b>	<b>Potential U.S. Suppliers</b>	<b>Total Opportunity</b>	<b>Percentage for Potential Local Sourcing</b>	<b>Final: Estimated US Export Potential</b>
Servers	IBM, Armonk, NY ( <a href="http://www.ibm.com">www.ibm.com</a> ) Oracle, Redwood Shores, CA ( <a href="http://www.oracle.com">www.oracle.com</a> ) HP, Palo Alto, CA ( <a href="http://www.hp.com">www.hp.com</a> ) Dell, Austin, TX ( <a href="http://www.dell.com">www.dell.com</a> ) SuperMicro, San Jose, CA ( <a href="http://www.supermicro.com">www.supermicro.com</a> )	\$400,000	20%	\$320,000
Storage Area Networks (SAN)	EMC, Hopkinton, MA ( <a href="http://www.emc.com">www.emc.com</a> ) Fusion I/, Salt Lake City, UT ( <a href="http://www.fusionio.com">www.fusionio.com</a> ) Network Appliance, Sunnyvale, CA ( <a href="http://www.netapp.com">www.netapp.com</a> ) HP, Palo Alto, CA IBM, Armonk, NY	\$500,000	40%	\$300,000
Server switches, routers, Host bus adapters (HBA)	Cisco, San Jose, CA ( <a href="http://www.cisco.com">www.cisco.com</a> ) Brocade, San Jose, CA ( <a href="http://www.brocade.com">www.brocade.com</a> )	\$750,000	40%	\$450,000
Software (security, virtualization, SO, database, middleware, e-mail, disaster management)	IBM, Armonk, NY Oracle, Redwood Shores, CA ( <a href="http://www.ibm.com">www.ibm.com</a> ) Microsoft, Redmond, WA ( <a href="http://microsoft.com">microsoft.com</a> ) EMC (Hopkinton, MA ( <a href="http://www.emc.com">www.emc.com</a> ) VMWare, Palo Alto, CA ( <a href="http://www.vmware.com">www.vmware.com</a> )	\$2, 500,000	20%	\$2,000,000
Backup power generators	Caterpillar, Peoria, IL ( <a href="http://www.caterpillar.com">www.caterpillar.com</a> ) Onen/Cummins, Fridley, MN ( <a href="http://www.cumminsonan.com">www.cumminsonan.com</a> )	\$1,300,000	0%	\$1,300,000

Air conditioning	Emerson, St louis, IL, (www.emerson.com) Schneider, Palatine, IL (www.schneider-electric.com)	\$ 500,000	40%	\$300,000
Electrical Distribution	Emerson, St Louis, MO Schneider, Palatine, IL General Electric, fairfield, CT (www.ge.com) Square D (now Schneider Electric)	\$ 700,000	20%	\$560,000
Construction Management	No US Company expected to participate in the construction for this project.	\$20,000,000	0%	\$0
Fire Suppression, BMS, and Security	FIKE, Blue Springs, MO (www.fike.com) Johnson Controls, Milwaukee, WI (www.johnsoncontrols.com) IBM, Armonk, NY (www.ibm.com) Cisco, San Jose, CA (www.cisco.com)	\$750,000	40%	\$450,000
Consulting	IBM, Armonk, NY (www.ibm.com) HP, Palo Alto, CA (www.hp.com)	\$2,500,000	20%	\$2,000,000
<b>Total</b>		<b>\$29,150,000</b>		<b>\$7,950,000</b>

As MAI is considering adding a separate BCDR facility in a second location (outside of Bucharest) to complete the data center project, this means that the total project potential (\$29.1M) would increase by 65% to a total opportunity of US \$48M. Using the same percentages to determine the US export potential for the two facilities results in a total US export potential for the MAI project of \$7.9M + \$5.2M or \$13.1M.

## Ministry of Interior – Qualifications

### Team Composition and Experience

In terms of the composition and particular credentials of the Contractor, it is judged that the team should consist of a Project Manager, a Telecom/Network Specialist; a Data Center Planning and Design Specialist; an Enterprise Architect; an ICT Operations Specialist and a Financial and Economic Analyst (all U.S. based); plus Local Support (Romania-based).

The position of Project Manager may be combined with that of any of the other U.S.-based specialists, provided that the person so designated meets all of the requirements of the two positions separately, and it can be shown that the proposed Contractor Team can efficiently carry out the full scope of the FS. All team members must have the organizational, managerial and cross-cultural skills to carry out the Feasibility Study effectively, including experience working with team members with different functional expertise. More specific descriptions follow:

**Project Manager:**

- At least fifteen (15) years' experience in the ICT industry
- Specific expertise in planning and implementing large-scale consolidation/integration projects, preferably in the context of public-sector organizations
- Organizational, management and cross-cultural skills and perspective to structure, oversee and carry out the FS effectively; ability to work closely and effectively with senior decision making and IT personnel throughout the FS, as well as with other stakeholders and interested parties
- Proficiency in Romanian, at a level adequate to enable effective conduct of day-to-day work in that language, is not specifically required but would be an advantage

**Telecom/Network Specialist:**

- At least ten (10) years' experience with the planning, design and implementation of telecom/networking infrastructure and connectivity solutions
- Specific experience with fiber-optic-based wide-area and metropolitan-area backbone networks and protocols (e.g., IP/MPLS), VPNs
- Experience developing wiring plans for internal LANs, including storage systems, server systems, and virtual environments
- Exposure to network security / privacy issues, authentication, access control is highly desirable
- Ability to work closely with and support the Data Center Planning and Design Specialists as may be required
- Organizational and cross-cultural skills and perspective to structure, oversee and carry out the FS effectively

**Data Center Planning and Design Specialist:**

- At least ten (10) years' experience with Data Center planning and operation, including experience with data center construction/migration projects
- Experience with estimation of both hard data-center costs (e.g., required new hardware and software) and associated soft costs (e.g., administration, training) and cost/benefit analysis

- Knowledge of backup and disaster-recovery requirements, infrastructure and procedures
- Organizational/management skills to structure, oversee and carry out the FS effectively
- Experience employing international data center design standards and operations best practices

#### **Enterprise Architect:**

- At least ten (10) years' experience in the ICT industry
- Direct experience planning and developing implementation best practices; assessment of new technologies; capacity planning; performance tuning.
- Ability to prepare a holistic, government-wide view of current and future work flow architecture in support of government goals and objectives.
- Experience identifying business requirements that affect developing enterprise architectures and providing solutions that integrate architectural vision and strategy.
- Ability to identify relevant standards, architectural governance, design patterns and IT practices.
- Specific expertise in planning or management of data center consolidation projects
- Knowledge of interoperability issues and standards, applicable middleware solutions
- Ability to work closely and effectively with IT personnel and interested parties throughout the FS
- Expertise in assessing the people, processes, and information technologies required to create a consistent and proper handling of an organization's data across a government or business enterprise, and establishing goals for the consistent and proper handling of data
- Ability to standardize use of ICT taxonomies and build confidence in organizational decision making based upon the more effective management and use of data assets

#### **ICT Operations Specialist:**

- At least ten (10) years' experience in ICT with a focus on operations workflow and development of operations support systems (OSS).
- Experience estimating both hard costs (e.g., required new hardware and software) and associated soft costs (e.g., administration, training) of service delivery and support systems, as well as cost/benefit analysis
- Experience with Building Management System (BMS) platforms and solutions would be a definite advantage
- Familiarity with related operational issues (e.g., emergency response and disaster coordination) would be an advantage

- Familiarity with network management and network operations center development and operation

**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 ICT 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
- Experience in preparing cost analyses to support proposed pricing for goods and services for regulated and non-regulated business initiatives
- Exceptional proficiency in spreadsheet programs is required and experience in other personal computer programs such as word processing, presentation and statistical software is preferred
- 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

In addition, the Contractor Team shall include Local Support. It is envisaged that Local Support will take the form of an individual or small firm based in Romania (and ideally in Bucharest), with knowledge and experience in ICT and in working with public-sector institutions. It is anticipated that the Local Support will provide logistical and translation assistance, particularly in conjunction with interviews, site visits and data-gathering activities, as well as liaison and continuity in the intervals between in-country visits of U.S.-based Contractor Team members. The Local Support shall also have expertise in tracking and monitoring laws and regulations in the information and communication technology industry, and providing analysis of new and existing regulations, laws and other areas of specific concern for effective regulatory and legal compliance.

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

Criterion	Maximum Points
Expertise and skills of proposed personnel	40
Proposed approach to the FS and to the individual tasks	35
Pertinent international experience and cross-cultural skills	15

Romania ICT DM Report: Public Distribution Version

Experience and capabilities of local support	10
<b>Total:</b>	<b>100</b>

Proposals that do not include all requested information may be considered non-responsive. Price will not be a factor in contractor selection.

## ANNEX 3



**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.

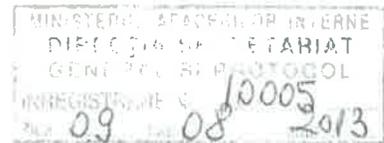
### 3) Definitions

“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



## GRANT AGREEMENT

concluded between

*the U.S. Trade and Development Agency* (as “USTDA”)

and

*the Ministry of Internal Affairs of the Government of Romania* (as “Grantee”)

to achieve a **feasibility study** for a project named “*Data Center Modernization and Consolidation*”

- english version -

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*in the event that this Grant Agreement is signed in more than one language, the English language version shall govern*

## **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 Ministry of Internal Affairs of the Government of Romania ("Grantee"). USTDA agrees to provide the Grantee under the terms of this Grant Agreement US\$400,600 ("USTDA Grant") to fund the cost of goods and services required for a feasibility study ("Study") on the proposed Data Center Modernization and Consolidation project ("Project") in Romania ("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.

### **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 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. In the event that only one signature is dated, such date shall constitute the Effective Date.

**8. Study Schedule**

**(A) Study Completion Date**

The completion date for the Study, which is November 28, 2014, is the date by which the parties estimate that the Study will have been completed.

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

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

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

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

#### **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 State Secretary, Ministry of Internal Affairs. The parties hereto may, by written notice, designate additional representatives for all purposes under this Grant Agreement.

## 16. Addresses of Record for Parties

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

To: Mr. Bogdan Tohaneanu  
State Secretary  
Ministry of Internal Affairs of the Government of Romania  
Piata Revolutiei nr.1 A, sect. 1  
Bucharest, Romania

Phone:

Fax:

E-Mail: bogdan.tohaneanu@mai.gov.ro

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

Phone: (703) 875-4357

Fax: (703) 875-4009

E-Mail: grantnotices@ustda.gov and  
sgreenip@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.: 1113/141001  
Activity No.: 2013-21016A  
Reservation No.: 2013193  
Grant No.: GH201321193

## 17. Implementation Letters

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

## **18. Grant Agreement Amendments**

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

## **19. Termination Clause**

Either party may terminate this Grant Agreement by giving the other party written notice thereof. The termination of the Grant Agreement will end any obligations of the parties to provide financial or other resources for the Study, except for payments that may be made pursuant to Clause 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.

## **22. Governing Law**

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

## **23. Counterparts**

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

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

**IN WITNESS WHEREOF, the Government of the United States of America and the Ministry of Internal Affairs of the Government of Romania, 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 Ministry of Internal Affairs  
of the Government of Romania**

By: \_\_\_\_\_



By: \_\_\_\_\_

Mr. Bogdan TOHANEANU  
State Secretary



Date: \_\_\_\_\_

August 9, 2013

Date: \_\_\_\_\_

Witnessed:

Witnessed:

By: \_\_\_\_\_

By: \_\_\_\_\_

**Annex I -- Terms of Reference**

**Annex II – USTDA Mandatory Clauses**

## 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 Ministry of Internal Affairs of the Government of Romania ("Client"), dated \_\_\_\_\_ ("Grant Agreement"). The Client has selected \_\_\_\_\_ ("Contractor") to perform the feasibility study ("Study") for the Data Center Modernization and Consolidation project ("Project") in Romania ("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. The Contractor shall ensure that no Romanian classified information is provided to USTDA.

## **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**

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. The Contractor shall ensure that no Romanian classified information is included in the Final Report.

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 November 28, 2014, is the date by which the Contract Parties estimate that the Study will have been completed.

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

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

## **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 13/14 1001  
Activity No.: 2013-21016A  
Reservation No.: 2013193  
Grant No.: GH201321193

## **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: Mr. Bogdan Tohaneanu  
Title: State Secretary  
Ministry of Internal Affairs of the Government of Romania

Phone:  
Fax:  
E-Mail: [bogdan.tohaneanu@mai.gov.ro](mailto:bogdan.tohaneanu@mai.gov.ro)

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**

## Annex I

### **Terms of Reference**

**Objective:** The primary objective of the Study is to determine the feasibility and recommended design of a data center for the Grantee to migrate existing independent data centers into a single consolidated data center. The single center would have space available for co-location and use by other organizations, which may be needed for disaster recovery or other requirements including implementing a government interoperability framework for data systems and application integration. The goal of the project is more effective delivery of services to government, business, and citizens while at the same time yielding substantial cost savings.

The Project involves current and anticipated data center needs of the four central units of the Grantee (the General Directorates for Information Technology and Communications, Operational Management, Human Resources Management and Finance), and the Grantee's 15 subordinate units.

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

**Upon signing the Contract, the Grantee shall provide the Contractor with all available information related to the development of the Project.**

Not less than one (1) month prior to the Contractor's initial working mission to Bucharest, the Contractor shall develop and forward to the Grantee a Preliminary Information Request (PIR). The purpose of the PIR is to provide the Contractor with an advance picture of the "situation on the ground" and thus to enable more focused and more efficient use of time during the first and subsequent in-country tasks.

It is anticipated that the PIR will focus on the anticipated participating institutions, and will seek to obtain the following information from each such institution: name of institution and of any participating subsidiary or affiliate organizations; number of employees; number of dedicated information and communication technology (ICT) personnel; and number, type and size of ICT facilities targeted for consolidation or disaster recovery purposes, with particular attention to numbers, types and configurations of servers.

Without necessarily being definitive, the following list is representative of the type of information to be requested and ideally supplied for each server and/or storage solution:

- Server Operating System(s);
- Year installed;
- Application(s) hosted / major functions, particularly “mission-critical” ones;
- Scope of use (e.g., department, headquarters building, institution-wide, ...);
- Required availability (e.g., 8 x 5, 10 x 5, 24 x 7, ...);
- Number of users (broken down by application or task to the extent possible);
- Transaction volumes;
- Networking/connectivity requirements and networking technology employed;
- Average central processing unit (CPU) utilization;
- Existing customization (if any);
- Existing virtualization (if any); and,
- Responsibility for operation, maintenance, support, availability, updating, backup.

In addition, the survey shall include other supporting equipment such as switches, routers, and firewalls:

- Switch or type;
- Number and type of ports;
- Switch or router age – still in warranty or not;
- Firewall make;
- Existing traffic levels;
- External communications capacity (E1, E3, Ethernet, etc.).

The Grantee shall provide reasonable assistance to the Contractor in obtaining the above information prior to the Contractor’s initial working mission. At the same time, it is understood that the breadth, depth, timeliness, etc., of the information obtained from the institutions concerned will not necessarily be uniform or available. The Grantee will furnish the information to the Contractor not less than ten (10) days prior to the Contractor’s initial working mission to Romania.

The Contractor shall collect and organize all information, and perform comprehensive secondary research regarding industry trends, key competitors, and global best practices in consolidating and managing data centers, and for providing space for colocation use by other organizations as needed for disaster recovery or other requirements.

The Contractor shall discuss and finalize the schedule and any related concerns and logistics relative to the forthcoming tasks and deliverables with the Grantee.

**Task 1 Deliverable:** An Inception Report, presenting the findings of Tasks 1, and describing the progress in collecting data, and problems encountered or foreseen. Any impacts on the projected work schedule or deployment of Contractor personnel shall also be described in the Inception Report. Any pertinent initial observations or findings shall also be included.

## **Task 2: Review of Existing Data Center and ICT Environment**

### **Sub-Task 2.1 - Review of Project Objectives and Baseline Data**

The Contractor shall conduct a working mission to Bucharest to meet with the Grantee to discuss the Project's objectives and the logistics and practicalities of the execution of the Study.

The Contractor shall become familiar with the organization, functions, responsibilities, capabilities and current profile of activities of the Grantee, with particular reference to the Project.

The Contractor and Grantee shall review and update the listing of the data centers and small ad hoc installations of servers and storage subject to consolidation. The Grantee shall identify any data centers and small ad hoc installations of servers and storage, for example public key infrastructure (PKI) systems, that will not be involved in the consolidation and modernization plan.

The Contractor and Grantee shall review and agree upon information and data that has been obtained to date and is still required for the Project, and shall specify how such data shall be collected, together with the roles that the Grantee and Contractor will play in terms of its acquisition. The Contractor and Grantee shall develop a mutually agreeable schedule for the collection of any such data.

### **Sub-Task 2.2 - Information Gathering**

The Contractor shall conduct structured interviews with qualified representatives of the Grantee's central and subordinate units subject to consolidation and address potential needs for disaster recovery. It is anticipated that such representatives will primarily be senior ICT professionals at these Centers and / or the institutions with which they are affiliated, although the interviewees may include (in consultation with the Grantee and by mutual agreement) representatives of other public-sector organizations (including the Grantee itself) or private-sector companies that are able to provide additional relevant input and perspective.

The objective of the interviews is to gather baseline data regarding ICT infrastructure and facilities targeted for inclusion in the Project, as well as current and foreseeable future applications, current and projected transaction volumes, backup / disaster recovery requirements, workflow processes, service delivery and interfaces to the general public, requirements for interfacing with other public-sector institutions, and existing ICT staffing. Particular problems or shortfalls in these areas that are likely to impact the Project should be noted and described in appropriate detail.

The Contractor and Grantee shall agree on the list of interviewees (and alternate interviewees should they be necessary) and on the general outline and areas of emphasis of the interview schedule. The number of such interviews shall include all agencies operating data centers and small ad hoc installations of servers and storage, as well as other stakeholders whose operations would be impacted by data center consolidation, disaster management and continuity planning, cloud computing, and interoperability.

The Grantee shall make reasonable efforts to assist the Contractor in gaining access to prospective interviewees.

In accordance with Romanian Law, work on Romanian classified information must be performed by organizations and individuals with the required clearance, which must be a Romanian citizen or entity. Therefore the Contractor's subcontractors must have the required clearance. Work on Romanian classified information performed by a Romanian subcontractor remains subject to the USTDA Nationality Requirements listed in Annex II Article C below including the requirement that no more than 20% of the grant funds may be used to pay for work performed by host country subcontractors.

### **Task 2.3 - Site Visits and Surveys**

The Contractor shall conduct visits to the Grantee's data centers, small ad hoc installations of servers and storage, and independent server operations to obtain a first-hand view of their operation and to supplement the information obtained in Sub-Tasks 2.1 and 2.2. All operational sites should be included in the survey, with the exception of sites with high security or classified processing (e.g., PKI Management). This Sub-Task may be combined with Sub-Task 2.2 as appropriate and practicable. The Grantee shall make reasonable efforts to assist the Contractor in arranging site visits.

The Contractor shall evaluate the Grantee's current data center environment and include all of the Grantee's central and subordinate unit facilities, communication capacity,

human capacity and staffing, security, operations process, maintenance, applications, as well as disaster management and operating continuity.

To define the Grantee's baseline environment the Contractor shall develop a checklist and perform an in depth survey of each operating facility, recording results of the survey in a format which will allow easy analysis on status from a variety of viewpoints.

Sub-Task 2.3 methodology shall include:

- Record the number of IC&T users per organization;
- Site survey of each central unit and 15 subordinate's data center, small ad hoc installations of servers and storage, or server operation;
- Identify staffing, training, and positions of ICT personnel within each agency;
- Review of all Grantee, including four central units and nine subordinated units' disaster recovery and business continuity plans;
- Identify hardware types and capacity of server, storage, switching, routing equipment;
- Estimate current usage volumes on server/storage equipment;
- Record bandwidth capacity and usage for both internal and external communications;
- Identify major applications used by each agency, including database type;
- Identify applications developed internally (non-Commercial off the shelf 'COTS');
- Identify application and database external interfaces with other agencies;
- Identify any existing use of virtualization, cloud computing capacity, or facility outsourcing; and,
- Review operations process, audit, and governance, including documentation.

The Contractor will prepare an audit and assessment in the following specific areas:

**Data Center and Small Ad Hoc Installations of Servers and Storage:**

A standardized data center survey checklist shall be used to record all elements of the data center, including:

- Type of building where the data center is located (mixed-use or dedicated);
- Type, capacity, and delivery of cooling equipment;
- Power available to site;
- Back-up power generation capacity, including fuel capacity and operation hours without refueling;

- Indicate if power is dedicated to the data center or if shared by other building tenants or offices;
- Indicate if raised floor or solid floor;
- Identify use of cabling (ladder rack, under floor, etc.); and,
- Assess general condition of data center.

**Communication and Connectivity:**

Identify and record types/vendors/capacity of switching, routing, optical, and transmission equipment. Contractor will also identify the telecom carrier or network providing access and connectivity to each data center. Identify topology of local area networks (LANs) and external connections.

**Servers, Storage, and Virtualization:**

The survey shall include types (including by manufacturer) and capacity of all server, storage, hardware and network infrastructure of the virtualization system. If virtualization is used, Contractor should identify the type of virtualization used (e.g., VMWare), and the approximate number of virtual machines. If Cloud computing (Infrastructure as a Service 'IaaS') is used, indicate the hypervisor, orchestration engine, and approximate number of virtual machines provisioned.

### **Interoperability and External Interfaces:**

Contractor shall audit external interfaces for applications running in data centers. This will include internal application to application interfaces, as well as external interfaces. Contractor should include any standards used, such as European Union (EU), Shengen, or World Health Organization (WHO) where used to provide interoperability with either internal or external interfaces.

### **Standards, Audits, and Governance:**

Contractor shall record all standards used within the data center and application environment, including data center construction, operations, security, and data management, for national and international standards.

Contractor will list requirement and actual completion of audits and governance process for all operations and facility management.

**Task 2 Deliverable:** A report covering the Data Operations and Connectivity Needs Assessment as described above. Survey results shall be prepared in the form of tables for quantitative results, and narrative for qualitative results, or those items requiring detailed explanations. The Contractor shall submit two (2) copies of a draft version of this report to the Grantee. The Grantee shall be given reasonable time to review the draft report and to propose modifications or amendments (if any) for incorporation into the final version of the report. In the event that substantive modifications or amendments are proposed, the Contractor shall prepare and submit to the Grantee two (2) revised copies of the report, duly incorporating the proposed modifications or amendments.

### **Task 3: Establishment of Target Architecture and Plan**

The Contractor will coordinate with the Grantee to identify the business goals and strategic drivers of the Grantee to establish a target architecture and Grantee ICT capability. The Contractor will secure endorsement of the target architecture by the Grantee prior to starting Task 4.

Based on the stakeholder concerns, business capability requirements, scope, constraints, and principles, the Contractor will create a high-level view of the baseline and target ICT architectures. The Architecture Vision covers the breadth of scope identified for the Project, at a high level. The Contractor shall create a simple solution concept diagram that illustrates concisely the major components of the solution and how the solution will result in benefits for the Grantee's four central units and 15 subordinated units.

The Contractor shall develop target descriptions for the Grantee's business architecture, as needed to support the Grantee's architecture vision. The scope and level of detail to be defined will depend on the relevance of the business elements to attaining the target architecture vision, and on whether architectural descriptions exist.

This step generates the first, high-level definitions of the baseline and target environments, from a business, information systems, and technology perspective.

Within this task, the Contractor shall:

- Define high level data center requirements;
- Promote design criteria using energy efficiency and "green" technologies for electrical distribution, cooling systems, and computer room layouts;
- Define high level requirements for virtualization, and cloud computing components as identified within the scope of the consolidation project;
- Define requirements for disaster recovery and operations continuity;
- Define requirements for interoperability and standardization;
- Define compliance, audit, and governance requirements;
- Define the target architecture value propositions and desired key performance indicators;
- Develop a justification for the architectures and changes required;
- Produce a value proposition for each of the stakeholder groupings;
- Review and agree on the value propositions with the sponsors and stakeholders concerned; and,
- Define the performance metrics and measures to be built into the enterprise architecture to meet the business needs.

### **Sub-Task 3.1 - Collect Target Architecture Requirements**

The Contractor shall work with the Grantee to collect and identify all required components and visions from the four central units and 15 subordinated units and relying organizations.

Areas of primary concern for the four central units and 15 subordinated units will fall within the following categories:

- Central or consolidated data center;
- Energy efficiency;
- Connectivity or telecom/bandwidth;

- Disaster management and continuity of operations;
- Data and applications interoperability;
- Virtualization and potential of cloud computing;
- Standardization;
- Compliance (including personally identifiable information 'PII' data); and,
- Human resources, including new or special skill sets.

### **Sub-Task 3.2 - Develop High Level Target Architecture**

The Contractor shall arrange one or more workshops to engage the Grantee's four central units and 15 subordinated units, subordinate ICT managers, and relying organization managers to use target architecture requirements to develop a high level target architecture.

High level target architecture will accommodate as a minimum, resources that are common to all organizations. Unique target requirements may be established as a second priority, or as an exception as determined by the Grantee.

High level architecture will address facility requirements, connectivity requirements, disaster management requirements, and potentially shared computing, storage, and application resources.

Special consideration should be given to ensuring target architecture promotes energy efficiency. The Contractor will incorporate energy efficient or "green" equipment supporting electrical distribution, cooling systems, and computer room layouts into the design. The design should incorporate best-practices such as hot or cold aisle containment, air side economization, variable speed fans, and other practices which limit the amount of energy loss.

High level architecture will ensure all priority organizational business needs and requirements are met by components included within the architecture.

Contents of the high level target architecture shall include:

- Project scope;
- Project goals, objectives, and constraints;
- Architecture principles;
- Baseline Architecture;
- High Level Target Architecture Model, including:
  - Business Architecture models;

- Data Architecture models;
- Application Architecture models;
- Technology Architecture models (including facility and virtualization);
- Rationale and justification for architectural approach;

### **Sub-Task 3.3 - Stakeholder Approval**

Contractor and Grantee will present output from the high level target architecture to both project executive sponsor and stakeholders from each supported agency and relying agency.

A workshop shall be arranged by Contractor to deliver the target architecture.

If the central units and 15 subordinated units require changes, those changes should be incorporated into the high level target architecture.

**Task 3 Deliverable:** The Contractor shall deliver a high level target architecture providing a detailed set of stakeholder requirements, facility requirements, best practices in energy efficiency, common and critical standards, interoperability requirements, security, disaster management, compliance and governance, human resources needed to fulfill target architecture objectives. The Contractor will obtain the Grantee's written agreement with the target architecture plan prior to starting Task 4.

### **Task 4: Gap Analysis**

The Contractor shall conduct a Gap Analysis. The Contractor shall take the baseline capabilities established in Task 2, the Target Architecture defined in Step 3, and create a map of shortfalls and development requirements needed to bring the Grantee up to the target architecture.

#### **Gap Analysis Methodology**

The target architecture must support all of the essential information processing needs of the organization today, and be flexible enough to meet long term vision requirements established by four central units and 15 subordinated units. The most critical source of gaps that should be considered are the Grantee's concerns that have not been addressed in prior architectural work, sources of high risk (such as disaster management), and construction scope or sizing requirements. The analysis shall include the following:

- Facility requirements;
- Disaster management;
- Supporting hardware (e.g., servers, switching/routing, storage);
- Applications;
- Human capacity;
- Standards; and,
- External interfaces.

The Contractor shall produce the Gap Analysis in a tabular format, showing the baseline, target, and gap. The gaps will identify specific development requirements for the Project. The Gap Analysis will also identify items in the baseline that will be either eliminated or decommissioned in the process of meeting the Target Architecture.

**Task 4 Deliverable:** The Contractor shall create a detailed Gap Analysis identifying the baseline architecture, target architecture, development requirements (gaps), and items in the baseline architecture that will be decommissioned or eliminated during the course of the project.

#### **Task 5: Project Solution Development**

The Contractor shall determine how to deliver the Grantee's Project architecture. The Contractor shall take into account the complete set of gaps between the Target and Baseline Architectures identified in Task 4, and logically develop solutions as needed to address those gaps. Through this effort, the Contractor shall build a best-fit roadmap that is based upon the stakeholder requirements, government business transformation readiness, identified opportunities and solutions, and to identify implementation constraints. The key is to focus on the final target while realizing incremental business value.

Solution development acknowledges that the target architecture cannot be accomplished in a single step, and will thus accommodate a series of prioritized transition phases that will allow a road map of both development and implementation steps needed to fulfill the requirements of the target architecture.

#### **Sub-Task 5.1 - Solution Development**

- Facility requirements: The Grantee desires to construct a new data center to accommodate IT equipment and communications equipment needed to fulfill requirements of the Grantee and other relying organizations. The Contractor shall perform facility planning, including all data center construction

requirements and capacity requirements identified in the Gap Analysis. Facility planning shall be done referencing international or specific data center planning standards or recommendations, such as TIA 942-2, BICSI 002-2011, Uptime Institute Tier Standards, or other acceptable data center planning references.

- Disaster management: The Contractor shall develop a comprehensive disaster recovery and continuity of operations plan. This plan shall include the requirement for an alternate processing facility, data backup, continuity operations support hardware and network or communications connectivity, and operations continuity.
- Supporting hardware (e.g., servers, switching/routing, and storage): The Contractor shall develop a plan identifying required hardware needed to support colocation, virtualization, and the potential of cloud computing within the data center. The actual amount of computer, storage, and communications equipment capacity shall be based on the results of stakeholder surveys and the previous analysis of baseline vs. target architectures.
- Applications: While it is anticipated that individual stakeholder organizations will have unique applications supporting their individual functions, the Project will also require consideration of new software and applications to support virtualization, cloud computing, shared data and applications, as well as upgraded facility management (BMS), network management (NMS), and customer management (including provisioning). The Contractor shall identify and establish application requirements for a future tender for each application.
- Human capacity. The Grantee's Consolidation and Modernization project will require new technical skills, as well as service delivery and orchestration skills. The Contractor shall determine requirements for a high level training program or skills development program to ensure operations and customer service plans meet all stakeholder needs. The Contractor shall make recommendations regarding development of a new organization chart or reporting structure.
- Standards. All data center, disaster management, application development and interoperability require reference to standards. The Contractor shall reference international, national, or local standards (where other standards do not exist or a unique requirement justifies creation of a local standard) in all aspects of development. Where a standard does not exist, the Contractor shall

clearly identify there is a lack of standard, and a need to develop a local “provisional standard” to allow reference for design or operations process. In addition, the Contractor shall keep in mind that where possible, equipment for the Project should be purchased by the Grantee from a single or limited number of vendors to enhance the ability for the Grantee to maintain volume purchasing agreements, strong service level agreements, and the ability to quickly employ equipment spares when facility, server, storage, or communications equipment fails and needs rapid replacement.

- External interfaces, interoperability, or application/data dependencies. The Project will address the need for the Grantee and its organizations to develop data and applications that are interoperable, or allow application level integration with common data sources. The Contractor shall ensure that applications and virtualization or cloud computing infrastructure in the solution comply with a “Cloud First” or “Virtualization” first policy. This will enhance the potential of developing standardized data bases, programming interfaces, security (including authentication and authorization), and supporting development of a service-oriented architecture (SOA) and government interoperability framework.

#### **Sub-Task 5.2 - Transition Architecture and Steps**

The Contractor shall develop a Transition Architecture that shows the enterprise at an architecturally significant state between the Baseline and Target Architectures. Transition Architectures are used to describe transitional actions necessary to reach the Target Architecture.

The Project is complex, and will require a series of transition steps based on an identified critical path, as well as prioritizing development and implementation requirements identified in the Gap Analysis.

The Contractor shall develop a Transition Architecture and steps including:

- Overall transition strategy;
- Definition of transition states;
- Business Architecture for each transition state;
- Data Architecture for each transition state;
- Application Architecture for each transition state;
- Technology Architecture for each transition state; and,
- Identifying stakeholders and cross agency system dependencies at each step.

The Transition Architecture and Steps shall include the following components (with select examples):

**NOTE:** Specific steps within the transition architecture are developed following the Gap Analysis. The following information provides a template for identifying and building transition architectures.

- Baseline Architecture
- Transition Architectures
  - Segment Architecture - Data Center Construction and Development
    - Sub-Project 1
    - Sub-Project 2
    - Sub-Project 3
    - Sub-Project 4
  - Segment Architecture - Disaster Management and Continuity Development
    - Sub-Project 5 - Develop interim backup solution and site
    - Sub-Project 6 - Identify permanent backup and continuity of operations site
    - Sub-Project 7 - Develop disaster management and continuity of operations standards
  - Segment Architecture - Supporting Hardware (e.g., servers, switching/routing, storage) identification, procurement, and installation
    - Sub-Project 8
    - Sub-Project 9
    - Sub-Project 10
  - Segment Architecture - Applications identification, procurement, and installation
    - Sub-Project 11
    - Sub-Project 12
    - Sub-Project 13
  - Segment Architecture - Human capacity - recruiting, training
    - Sub-Project 14
    - Sub-Project 15
    - Sub-Project 16
  - Segment Architecture - Standards identification and governance
    - Sub-Project 17
    - Sub-Project 18
    - Sub-Project 19

- Cross Agency Dependency Identification
- Interim Target Architectures
- Target Architecture

### **Sub-Task 5.3 – Transition Architecture Workshop**

The Contractor shall prepare a one day workshop and visual presentation for the Grantee which shall focus upon sharing the Project process to date and the candidate Transition Architecture and Steps plan from Sub-Task 5.2. The Contractor shall provide three (3) case examples of data center, disaster recovery and operational continuity best practices for organizations that are similar in size and complexity to the Grantee. The Contractor shall facilitate a group discussion and shall record suggested ideas and / or requirements.

**Task 5 Deliverable:** The Contractor shall prepare solutions listed in Sub-Task 5.1. The Contractor shall prepare a Transition Architecture and Steps to guide the Grantee and relying organizations in meeting Target Architecture objectives. Contractor shall prepare the presentation and deliver the workshop as listed in Sub-Task 5.3.

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

The Contractor shall prepare an economic / financial analysis of the Project.

The principal objective of the economic / financial analysis is to estimate, to the extent practicable and for the Grantee's budgetary and planning purposes, the cost of implementation of the proposed Data Center.

The principal cost elements to be taken into consideration are:

- Equipment costs for equipping of the Data Center with mechanical and electrical infrastructure;
- Estimated costs for required networking systems and equipment;
- Estimated costs for major new systems to be installed in the Data Center, rather than migrated, if any;
- Estimated costs (which may be benchmarked) for migration to virtualization, under reasonable assumptions about the eventual virtualization configuration;
- Estimated construction costs for building a new national data center facility; and,
- Estimated service agreement costs as needed to maintain facility and IT equipment.

Estimated costs for the ongoing operation of the Data Center are outside the scope of the Project.

The Grantee reports that it does not presently have either the relevant data or a suitable methodology for baselining the current cost of operating the various data centers and small ad hoc installations of servers and storage. Accordingly, the Grantee is not currently in a position to estimate the likely cost savings that will accrue from the Project, through a comparison of the "as is" and "to be" environments. The Contractor shall develop and furnish the Grantee with an appropriate methodology and procedures, which the Grantee can utilize for collecting relevant cost data from current data centers and small ad hoc installations of servers and storage operations. The Contractor shall estimate the life cycle costing for the purpose of estimating and planning current operations, the likely savings in both hard costs (such as the cost of IT hardware and software and networking infrastructure) and soft costs (the costs associated with overheads such as IT management, power consumption, and data center operations/labor) that will accrue over a medium- to long-term time horizon (e.g., five to seven years).

The Contractor shall prepare a comparison of operational costs prior to consolidation and upon consolidation.

**Task 6 Deliverable:** The Contractor shall prepare a report presenting the findings of the economic / financial and life cycle costing analysis as described above, suitably documenting the assumptions that are made in arriving at the cost estimates. The report shall also include the methodology and procedures for collecting relevant cost data from data centers and small ad hoc installations of servers and storage, as described above. The Contractor shall submit the draft version of this report to the Grantee. The Grantee shall be given reasonable time to review the draft report and to propose modifications or amendments (if any) for incorporation into the final version of the report. In the event that substantive modifications or amendments are proposed, the Contractor shall prepare and submit to the Grantee a revised copy of the report, duly incorporating the proposed modifications or amendments.

#### **Task 7: Regulatory Analysis**

The Contractor shall determine if any regulations would impact the Project's viability or prognosis to move forward.

**Task 7 Deliverable:** The Contractor shall prepare a report presenting the findings of the regulatory analysis.

### **Task 8: Preliminary Environmental and Development Impact Analysis**

The Contractor shall conduct a preliminary review of the project's anticipated impact on the environment with respect to local and international standards and requirements (for example multilateral development banks). This review shall identify potential negative and positive impacts, discuss the extent to which the negative impacts can be mitigated and develop plans for a full environmental impact assessment when the project moves forward to the implementation stage. This review shall highlight the positive impacts, including power savings, that greenfield data centers provide. In this assessment, the Contractor shall analyze the power requirement for the data center and its impact on the environment.

The Contractor shall assess the development benefits associated with the project and the methodology for measuring those benefits. The Contractor shall include examples of the development benefits that would be expected in the host country if the project is implemented as outlined in the FS. The Contractor shall focus on examples from the categories listed below and shall develop a methodology for assessing these impacts over time. The Contractor shall only list benefits in the categories that are applicable to the project. The categories to be considered are as follows:

- Infrastructure (e.g. data center capacity);
- technology transfer and productivity;
- revenue creation;
- human capacity building;
- market oriented reform (if applicable); and,
- financial and economic security.

**Task 8 Deliverables:** The Contractor shall prepare the following reports:

- A report presenting the findings of the preliminary environmental analysis; and
- A report presenting the findings of the preliminary developmental impact analysis.

### **Task 9: Identification of Potential U.S. Suppliers**

The Contractor shall provide a list of the procurements that are likely to be subject to competitive tenders in which international suppliers can participate and a list of the equipment and services that are likely to be imported for project implementation.

**Task 9 Deliverable:** The Contractor shall prepare the list of U.S. Suppliers, including a list of the procurements that are likely to be subject to competitive tenders in which

international suppliers can participate, and a list of the equipment and services that are likely to be imported for project implementation.

**Task 10: Assessment of Financing and Investment Resources**

The Contractor shall identify and determine requirements and procedures for potential financing resources for the data center project, including assessing the Grantee's internal financing options and established lines of credit, funding from the Romanian State Budget, EU Structural Funds, the European Bank for Reconstruction and Development (EBRD), World Bank, as well as European banks, and US, regional and multi-lateral financing institutions. The Contractor shall contact the Export-Import Bank of the United States (Ex-Im) and the Overseas Private Investment Corporation (OPIC) to assess their ability to finance and / or insure potential U.S. businesses that invest in or locate their data in the Grantee's data center.

**Task 10 Deliverable:** The Contractor shall prepare a written summary of the Grantee's potential financing resources for the data center project including all contacts, willingness to fund, type of financing and any other related financing and investment parameters.

**Task 11: Preparation of Implementation Plan**

The Contractor shall prepare a timeline and implementation plan that correlates to the deliverable in Task 5 - Project Solution Development. The Contractor shall prepare and deliver a final presentation that identifies the final recommendations and Project findings to the Grantee.

**Task 11 Deliverable:** The Contractor shall prepare the timeline and implementation plan including different phases and budget for each phase. The plan should also include a facility, staffing and operations planning forecast. The Contractor shall prepare and deliver a final presentation that identifies the final recommendations and Project findings to the Grantee.

**Task 12: Preparation of the Request for Proposals (RFP)**

12.1 The Contractor shall prepare the engineering design, construction, supply, installation, commissioning, and maintenance support plan and develop RFP specifications for development and construction of the Project. The Contractor shall ensure that the RFP is consistent with the Grantee's project objectives and that the RFP clearly requests a response regarding all technical and operational parameters required, including but not limited to:

- Functional requirements (specification for the data center, including maintenance, security, and fire protection);
- Technical requirements (including scalability, disaster management, monitoring);
- Financial requirements (cost (initial and ongoing), training, etc.);
- Organizational requirements (staffing, department management and / or reorganizations);
- Business requirements (operations, processes, activities, documentation);
- Training needs;
- Implementation and construction time frame, plan and schedules;
- Commissioning schedule and plan;
- Deliverables;
- RFP bidding rules and evaluation criteria;
- Sample contract (should a vendor be selected); and,
- Other points to be determined by the Contractor and Grantee

The Contractor will work with the Grantee to finalize the RFP for external distribution and to define final data center requirements and issues, including any staffing and training needs that must be addressed by bidders as part of the data center implementation. The Contractor will ensure that the Grantee is fully informed and active in the RFP planning and release process. The Contractor will work with the Grantee to create a short list of vendors who will receive the RFP and will ensure that procedures are in place to allow the RFP process to be fair, open and transparent.

The Contractor shall work with the Grantee to develop the RFP evaluation criteria and methodologies and ensure that state-of-the-art international RFP evaluation procedures are in place for evaluating vendors' responses to the RFP. The Contractor shall develop a timeline for the RFP release, receipt of responses and evaluation, and document the anticipated timeline for the final negotiation and project award. The Contractor shall document any concerns that can support or hinder the RFP release and follow-on procurement process.

**Task 12 Deliverable:** The Contractor shall prepare the RFP specifications for the Grantee's data center defining the final Grantee solution requirements and issues,

including any staffing and training needs that must be addressed as part of the data center construction and operation. The Contractor shall deliver a short list of vendors, with contact information, and document procedures to ensure that the RFP process will be fair, open and transparent.

The Contractor shall prepare RFP evaluation criteria and methodologies and a timeline for the RFP release, receipt, and evaluation, and the anticipated timeline for the final negotiation and project award. The Contractor shall document any concerns that can support or hinder the RFP release and follow-on procurement process.

**Task 13: Preparation of the Final Report**

The Contractor shall prepare and deliver to the Grantee and USTDA a substantive and comprehensive final report of all work performed under the Terms of Reference (“Final Report”). The Contractor shall first prepare a Draft Final Report for submission to the Grantee. The Contractor shall give adequate time to the Grantee to review the Draft Final Report and to propose modifications or amendments (if any) for incorporation into the Final Report.

The Final Report shall be organized in accordance with the sequence of tasks performed, as described above, shall comprise a substantive and comprehensive report of the work performed in Tasks 1 through 12, and shall include all deliverables and documents that have been provided to the Grantee. The Contractor shall ensure that no Romanian classified information is included in the Final Report. The Final Report shall give an account of problems that were encountered in the course of the Study and of any problems that can reasonably be anticipated in the future, together with any corresponding recommendations. The Final Report shall be prepared in accordance with Clause I of Annex II of the Grant Agreement.

## ANNEX 6



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

### U.S. Firm Information Form

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

USTDA Activity Number [To be completed by USTDA]

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

Full Legal Name of U.S. Firm

Business Address (street address only)

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

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

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

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

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

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

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

#### Project Manager

Name	Surname	
	Given Name	

Address

Telephone

Fax

Email

#### Negotiation Prerequisites

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

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

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

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

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

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

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

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

Name		Signature	
Title			
Organization		Date	





**ATTACHMENT B**

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

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

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

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

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

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



**ATTACHMENT C**

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

**Subcontractor Information Form**

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

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

Activity Title [*To be completed by USTDA*]

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

Full Legal Name of Subcontractor

Business Address of Subcontractor (street address only)

Telephone Number

Fax Number

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

**Subcontractor Point of Contact**

Name

Surname

Given Name

Address

Telephone

Fax

Email

**Subcontractor's Representations**

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

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

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

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

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

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

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

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

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

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

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