Iraq Governance and Performance Accountability Project (IGPA)

Request For Proposals (RFP)

RFP-DAI-IGPA-BAG-20-021

Landfill Rehabilitation and Transfer Station
Issue Date: November 29, 2020

WARNING: Prospective Offerors who have received this document from a source other than the (Iraq Governance and Performance Accountability Project (IGPA), Baghdad-Iraq), should immediately contact (ProcurementIGPA@dai.com) and provide their name and mailing address in order that amendments to the RFQ or other communications can be sent directly to them. Any prospective Offeror who fails to register their interest assumes complete responsibility in the event that they do not receive communications prior to the closing date. Any amendments to this solicitation will be issued and posted in the same announcing website, where offerors are encouraged to check the website periodically.

DAI conducts business under the strictest ethical standards to assure fairness in competition, reasonable prices and successful performance or delivery of quality goods and equipment. DAI does not tolerate corruption, bribery, collusion or conflicts of interest. Any requests for payment or favors by DAI employees should be reported as soon as possible to ethics@dai.com or by visiting www.dai.ethicspoint.com. Further, any attempts by an offeror or subcontractor to offer inducements to a DAI employee to influence a decision will not be tolerated and will be grounds for disqualification, termination and possible debarment. See provision No. 9 for more details.

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Synopsis of the RFP

RFP No.	RFP-DAI-IGPA-BAG-20-021
Issue Date	November 29, 2020
Title	Landfill Rehabilitation and Transfer Station
Issuing Office & Email Address for Submission of Proposals	DAI - Iraq Governance and Performance Accountability Project, Baghdad Office Al Rasheed Tulip Hotel - Baghdad, Iraq *(only electronic copy of the proposals will be accepted)* IGPAProcurementINBOX@dai.com
Deadline for Receipt of Questions	December 07, 2020, 12:00 PM Baghdad Time zone *E-mail subject line must contain solicitation number and title:* " *RFP-DAI-IGPA-BAG-20-021* Landfill Rehabilitation and Transfer Station*".* All questions received will be compiled and answered in writing and distributed to all interested Offerors
Bidders' Conference	A Pre-Proposal Bidders' Conference is scheduled for December 08, 2020, 03:30 PM Baghdad Time zone, via Microsoft teams through the following link: **Microsoft Teams meeting** **Join on your computer or mobile app:** https://teams.microsoft.com/l/meetup-join/19%3ameeting_N2ZmNzc4MTItYjA4OC00OTQ0LWE0NmUtMDcwZTRkNDU0MGFm%40thread.v2/0?context=%7b%22Tid%22%3a%227107113d-e20b-4c20-a4ce-553cabbf686d%22%2c%22Oid%22%3a%2225a36aa3-05a2-40bb-adb9-48c604643627%22%7d **Video Conference ID: 114 346 613 9** **164285629@teams.bjn.vc**
Deadline for Receipt of Proposals	December 20, 2020, 12:00 PM Baghdad Time zone *E-mail subject line must contain solicitation number and title:* *RFP-DAI-IGPA-BAG-20-021* Landfill Rehabilitation and Transfer Station*".*
Point of Contact	Please send your questions *only* to ProcurementIGPA@dai.com
Anticipated Award Type	DAI anticipates issuing a subcontract agreement Issuance of this RFP in no way obligates DAI to award a subcontract or purchase order, and offerors will not be reimbursed for any costs associated with the preparation of their bid.
Basis for Award	An award will be made based on the Trade-Off Method. The award will be issued to the responsible and reasonable Offeror who provides the best value to DAI and its client using a combination of technical and price factors.

1. Introduction and Purpose

1.1 Purpose

DAI, the implementer of the USAID-funded Iraq Governance and Performance Accountability (IGPA), invites qualified offerors to submit proposals to provide Landfill Rehabilitation and Transfer Station in support of program implementation.

1.2 Issuing Office

The Issuing Office and Contact Person noted in the above synopsis is the sole point of contact at DAI for purposes of this RFP. Any prospective offeror who fails to register their interest with this office assumes complete responsibility in the event that they do not receive direct communications (amendments, answers to questions, etc.) prior to the closing date.

1.3 Type of Award Anticipated

DAI anticipates awarding A Firm Fixed Price Subcontract This subcontract type is subject to change during the course of negotiations.

A Firm Fixed Price Subcontract is: An award for a total firm fixed price, for values more than $150,000, for the provision of specific services, goods, or deliverables and is not adjusted if the actual costs are higher or lower than the fixed price amount. Offerors are expected to include all costs, direct and indirect, into their total proposed price.

2. General Instructions to Offerors

2.1 General Instructions

"Offeror", "Subcontractor", and/or "Bidder" means a firm proposing the work under this RFP. "Offer" and/or "Proposal" means the package of documents the firm submits to propose the work.

Offerors wishing to respond to this RFP must submit proposals, in English, in accordance with the following instructions. Offerors are required to review all instructions and specifications contained in this RFP. Failure to do so will be at the Offeror's risk. If the solicitation is amended, then all terms and conditions not modified in the amendment shall remain unchanged.

Issuance of this RFP in no way obligates DAI to award a subcontract or purchase order. Offerors will not be reimbursed for any costs associated with the preparation or submission of their proposal. DAI shall in no case be responsible for liable for these costs.

Proposals are due no later than **December 20, 2020, at 12:00 Baghdad Time**. An electronic copy of the Technical Proposal and an electronic copy of the Price proposal to be submitted to (IGPAProcurementINBOX@dai.com) (this is a strict access controlled e-mail account set up ONLY to receive solicitation responses), RFP number and title of the activity must be stated in the subject line of the e-mail.

Late offers will be rejected except under extraordinary circumstances at DAI's discretion.

The submission to DAI of a proposal in response to this RFP will constitute an offer and indicates the Offeror's agreement to the terms and conditions in this RFP and any attachments hereto. DAI reserves the right not to evaluate a non-responsive or incomplete proposal.

Offerors are required to review all instructions and specifications included in this RFP thoroughly.

Failure to agree and comply with the specifications of this RFP will result in offerors being considered unresponsive, and the proposal may be rejected.

2.2 Proposal Cover Letter

A cover letter shall be included with the proposal on the Offeror's company letterhead with a duly authorized signature and company stamp/seal using Attachment B as a template for the format. The cover letter shall include the following items:

- The Offeror will certify a validity period of 90 calendar days for the prices provided.
- Acknowledge the solicitation amendments received, if any.

2.3 Questions regarding the RFP

Each Offeror is responsible for reading and complying with the terms and conditions of this RFP. Requests for clarification or additional information must be submitted in writing via e-mail to ProcurementIGPA@dai.com by no later than the date/time specified above. No questions will be answered by phone. Any verbal information received from a DAI or (IGPA) employee or other entity shall not be considered as an official response to any question regarding this RFP.

Copies of questions and responses will be distributed in writing to all prospective bidders who are on record as having received this RFP after the submission date specified in the Synopsis above.

2.4 Pre-Proposal Bidders' Conference

A pre-proposal bidders' conference will be held on December 08, 2020, beginning at 03:30 PM Baghdad Time zone, **via Microsoft teams through the following link:**

https://teams.microsoft.com/l/meetup-join/19%3ameeting_N2ZmNzc4MTItYjA4OC00OTQ0LWE0NmUtMDcwZTRkNDU0MGFm%40thread.v2/0?context=%7b%22Tid%22%3a%227107113d-e20b-4c20-a4ce-553cabbf686d%22%2c%22Oid%22%3a%2225a36aa3-05a2-40bb-adb9-48c604643627%22%7d

Information of interest to all prospective Offerors will be presented. While attendance at the pre-proposal conference is not mandatory, all interested prospective suppliers are encouraged to attend in order to prepare acceptable proposals. Questions asked at the Pre-Proposal Bidder's Conference that would benefit all bidders shall be publicly advertised and provided in an amendment/ attachment to the RFP.

3. Instructions for the Preparation of Technical Proposals

Technical proposals shall be sealed in a separate envelope from price proposals and shall be clearly labeled as "VOLUME I: TECHNICAL PROPOSAL".

Technical proposals shall include the following contents

1. **Technical Approach** - Description of the proposed services that meets or exceeds the stated technical specifications or scope of work. The proposal must show how the Offeror plans to complete the work and describe an approach that demonstrates the achievement of timely and acceptable performance of the work. The Technical Approach under this RFP consists of two evaluation criteria;
   - Problem statement and evidence of local knowledge
   - Methodology
2. **Management approach** – Description of the Offeror's staff assigned to the project. The proposal should describe how the proposed team members have the necessary experience and capabilities to carry out the Technical Approach. The Management Approach consists of two evaluation criteria;
   - Organizational Management
   - Staffing

3. **Past Performance** –Provide a list of at least three (3) awards of similar scope and duration implemented over the past five years. The information shall be supplied as a table and shall include the legal name and address of the organization for which services were performed, a description of work performed, the duration of the work and the value of the contract, a description of any problems encountered and how it was resolved, and a current contact phone number of a responsible and knowledgeable representative of the organization.
   See Attachment F.

3.1 Services Specified

For this RFP, DAI is in need of the services described in Attachment A.

3.2 Technical Evaluation Criteria

Each proposal will be evaluated and scored against the evaluation criteria stated in the table below. Price proposals are not assigned points, but for overall evaluation purposes of this RFP, technical evaluation factors other than price, when combined, are considered significantly more important than price factors. The award will be made to the Offeror whose offer presents the best value and is the optimal combination of technical merits and reasonable cost.

Proposals will be evaluated and scored on technical aspects first. Only the price proposals of those offers that pass the minimum qualifying score of 70 points in the technical evaluation will advance to price evaluation. Proposals not reaching this qualifying score in the technical evaluation will be considered non-competitive and will not be evaluated.

Technical Competence as presented in the Technical Proposal with the possible 100 points in total made up as follows:

Technical Competence – presented in the Technical Proposal	**(100 points in total)**
Technical Approach	**(70 points)**
Past performance	**(30 points)**

Offerors shall provide a clear, specific, and concise technical proposal that covers both the conceptual and practical approaches and address the following, in the order specified below:

Item	Requirement	Points Available
TECHNICAL APPROACH		
1) Problem statement and evidence of local knowledge	Tenderer needs to demonstrate an understanding of current SWM general knowledge as it relates to landfill rehabilitation and redevelopment in Iraq or similar environments, and in particular: a) Standard of local landfills, and the major shortcomings with respect to environmental compliance and also site use efficiency. Landfill redevelopment requirements, in terms of the physical interventions required (5 points) b) Standard of local transfer stations, and the major shortcomings with respect to capacity and efficiency (5 points)	10 points

2) Methodology	Considering the Statement of Work, please describe in detail the following: a) The steps, in chronological order that you will take to implement the work both the landfill rehabilitation and transfer station upgrade parts. Make sure to describe any innovative approaches or technology you plan to use. This section should demonstrate the vendor implementation strategy with respect to obtaining the critical data required, both from office-based and field activities, for population and waste generation rates, topographical surveys, soil sampling for engineering classification, environmental surveys including soil and possibly groundwater sampling. (10 points) b) A description of similar projects you implemented or were closely involved with in the past and lessons you learned that will be incorporated into the activity described in this RFP. (5 points) Methodologies that indicate a greater practical understanding of implementing the work and more innovative yet realistic ways of carrying out the work will be scored more favorably than those that do not consider these factors. **(One to two pages maximum for items (a) through (b))**	15 points
MANAGEMENT APPROACH		
3) Organisational Management	Please provide and describe: a) An organizational chart that describes the proposed structure including the staff assigned to the project. The vendor should describe how the proposed team members have the necessary experience and capabilities to carry out the technical approach. (3 points) b) Description of the systematic management approach that demonstrates the capacity to complete work in a timely, satisfactory fashion, especially when covering the three municipalities to be involved. (7 points)	10 points
4) Staffing	Please provide the following, in order: a) A staffing plan for this activity that includes the following information for each proposed staff member (5 points): - Name and Proposed position on the team: - Summary of relevant expertise and experience	35 points

	b) CVs for the two Key Personnel should be provided as below, and should be no longer than one page in length. 1. One overall Project Manager requiring university-level education and at least 10 years' experience in managing similar projects preferably involving solid waste management, and especially waste management facilities such as transfer stations and landfills. (10 points) 2. SWM specialist/s with at least 10 years' broad SWM experience, preferably a master's degree or equivalent, experience in SWM generally, and SWM-related data gathering and review/assessment and managing topographic surveys and environmental sampling. It is essential to have experience working on landfill rehabilitation projects either in a lead or support role, or very similar programs in Iraq or similar environments (10 points) 3. SWM specialist/s with at least 10 years' broad SWM experience, preferably a master's degree or equivalent, experience in SWM generally and specifically relating to waste collection and haulage, and also SWM-related data gathering and review/assessment. It is essential to have experience working on the waste haulage or transfer projects either in a lead or support role, or very similar programs in Iraq or similar environments (10 points) Staffing plans that propose staff with qualifications and experience related to the tasks stated in this RFP will be evaluated more favorably than staffing plans that do not take these factors into consideration.	
PAST PERFORMANCE		
5) Past performance	Document and summarize your proven track record of successfully implementing exactly the same or similar activities. Using the table format provided below, please list only the projects you or your team have implemented within the past 5 years, a brief description of how each is relevant to this RFP and the contact details for each previous client or donor. You may also include recommendation/appreciation letters and certificates as attachments Offerors with past performance with similar projects, in the same geographic area and/or of similar scale to the activity described in this RFP, will be given higher scores than offerors that do not meet these criteria. If an Offeror has current/past performance	30 points

	working with DAI, they cannot be positively evaluated on this experience unless it is provided in the Offeror's proposal.	
Total		**100 points**

4. Instructions for the Preparation Price Proposals

Price proposals shall be in a separate document from technical proposals and shall be clearly labeled as "**VOLUME II: PRICE PROPOSAL**."

Provided in Attachment C is a template for the Detailed Budget and price Schedule for firm-fixed-price awards. Offerors shall complete the template, including as much detailed information as possible and submit in *PDF and Excel* formats.

It is important to note that the Value Added Tax (VAT) should not be included in the budget. The Subcontractor is responsible for all applicable taxes and fees, as prescribed under the applicable laws for income, compensation, permits, licenses, and other taxes and fees due as required.

5. Basis of Award

5.1 Best Value Determination

DAI will review all proposals and make an award based on the technical and price evaluation criteria stated above and select the Offeror whose proposal provides the best value to DAI. DAI may also exclude an offer from consideration if it determines that an Offeror is "not responsible", i.e., that it does not have the management and financial capabilities required to perform the work required.

Evaluation points will not be awarded for price. The price will primarily be evaluated for realism and reasonableness. DAI may award to a higher-priced offeror if a determination is made that the higher technical evaluation of that Offeror merits the additional price.

DAI may award to an Offeror without discussions. Therefore, the initial offer **must contain the Offeror's best price and technical terms.**

5.2 Responsibility Determination

DAI will not enter into any type of Agreement with an Offeror prior to ensuring the Offeror's responsibility. When assessing an Offeror's responsibility, the following factors are taken into consideration:

1. Business Registration: Please provide a copy of official Iraqi business registration and required license(s) to operate in Iraq (e.g., organization registration in Iraq, or/and the organization proxy registration in Iraq – in case of non-Iraqi organization, please submit home country business registration as well), the organization also must be eligible to perform work under applicable laws and regulations of Iraq.
2. Evidence of a DUNS number (explained below in section 8.4).
3. Provide confirmation that the source, origin, and nationality of the products or services are not from a Prohibited Country (explained below in section 8.3).
4. Offerors must have adequate financial resources to finance and perform the work or deliver goods or the ability to obtain financial resources without receiving advance funds from DAI (e.g. Bank Statement, … etc.).

5. Ability to comply with required or proposed delivery or performance schedules (e.g. detailed price schedule, … etc.)
6. Have a satisfactory past performance record (e.g. appreciation letters or previous performance evidence, … etc.).
7. Provide evidence to have the necessary organization, experience, accounting, and operational controls and technical skills (e.g. organizational structure, origination operation manual … etc.).
8. Insurance and Risk Allocation (as defined in **Attachment I**)
9. The Vendor is to submit proof of manuals, standard operating procedures, and/or internal policies, including human resource policies, which reflect a commitment to non-discrimination, equity and inclusion, and reporting mechanisms, including a whistleblower policy, for non-compliance with internal policies. If the Vendor is unable to produce the required documentation, the Vendor must be willing to work with IGPA/Takamul to receive training and support in the development of relevant policies.

6. Anticipated post-award Deliverables

Upon award of a subcontract, the payment will be made upon receipt of a properly executed tranche payment request, complete with a milestone report and applicable documentation for each deliverable as listed below. The Offeror should detail the proposed costs per deliverable in the Price Schedule. Payment shall be made only in accordance with approved milestones/deliverables and payment schedule, upon Technical Monitor approval of required documentation.

Milestone #	Milestone Description and Required Documentation	Payment Amount (%)	Anticipated Completion Dates
1	**Inception report including activity plan** • Kick-off meeting minutes, including the agenda, points of discussion, and decisions made. • Inception report - 10 pages (maximum) • Progress report number 1 (covering the period of week 1-4)	20%	End of Contract week 4
	Completion of site inspections and reporting • Submit six (6) consolidation reports (one for each of the 6 activities) of no more than 5 pages each • Progress report number 2 (covering the period of week 5-8)		End of Contract week 8
2	**Field survey, sampling and analysis** • Reports from the topographic, soils and environmental surveys - for all 3 landfill rehabilitation sites • Finalized spreadsheet tables for all 6 locations, using the spreadsheet proformas to be provided by IGPA/TAKAMUL • Progress report number 3 (covering the period of week 9-12)		End of Contract week 12

	Overview of rehabilitation approach for landfills and concept development for transfer stations • Rehabilitation approach for each of the three landfill sites, supported with sketches and calculations • Overview on the layout, spatial and equipment requirements for each of the three transfer stations (for both basic and premium options) • Progress report number 4 (covering the period of week 13-16)	30%	End of Contract week 16
3	**Draft report including costings and drawings <u>for rehabilitating one landfill and developing both options at one transfer station</u>** • Two draft reports in English only including designs, layouts, quantities and costs reflecting the agreed approach to rehabilitation at one of the three landfills, and one of the transfer stations (basic and premium options) • Progress report number 5 (covering the period of week 17-20)	30%	End of Contract week 20
	Draft rehabilitation reports including costings and drawings for remaining two landfills and two transfer stations • Revised draft reports for the first landfill and first transfer station, in both English and Arabic • Four (4) draft reports for the remaining two landfills, and remaining two transfer stations (basic and premium options) • All 6 draft reports to be in both English and Arabic, • Six workshop presentations for both landfill rehabilitation and transfer station concepts • Progress report number 6 (covering the period of week 21-24)		End of Contract week 24
4	**Completion of workshops and finalization of rehabilitation reports** • Completed workshop documentation (6 sets in total) • Final reports incorporating workshop feedback, in both English and Arabic, submitted to the relevant provinces/municipalities after IGPA review • Progress report number 7 (covering the period of week 25-28)	20%	End of Contract week 28
	Final Report • A 10-page (maximum) report for each of the six locations.		End of Contract week 32

7. Inspection & Acceptance

The designated DAI Project Manager will inspect from time to time the services being performed to determine whether the activities are being performed in a satisfactory manner, and that all equipment or supplies are of acceptable quality and standards. The subcontractor shall be responsible for any countermeasures or corrective action, within the scope of this RFP, which may be required by the DAI Chief of Party as a result of such inspection.

8. Compliance with Terms and Conditions

8.1 General Terms and Conditions

Offerors agree to comply with the general terms and conditions for an award resulting from this RFP. The selected Offeror shall comply with all Representations and Certifications of Compliance listed in Attachment G.

8.2 Prohibited Technology

Bidders MUST NOT provide any goods and/or services that utilize telecommunications and video surveillance products from the following companies: Huawei Technologies Company, ZTE Corporation, Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company, or any subsidiary or affiliate thereof, in compliance with FAR 52.204-25.

8.3 Source and Nationality

Under the authorized geographic code for its contract DAI may only procure goods and services from the following countries.

Geographic Code 935: Goods and services from any area or country, including the cooperating country, but excluding Prohibited Countries.

DAI must verify the source and nationality of goods and services and ensure (to the fullest extent possible) that DAI does not procure any goods or services from prohibited countries listed by the Office of Foreign Assets Control (OFAC) as sanctioned countries. OFAC sanctioned countries may be searched within the System for Award Management (SAM) at www.SAM.gov. The current list of countries under comprehensive sanctions include: Cuba, Iran, North Korea, Sudan, and Syria. Goods may not transit through or be assembled in comprehensive sanctioned origin or nationality countries nor can the vendor be owned or controlled by a prohibited country. DAI is prohibited from facilitating any transaction by a third party if that transaction would be prohibited if performed by DAI.

By submitting a proposal in response to this RFP, Offerors confirm that they are not violating the Source and Nationality requirements of the goods or services being offered and that the goods and services comply with the Geographic Code and the exclusions for prohibited countries outlined above.

8.4 Data Universal Numbering System (DUNS)

There is a **mandatory** requirement for your organization to provide a DUNS number to DAI. The Data Universal Numbering System is a system developed and regulated by Dun & Bradstreet (D&B) that assigns a unique numeric identifier, referred to as a "DUNS number" to a single business entity. Without a DUNS number, DAI cannot deem an Offeror “responsible” to conduct business with and therefore, DAI will not enter into a subcontract/purchase order or monetary agreement with any organization. The determination of a successful offeror/applicant resulting from this RFP/RFQ/RFA is contingent upon the winner providing a DUNS number to DAI. Offerors who fail to provide a DUNS number will not receive an award and DAI will select an alternate Offeror.

All U.S. and foreign organizations which receive first-tier subcontracts/ purchase orders with a value of $30,000 and above **are required** to obtain a DUNS number prior to signing of the agreement.

Organizations are exempt from this requirement if the gross income received from all sources in the previous tax year was under $300,000. DAI requires that Offerors sign the self-certification statement if the Offeror claims exemption for this reason.

For those required to obtain a DUNS number, see Attachment D - Instructions for Obtaining a DUNS Number - DAI'S Vendors, Subcontractors

For those not required to obtain a DUNS number, see Attachment E: Self Certification for Exemption from DUNS Requirement

9. Anti-Corruption and Anti-Bribery Policy and Reporting Responsibilities

DAI conducts business under the strictest ethical standards to assure fairness in competition, reasonable prices and successful performance or delivery of quality goods and equipment. **DAI does not tolerate the following acts of corruption:**

- Any requests for a bribe, kickback, facilitation payment or gratuity in the form of payment, gift or special consideration by a DAI employee, Government official, or their representatives, to influence an award or approval decision.
- Any offer of a bribe, kickback, facilitation payment or gratuity in the form of payment, gift or special consideration by an offeror or subcontractor to influence an award or approval decision.
- Any fraud, such as mis-stating or withholding information to benefit the offeror or subcontractor.
- Any collusion or conflicts of interest in which a DAI employee, consultant, or representative has a business or personal relationship with a principal or owner of the offeror or subcontractor that may appear to unfairly favor the offeror or subcontractor. Subcontractors must also avoid collusion or conflicts of interest in their procurements from vendors. Any such relationship must be disclosed immediately to DAI management for review and appropriate action, including possible exclusion from award.

These acts of corruption are not tolerated and may result in serious consequences, including termination of the award and possible suspension and debarment by the U.S. Government, excluding the offeror or subcontractor from participating in future U.S. Government business.

Any attempted or actual corruption should be reported immediately by either the offeror, subcontractor or DAI staff to:

- Toll-free Ethics and Compliance Anonymous Hotline at (U.S.) +1-503-597-4328
- Hotline website – www.DAI.ethicspoint.com, or
- Email to Ethics@DAI.com
- USAID's Office of the Inspector General Hotline at hotline@usaid.gov.

By signing this proposal, the offeror confirms adherence to this standard and ensures that no attempts shall be made to influence DAI or Government staff through bribes, gratuities, facilitation payments, kickbacks or fraud. The offeror also acknowledges that violation of this policy may result in termination,

repayment of funds disallowed by the corrupt actions and possible suspension and debarment by the U.S. Government.

10. Attachments

10.1 Attachment A: Scope of Work for Services or Technical Specifications

Concept Development Bundled Activity – Landfill Rehabilitation and Transfer Station

1. ACTIVITY PURPOSE

USAID-funded IGPA/Takamul project works on improving the delivery of services in Iraq (initially in the provinces of Baghdad, Basra, Babil, Erbil, Ninewa & Anbar), with specific focus on the services of electricity, water and solid waste management. However, the overall project is now extending geographically into new provinces, and it is these new provinces that will be the location for this proposed activity, namely:

- Wasit
- Najaf
- Maysan
- Muthanaa
- Salah Al-Din
- Diyala

Following on from pilot projects conducted internally, it is proposed to extend the concept development activities into further landfill rehabilitation studies (PART A) and transfer station activities (PART B). Whilst the two activities obviously have some different tasks, there is large amount of common effort required and similar technical skills and experience needs. Hence, the two activities will be run in parallel.

A. Landfill rehabilitation

Most of the solid waste dumping locations are being operated to a standard significantly less than that expected for a controlled or engineered landfill. As a result, there is significant potential for health and environmental impacts, as well as inefficient use of the site area.

The purpose of this activity is to survey the current sites, and prepare a design for remediation of the site, based on the procedure and designs already prepared for other local disposal sites. The approach will consider not only new works associated with rehabilitation construction activities but also sensibly integrating the rehabilitation works with the ongoing operation of the site in 3 municipalities. The location of the three municipalities within the list of six candidate provinces identified in Section 5 will be provided prior to contract commencement.

B. Transfer stations

Some provinces and municipalities have identified the benefits of incorporating a transfer system in their waste collection and haulage activities. To date most of these transfer stations are termed intermediary landfills and are simply open area dumping and reloading, which is both environmentally suboptimal and also involves double handling of the waste.

The purpose of this activity is to investigate engineered transfer stations for 3 municipalities and undertake the concept design and costings for two options (basic and premium options) with a view to improving collection efficiency and reducing environmental impact. The location of the three municipalities within the list of six candidate provinces identified in Section 5 will be provided prior to contract commencement.

2. BACKGROUND AND RATIONALE

A. Landfill rehabilitation

Most of the municipal solid waste disposal sites throughout Iraq are not being operated to a suitable standard. As noted above, this has both health and environmental impacts but also means that the life of the site is not being maximized. In many cases, the municipality charged with locating and operating the site believe current facilities are approaching full capacity which usually is not the case, and significant further life can be obtained from that facility. This means that an investment in upgrading the facility to a controlled landfill standard will not only reduce the environmental impact but also greatly increase site life. Therefore, by considering a whole of life costing, a relatively modest investment now will provide a large return as new landfill sites will not be required for many years.

A vendor will be commissioned to prepare a concept-level design and indicative drawings to guide the municipality on how to rehabilitate the site in a coordinated manner, including integrating the necessary landfill upgrades with the ongoing operation of the facility during construction. This has the major benefit of incorporating placement of ongoing wastes deliveries as part of the rehabilitation activities, thereby avoiding double handling of the waste. For example, it will be necessary to raise and increase the height and batter slopes at many sites and this can be partially achieved by simply placing new waste coming into the site into the correct location rather than having it dumped and then having to be relocated at a later date. This full integration of design, construction and operation will ensure the most efficient site development program is achieved both in terms of time and cost.

Part of the contract of the selected vendor will be to undertake topographic surveys and site investigation studies prior to the concept design commencing.

This will include firstly undertaking a topographical and features survey of the entire site noting the extent of waste currently deposited on the site (including height and external slopes of the waste mounds) as well as noting where the current tipping face is located compared with old waste piles, and noting where any waste is on fire. The survey will also locate and annotate key site features such as access roads, weighing facilities, buildings, lining systems, drains or watercourses and proximity to development such as housing estates. The survey will also produce a contour plan with 0.5 metre intervals.

The second site-works investigation will be to undertake a number of basic soil profiles by excavating temporary pits at the site as well as an environmental survey to assess the extent of contamination of soil and groundwater underneath the current dumpsite, if any. This will involve installing excavation pits to log soil profiles and collect soils samples to the depth of the excavator reach or water table (whichever comes first), and sampling local groundwater subject to the groundwater table being sufficiently high to be accessible in the excavator pits.

A key project hold point will then be agreement between the vendor, municipality, and USAID-funded IGPA/Takamul project advisors on the approach to remediation once the environmental site assessments and surveys have been completed.

For example, if the testing indicates that there has been no impact on the local groundwater resources and little contamination of soil at depth underneath the waste mound, and it is already a very large mound, then a simple retrofit of an external leachate interceptor drain and leachate management pump station facilities may be sufficient. This would be part of the reshaping of the whole mound and incorporating a new cell development approach. If it is just shallow piles of waste, then these old waste areas could be reshaped to form the base for a lined landfill to be constructed on top of the old waste after compaction and reshaping.

However, if it is determined that there is significant vertical migration of leachate into the soil profile underneath the site, and potential for this leachate to pollute the local groundwater resources, then the assessment of how to manage this waste, including possible relocation of old waste into a new landfill cell, will have to be discussed and agreed upon. Obviously, the new design will incorporate

features designed to prevent excessive rainwater infiltration into the mound in the future and therefore the generation of further excessive leachate volumes.

The concept design will follow the contemporary approach to landfilling where the waste is not placed in shallow broad areas which maximizes odor emissions, vermin access and leachate formation. Rather the waste will be constrained to the smallest footprint possible and placed in a steep sided mound. This will provide far greater site life and will address any concerns by the municipality officers that the sites are close to capacity merely because waste is placed over the majority of the site.

B. Transfer stations

A transfer station is an intermediate station between a collection point and the final disposal option, utilized in order to increase the overall efficiency of the system. If the disposal site is far from the collection area, it is justifiable to have a transfer station where the collection vehicles transfer their loads to larger vehicles, which then haul the waste to the disposal or processing site.

The existing "intermediary landfills" in some municipalities need to be investigated and upgraded to a structured purpose-built Transfer Station (TS). They are generally uncontrolled open areas at present, where waste is simply dumped onto the ground and then later reloaded into long-haul vehicles for carriage to the final dumping location. This upgrading will greatly improve the current environmental impacts from the current effectively open dumping of waste on the ground in an uncovered area.

A number of the larger municipalities already have engineered transfer stations and it is this model which the project will support rolling out to other municipalities under this activity.

The locations are to be based on the municipalities/provinces having facilities, or wishing to establish facilities, that satisfied the following criteria:

- Site is owned or leased by the municipality/province
- Site has appropriate permits/approvals
- At least 200 tons of waste enters the transfer station site per day (TPD)
- Is improperly constructed and requires upgrade, including unimproved open space.
- Has sufficient land area to install a formal transfer station (minimum 1.5ha for transfer stations handling less than 1,000 TPD)
- Space for external access roads for large capacity truck and trailers

3. OBJECTIVES

A. Landfill rehabilitation

The general objective of the scope of work is to support three municipalities to be selected from the six provinces listed in Section 5 in improving the socio-environmental standard of their waste disposal sites, and in parallel, extending the life of the facility. Part of this intervention will be to rehabilitate the existing dump sites to reduce the environmental and health impacts from the current facilities:

- to ensure, through an inclusive and staged process, that the municipalities have a better understanding both of the theory and on-site operational training on how their current dumpsites can be rehabilitated and then correctly operated;
- to substantially reduce the current environmental and health impacts from the substandard dumpsite operation;
- to extend the life of the disposal site; and
- to sensibly integrate the design, rehabilitation construction works and ongoing operation into one package to minimize costs, accelerate the overall works program and reduce double handling of waste by incorporating the placement of fresh waste within the rehabilitation program.

B. Transfer stations

The general objective of the scope of work is to support three municipalities to be selected from the six provinces listed in Section 5 in improving the standard of operation at waste transfer sites, and in parallel, to rehabilitate/clean-up the existing site to reduce the environmental and health impacts from the current facilities:

- to ensure, through an inclusive and staged process, that the municipality has a complete understanding both of theory and on-site operational training on how their current intermediary landfill (informal transfer station) can be rehabilitated/cleaned-up and then correctly operated;
- to substantially reduce the current environmental and health impacts from the substandard intermediary landfill (informal transfer station) operation;
- to substantially improve the current waste haulage and transfer efficiencies;
- to ensure that gender and disadvantaged community concerns are mainstreamed and addressed at all stages; and
- to prepare two concept design options (one basic and one premium design option) that will achieve the above requirements or the municipality/province to consider and then select their preferred option

4. STATEMENT OF WORK

For each of the total of six project locations (3 for landfill rehabilitation and 3 for transfer stations), the selected vendor will perform the following tasks:

1. **Kickoff meeting**. Vendor to attend with the IGPA specialists to discuss the prior landfill rehabilitation concept designs and reports prepared by IGPA/TAKAMUL, and provided to the vendor to be used as the basis of future concept development.
    a. At this meeting, the parties will agree in overview what sections of the supplied material will require replacement or updating following investigation at each new site. This applies to both the landfill rehabilitation and the transfer station activity. **(Apart from changes to spreadsheets and associated quantities and numbers throughout the report, it is expected that in the order of only 10 pages of text will have to be changed in the report for each site. However this will have to be changed in both the English and Arabic versions of the reports. Similarly, many of the drawings from the previous internal reports will be very similar to those required for the new sites and in some cases will only require dimensional changes rather than complete re-drafting. About 12 drawings will be required for each location.)**
    b. IGPA/TAKAMUL will provide letters of introduction to the government officials for the relevant provinces/municipalities, and recommendations to both the vendor and the provinces/municipalities on which municipal and provincial staff should attend the various meetings.
    c. Collectively finalize the separate questionnaires for the two parts to be submitted within the first week to the provinces and municipalities seeking all the required data, including aspects relevant to each Part such as daily waste tonnages, hourly variation of waste tonnages coming to the transfer station, operating hours of both the transfer station and landfill receiving the waste, current haulage fleet both into the transfer station and transfer back vehicles hauling waste to the landfill, population projections and associated likely increase in waste tonnages over the next 20 years, soil types, depth to water table, etc.
    d. IGPA/TAKAMUL will confirm all required reporting requirements for meetings, workshop events and any training, such as appropriate attendance sheets , photographic responsibilities, and any other reporting requirements required by the

MEL or other IGPA/TAKAMUL departments. Indicative requirements are listed in Section 6.1 below.

e. Vendor to review the kick-off meeting minutes for the meeting held with IGPA/Takamul. The minutes should include the agenda, points of discussion, and decisions made.
f. Vendor to prepare the inception report will consist of a 10 pages (maximum) report that presents the Vendor roadmap for the activity stages with regard to project implementation with dates agreed for the initial visits to the municipalities and the detailed site inspections of the three landfills and the three transfer station sites, implementation approach and timing for the LANDFILL topographical and features survey, soil classification and environmental sampling of soils and groundwater where appropriate, and other stated deliverables.

2. **Site Meetings.** The vendor will arrange all logistics for meetings with the agreed municipal and provincial representatives to address the following:

    a. Meet with the municipal and provincial representatives to explain the project;
    b. Obtain, review and discuss all information and data resulting from the previously submitted questionnaire, such as growth projections, waste tonnage estimates including temporal variation where appropriate, site boundaries, local soil types, et cetera;
    c. Arrange to visit the 3 existing landfills and the 3 proposed transfer station sites in company with provincial/municipal and IGPA/TAKAMUL representatives; and
    d. When necessary assist in confirming the suitability of a new transfer station site if one has not already been identified by the municipality and the existing transfer facility site is unavailable for upgrading.

3. **Detailed data review and site inspections.**
    a. Undertake detailed inspections of the dumpsites to be rehabilitated, and the proposed transfer station sites to be upgraded (or the proposed new greenfield site for the transfer station, as appropriate)
    b. Review and discuss all the supplied data, by comparing it with what has been observed on site and from discussions with site personnel. Particular attention needs to be paid to the daily waste all tonnages to be managed and population and tonnage projections to allow the life of the rehabilitated landfill site or the proposed transfer station to be sensibly estimated. These items will almost definitely require follow-up discussions or paperwork review following the site inspection, such as reviewing waste truck haulage records or weighbridge data to ensure that the best possible waste tonnage projections can be made. For the transfer station, it will be critical to understand diurnal variation on waste tonnages as it relates to the storage capacity and overall sizing requirements.
    c. Vendor to undertake an audit of the heavy equipment and other facilities available on site, such as weighbridges, excavators, bulldozers and other heavy equipment to determine if additional equipment will be required to correctly operate a facility receiving the reported waste tonnages. These items should be included in the budget estimates to be completed once the concept design/s is/are agreed by IGPA/TAKAMUL and the provincial/municipal representatives.
    d. Submit six (6) consolidation reports (one for each of the 6 locations) of no more than 5 pages each, summarizing the findings to date

Part A only – landfill rehabilitation

a. Specifically review all available hydrogeological data for the sites, including soil stratigraphy, the depth to groundwater, and the local uses of this groundwater resource, etc., and compare this with the information obtained during the site inspections. During the site inspection, take particular note of these local soil types and presence of any groundwater, together with viewing local pits or embankments which may assist in determining the local soil stratigraphy and depth to groundwater. (This information will be confirmed by the hydrogeological studies to be completed as part of the second survey activity)
b. Confirm the physical extent of the features and topographical survey to be undertaken, and update the specification for undertaking the topographical and features survey at each of the three sites. The sample topographical and features survey scope of works is enclosed as **Appendix A**.
c. Confirm the soil investigation and environmental survey scope to be undertaken, including the location and number of test pits to be excavated to confirm soil profiles, undertaking in situ permeability tests, collecting soil and possibly groundwater samples for laboratory assessment of contamination with depth, et cetera. The full soil sampling and environmental scope of work is enclosed as part of **Appendix B**.

4. **Site Surveys.**

4A. LANDFILLS

a. Undertake in-house, or commission external parties to undertake, the topographical and features survey and environmental survey at each landfill site.
b. The contracted vendor may have survey skills in house in which case they should proceed with undertaking the topographical and features surveys, as per the approach specified in Appendix A. For budgeting purposes, it may be assumed that a 20 ha area will need to be surveyed, at each landfill.
c. Concurrently undertake the soils engineering and environmental survey, and have a soils technician log the soil stratigraphy in the test pits, as well as take soil samples for laboratory analysis from the agreed locations and levels. For budgeting purposes, it may be assumed that nine test pits will be excavated with full soils logs using USC classifications recorded in the 3 main pits and logged in general in the remaining 6 pits, and three infiltration tests conducted in situ, at each landfill.
d. If pit excavations confirm that the groundwater is within a few metres of the surface, then groundwater samples will be collected, preserved and submitted together with the soils to the environmental laboratory for the agreed tests. The list of laboratory tests required for the soils and any groundwater are presented in Appendix B.
e. If the surveys and sampling are contracted out to a third party, then the vendor must supervise all survey activities to ensure compliance with the scope of works.
f. Submit all soil and groundwater samples to the laboratory for analysis for the tests listed in Appendix B.

4B. TRANSFER STATIONS

Determine the site's upper soil profile and confirm that reasonable excavation depths are possible (meaning rock, if any, is rippable to a depth of 1 to 2 m) and that there is sufficient

soil on site to be able to construct the grade separated areas. This can be done simply by inspection when visiting the site, and if there is any doubt, by asking the representatives to use on-site equipment to excavate sample pits.

5. Prepare the population, waste generation rates, landfill airspace and transfer station footprint requirements.

a. Following agreement on the key waste and population data, the table proformas supplied by IGPA/TAKAMUL should be populated to calculate the waste delivery mass and timing for the transfer station concept development, and also allowing the waste volumes over the next 20 years to be calculated.
b. For the transfer station specifically, this will include the population and associated waste generation rates (addressing critical diurnal temporal variations), waste buffer storage volumes and footprint requirements for the hard stand areas, access roads, parking areas and site infrastructure such as buildings and weighbridges
c. For the landfill specifically, the second of spreadsheet supplied will then be used to determine the footprint required for the various stages of the landfill up until the 20 year horizon. The first landfill cell should have a life of between two and five years. The general design approach and issues such as external batter slopes, allowance for cover and settlement and you allowance for access roads parking areas and site infrastructure are all addressed in the sample material supplied.

6. Prepare the Design Concepts

6A. LANDFILLS. Present an overview of the rehabilitation concept for each landfill site, in consultation with the municipality/province, local actors and USAID-funded IGPA/Takamul project advisors.

a. Following completion of the Excel proformas by the vendor, the vendor will meet with the IGPA/TAKAMUL SWM specialists to discuss and agree the approach to developing design concepts. This will be done prior to any design reports or drawings being completed, so there is common internal agreement on the general design and concept approach.
b. Review the environmental survey results to determine whether soil and/or groundwater contamination is occurring at depth under the existing waste mounds.
c. Based on this review, determine whether basic in situ remediation of the existing waste mounds is possible, or whether the level of contamination is such that the waste mound/s needs to be removed and the waste placed into a new dedicated landfill cell.
d. Assuming that the level of contamination of soil and groundwater underneath or closely adjacent to the waste mounds is acceptable, then develop a waste remediation strategy that minimizes the quantity of waste that has to be excavated, loaded and relocated. If possible, the existing waste piles should be sensibly profiled and compacted to form part of the Vee shaped base of the proposed controlled landfill.
e. As part of this overall remediation options assessment, determine if a liner system is required underneath the rehabilitated landfill footprint. Preference should be given to utilizing any local clays to form a constructed clay liner, and only if this is unsuitable

either for cost or construction reasons, then an artificial liner such as HDPE should be incorporated into the concept design.

f. The vendor should then document the agreed general approach for each of the three sites, together with preparing basic sketches and plans, and submit these to IGPA/TAKAMUL for their approval.
g. Following making any amendments required by IGPA/TAKAMUL to this draft concept, the general concept should then be informally presented to the municipal and provincial representatives for their endorsement. At this stage just general sketches are required, and not formal reporting or costings.

6B. TRANSFER STATIONS. Present an overview of both the basic and premium technology concepts for the transfer stations

a. Following completion of the Excel proformas by the vendor, the vendor will meet with the IGPA/TAKAMUL SWM specialists to discuss and agree the design concepts approach. This will be done prior to any design reports or drawings being completed, so there is common internal agreement on the general design and concept approach.
b. The vendor should then document the agreed general approach for each of the three sites, together with preparing basic sketches and plans, and submit these to IGPA/TAKAMUL for their approval.
c. Following making any amendments required by IGPA/TAKAMUL to this draft concept, the concept should then be informally presented to the municipal and provincial representatives for their endorsement. At this stage just general sketches are required, and not formal reporting or costings.

7. **Prepare draft concept reports, costings and drawings**

7A. LANDFILLS. Prepare the draft landfill rehabilitation report, costings and drawings after obtaining endorsement from the municipality/province for the general rehabilitation concept, and confirming the approach with IGPA/TAKAMUL:

a. Vendor to determine the material and equipment quantities involved in the concept designs for preparing the budget estimates
b. The documentation package will include the agreed population and waste projections, equipment options, design reports, budget costings (after localizing and updating unit rates where necessary) and concept layout drawings for the possible landfill rehabilitation options including staging for each of the agreed municipalities, ensuring that gender and disadvantaged community concerns are mainstreamed and addressed at all stages.
c. Note that the reports, costings spreadsheets and drawings will be based on the samples provided from previous internal IGPA/TAKAMUL investigations, and much of this background material will not require any updating. Meet with the IGPA/TAKAMUL specialists and finalize what sections of the sample report require revision based on the agreed rehabilitation concept approach at each landfill.
d. Initially these documents will only be prepared for one of the three sites, to allow review and subsequent agreement between IGPA/TAKAMUL and the vendor prior to commencing the other two reports
e. Vendor to prepare the designs and layouts reflecting the agreed approach to rehabilitation at each of the three landfills,

f. Vendor to confirm the material and equipment quantities involved in the concept design for preparing the budget estimate
g. Vendor to update the unit rate and item costs, to reflect any increases during the project implementation, and make any changes necessary for the local environment. This would particularly apply to items such as clay and whether the local clay is suitable to construct a liner or does it have to be imported from off-site, and this will vary for each landfill site.
h. Vendor to prepare the first landfill report initially in English only, including cost estimates, and also the agreed associated drawings.
i. The drawings need only to be to concept stage level of detail and would typically include the following drawing list as a guide to the level of effort required. Again, the vendor will be provided with the drawings prepared for the concepts developed in-house by IGPA/TAKAMUL:

    i. site location plan clearly showing the location of the proposed site, and surrounding main features such as external access roads, boundary of waste site and location of landfill

    ii. site layout plan showing the site boundary and the proposed footprint of the waste mounds, together with any contiguous sensitive development such as housing estates

    iii. a details plan of the proposed facility showing the main functioning units and extent of civil work requirements such as access roads, buildings including storage, meeting rooms, ablution, generator sheds, general offices and weighbridge, hard stand and any pollution control equipment such as leachate collection pits.

    iv. A plan showing the internal road network and traffic movement directions addressing the need to ensure minimal delays to the waste collection vehicles during peak waste collection hours.

    v. If a materials recovery facility is to be incorporated, or even a waste scavenging area, this should be clearly shown and demarcated on the plan.

    vi. Excavation and filling plans to achieve the landfill base shape

    vii. Plan showing the layout of the leachate collection pipework for stage I

    viii. Plan and sections of the proposed facility showing the stages of the landfills including overtopping.

    ix. Three-dimensional renderings of at least the first and final stages

    x. Any other plans considered necessary to clearly demonstrate the movement and handling of waste throughout the facility as well as the socio – environmental controls included

j. Submit the draft documents for this one landfill in English to IGPA/TAKAMUL for review.
k. Upon making any changes required to the English version based on IGPA/TAKAMUL feedback, then prepare the Arabic report.

l. Prepare the reports based on the IGPA/TAKAMUL feedback for the other two landfill sites in both English and Arabic
m. Submit both English and Arabic reports, including drawings and budget estimates, to the municipality/province for all three landfill sites.
n. Prepare and submit three workshop presentations to provide the general activity background and approach, and also include the specific findings from the three-landfill rehabilitation activities, and submit to IGPA/TAKAMUL for approval.

7B. TRANSFER STATIONS. Prepare the draft transfer station options concept report, costings and drawings.

a. Vendor to determine the material and equipment quantities involved in the concept designs for preparing the budget estimates
b. The documentation package will include the agreed population and waste projections, equipment options, design reports, budget costings (after localizing and updating unit rates where necessary) and concept layout drawings for the possible transfer station options for each of the agreed municipalities, ensuring that gender and disadvantaged community concerns are mainstreamed and addressed at all stages.
c. Note that the reports, costings spreadsheets and drawings will be based on the samples provided from previous internal IGPA/TAKAMUL investigations, and much of this background material will not require any updating. Meet with the IGPA/TAKAMUL specialists and finalize what sections of the sample report require revision based on the agreed transfer station concepts.
d. Initially these documents will only be prepared for one of the three sites, to allow review and subsequent agreement between IGPA/TAKAMUL and the vendor prior to commencing the other two reports
e. The two options to be prepared for each site will be as follows:
    - Base option – grade separated vehicle unloading area where waste can be either dumped directly into the haul out trailers or onto the hard stand if scavenging is to be undertaken, or at peak times when there is insufficient haul out vehicles available. Site facilities will include a weighbridge and small office facilities. Access roads and hard stand areas will be gravel surfaces. Grade separation will be achieved by using rock filled gabions to a height of 4 m. Parking and queueing areas will also be provided for the incoming waste trucks as well as the haul out prime movers and trailers. The facility may be sized to suit the current type of transfer prime movers and trailers if so, requested by the municipality/province.
    - Premium option – grade separated vehicle unloading area where waste can be either dumped directly into the haul out trailers or onto the hard stand if scavenging is to be undertaken, or at peak times when there are insufficient haul out vehicles available stop site facilities will include a weighbridge and small office facilities. Access roads and will be bitumen sealed surfaces, and hard stand areas concrete slabs. Grade separation will be achieved by reinforced concrete vertical cantilevers to a height of 4 m. Parking and queueing areas will also be provided for the incoming waste trucks as well as the haul out prime movers and trailers. The facility will be sized to suit the upgraded type of transfer prime movers and trailers, which will be new high-capacity units.
f. The design report should set out the data assumptions made in developing the overall transfer station concept, including key inputs such as the design tons per day of waste

to be handled, which waste type will be accepted (such as will construction and demolition waste be accepted or will that waste type need to go direct to the final disposal site), haulage vehicle types and sizes, the basis for sizing and the layout of the station units (such as adopting a sawtooth design for the load-out bays to facilitate access at all times) and associated environmental drivers (such as the need for enclosing the transfer station because of the close proximity of neighbors and so on). The design report will also set out the unit rates adopted for the budget costings.

g. The drawings need only to be to concept stage level of detail and would typically include the following drawing list as a guide to the level of effort required. Again, the vendor will be provided with the drawings prepared for the concepts developed in-house by IGPA/TAKAMUL:

    i. site location plan clearly showing the location of the proposed site, and surrounding main features such as external access roads, boundary of waste catchment and location of landfill
    ii. site layout plan showing the site boundary and the proposed footprint of the transfer station, together with any contiguous sensitive development such as housing estates
    iii. a details plan of the proposed facility showing the main functioning units and extent of civil work requirements such as retaining walls and access/egress roads, roofed areas, hard stand and any pollution control equipment such as leachate collection pits.
    iv. A plan showing the internal road network and traffic movement directions, including confirmation that the larger trailer vehicles will have sufficient space for ingress and egress from the site (especially the turning radii and reversing room), parking areas for standby equipment and sufficient bays to handle the waste tonnage proposed to be received, addressing the need to ensure minimal delays to the waste collection vehicles during peak waste collection hours.
    v. If a materials recovery facility is to be incorporated, or even a waste scavenging area, this should be clearly shown and demarcated on the plan.
    vi. Sections of the proposed facility showing the grade separated components such as the receivables area, any receivables pit and waste load-out areas into the long-haul trailers and any roofs.
    vii. Any appurtenant works, such as entry control buildings or generator sheds for example.
    viii. Three-dimensional renderings of both the basic and premium options
    ix. Any other plans considered necessary to clearly demonstrate the movement and handling of waste throughout the facility as well as the socio – environmental controls included.

h. Submit the draft documents for this one transfer station (both basic and premium options) in English to IGPA/TAKAMUL for review.
i. Upon making any changes required to the English version based on IGPA/TAKAMUL feedback, then prepare the Arabic report.
j. Prepare the reports based on the IGPA/TAKAMUL feedback for the other two sites in both English and Arabic
k. Submit both English and Arabic reports, including drawings and budget estimates, to the municipality/province for both options for all three transfer station sites.

l. Prepare and submit three workshop presentations to provide the general activity background and approach, and also include the specific findings from the three-transfer station activities and submit to IGPA/TAKAMUL for approval.

8. **Organize six workshops to present the landfill rehabilitation and transfer station concepts to the relevant municipality/province**.
    a. The attendance list will be finalized in association with IGPA/TAKAMUL representatives, following initial discussions with the municipality/province. A total of 20 representatives should be allowed for in the vendor's tender budget at each of the Six workshops required, all to be based in the relevant province/municipality.
    b. The vendor will finalize the six detailed PowerPoint presentation describing how the concept was developed, and present the waste projections, volume requirements, size requirements over time and associated staging, environmental management infrastructure requirements, budget costings and drawings, for both the landfill rehabilitation and transfer station options (basic and premium).
    c. For the landfill workshops, part of the presentation by the vendor will also address the revised operational requirements that would be necessary to ensure that the rehabilitated landfills are operated correctly in the future. IGPA/TAKAMUL specialists can assist with providing suitable presentation material for this part of the workshop.
    d. For the transfer station workshops, the vendor will also address the revised operational requirements that would be necessary to ensure that the transfer station is operated correctly in the future. This will also include any necessary commentary on the waste pickers/scavengers, and how their role may be improved under each of the development options. This may simply be in terms of providing a short education activity on the health risks associated with waste, PPE use and perhaps the formation of some waste scavenger associations/collectives. There will be obvious benefits with the premium option because scavenging would be undertaken under cover.
    e. The vendor will organize and pay for venue hire for one day for each workshop, including snacks and lunch and hard copies of the presentation material as well as access to a number of hardcopy printouts of the draft report. The draft report copies are simply for review during the workshop and will be retained by the vendor after the workshop so that no draft copies are left with the municipal/provincial representatives.
    f. The vendor will document all feedback from the municipal and provincial representatives and incorporate that together with any further feedback from the IGPA/TAKAMUL representatives into the final report.
    g. The vendor will also prepare, collate and submit all other material required by IGPA/TAKAMUL for any workshop or training event, as confirmed during the kick-off meeting and listed below in the following chapters.

9. **Prepare and submit a final report**. Based on feedback obtained during the workshop, the vendor will then prepare a final overall project report in both English and Arabic for each of the six activities. The 10-page (maximum) report, plus annexes, for each of the six activities will include the following sections:
    a. Background and objective of the local project
    b. Summary of investigations and activities undertaken
    c. Description of the LANDFILL rehabilitation approach adopted, including reference to the engineering and environmental surveys undertaken

d. Description of the TRANSFER STATION concept design approach for both the basic and premium options
e. Implementation feedback and recommended changes to workshops
f. List of other reports prepared during the project
g. Other issues as may reasonably be required
h. Conclusions and recommendations

All reports shall be in both English and Arabic, except third-party reports (such as survey and laboratory reports) which do not have to be translated.

5. ACTIVITY LOCATION

Three locations will be chosen for the three landfill rehabilitation activities and three locations for the three transfer station activities, making six activities in total. The six activity locations will be chosen from the following six provinces. The exact locations will be presented during the kick-off meeting:

- Wasit
- Najaf
- Maysan
- Muthanaa
- Salah Al-Din
- Diyala

6. MONITORING AND EVALUATION

6.1 IGPA/TAKAMUL standard documentation requirements

The Monitoring, Evaluation, and Learning (MEL) Plan is a critical tool used by IGPA/Takamul for assessing and reporting progress towards achieving key program outcomes and results, as well as for planning, managing, and documenting the collection and use of performance data. The MEL Plan enables tracking progress towards pre-determined milestones and targets, make mid-course adjustments (monitoring), assess and report the results of its major components, analyze intended and unintended results and the impact of the program as a whole (evaluation).

The vendor will report on a number of qualitative and quantitative indicators – selected by IGPA/Takamul staff - assessing impact of the proposed initiatives and monitoring the progress of the project.

The Vendor's indicators have been selected in line with IGPA/Takamul MEL Plan indicators on the basis of their utility and efficiency in measuring progress in the most efficient way as well as the fact that they can be independently validated or verified. The gender percentages and total numbers of participants will be refined following the initial meetings with the provincial/municipal representatives, but indicative numbers are presented in the table below.

TABLE 1: Proposed Indicators

USAID Indicator	Definition	Male	Female	Total
2. Number of improved business processes implemented by provincial governments as a result of IGPA/Takamul support	Improved: Improved means the procedures or process has been revised, re-engineered, modified or updated with support from IGPA/Takamul with the aim to accelerate business activities aimed at improving service delivery. Process: process is a set of related procedures or regulatory procedures established by provincial governments with support from IGPA/Takamul that are implemented by provincial governments with technical assistance or support from IGPA/Takamul. Implemented: Implemented means the business process has been undertaken or applied by the provincial government	N/A	N/A	N/A
13. Number of individuals trained by IGPA/Takamul	This indicator counts the number of individuals to whom significant knowledge or skills have been imparted through interactions that are intentional, structured, and purposed for imparting knowledge or skills to improve service delivery in Iraq. The indicator includes GOI officials at the central and provincial levels, CSOs, private and public sectors actors who receive training or technical assistance in a variety of skills sets to improve service delivery. Through the IGPA/Takamul project, USAID will provide mentoring, and coaching to key Iraqi actors to enable them to apply newly acquired skills, to implement strategies, and facilitate behavior change (institutional and individual) that will lead to sustainable improvements in Iraq's governance and service delivery to citizens. The indicator will contribute data for counting the number of trainees who gained knowledge through structured trainings only, these include structured training sessions and on-the-job training sessions.	TBD	25% if possible	TBC - but 6 locations by 1 workshops by 20 individuals making 120 in total. (No individuals will attend more than 1 workshop)

	For trainings and on-the-job trainings: participants will be counted as individuals to avoid double-counting. For example, if one participant attends more than one training regardless of the topic of the training, the participant will be counted only once (simply because s/he is the same individual). Requirements for satisfactory completion of training: Individuals who participate in any structured training course offered by IGPA, whether the training is a face-to-face or online training, are expected to attend 100% of the training. Successful completion requires that a trainee participates at least 75% of the training length. (For instance, participants have to have attended at least 4.5-days of training on a 6-day training course; 4-days of training on a 5-day training course; 3-days of training on a 4-day training course; 1.5-days of training on a 2-day training course)			
14 Number of participants attending IGPA/Takamul interventions	This indicator counts the number of participants attending IGPA/Takamul's interventions. Interventions include workshops, conferences, seminars, follow-up sessions and any other events excluding trainings and on-the-job trainings. The indicator includes GOI officials at the central (Federal) and Provincial levels, CSOs, private and public sectors actors. Through the IGPA/Takamul project, USAID will provide technical expertise, mentoring, and coaching to key Iraqi actors to enable them to apply newly acquired skills, to implement strategies, and facilitate behavior change (on both institutional and individua levels) that will lead to sustainable improvements in Iraq's governance and service delivery to citizens. The indicator will contribute data for counting the number of participants who attended IGPA/Takamul's events. Participants at meetings are not counted under this indicator. Under this indicator, individuals will be counted multiple times, and this will not be considered double counting. Because unlike IGPA Indicator 13 (Number of individuals trained by IGPA/Takamul), this indicator will focus on tracking and measuring the participations rather than the persons.	TBD	25% if possible	TBC - but 6 locations by 1 workshops by 20 participants making 120 in total

The selected vendor will utilize the standardized IGPA/Takamul MEL tools of data collection: sign-in sheet, home letters, training evaluation form, and short report letterhead. IGPA/Takamul will provide the templates and protocols for the vendor's use when submitting deliverables:

Reports, approvals, meeting notes, etc. may be submitted electronically. Sign-in sheets, home letters, pre- and post-training tests, and training evaluation forms must be submitted in both original hardcopy and electronically.

The selected vendor must ensure that all relevant information detailed in this section is provided to IGPA no later than 10 working days prior to each event:

- For assessments: The selected vendor must coordinate with IGPA to provide the following documents:

    1. Assessment questionnaire to be shared with MEL team three days in advance of the survey/assessment.
    2. Filled assessment forms.
    3. Following the event completion, the following documents should be provided by the selected vendor: sign-in sheets, questionnaire, photos, event/assessment report.

- For Training Events:

    MEL forms required: sign-in sheets, training evaluation forms.

    Pre-post tests should be designed by the trainer and shared with MEL and E&I team three days in advance of the training event, pre-post test findings should be included in the event report. MEL team is responsible for designing the coding for technical team's pre/posttests while technical team is responsible for uploading on DAI Collect.

    During the last day of the training, the trainer will distribute a "Home Letter" to each participant, collect the cards, and submit to MEL team.

    Following the event completion, the following documents should be provided by the selected vendor: sign-in sheets, training evaluation forms, training materials (including presentations and handouts), photos, event report, detailed budget and agenda.

- For on-the-job trainings (OJT):

    MEL forms required: sign in sheets, training evaluation forms.

    Following the event completion, the following documents should be provided by the selected vendor: sign-in sheets, training evaluation forms, photos, event report, detailed budget, training materials, handouts and agenda.

Vendors are to coordinate with IGPA TAKAMUL CA&I to ensure training materials, outreach, data collection, etc. are all appropriate.

All photos and videos of civilians and participants must comply with international best practices.

Documentation described in the Detailed Delivery/Payment Schedule shall serve as deliverables and are not considered complete until written approval is provided by the IGPA/Takamul Team Lead. The following section also notes when key government stakeholder approval is also required. Approvals will not be considered valid unless they are in writing.

6.2 Vendor documentation requirements

The vendor is to submit proof of manuals, standard operating procedures, and/or internal policies, including human resource policies, which reflect a commitment to non-discrimination, equity and inclusion, and reporting mechanisms, including a whistleblower policy, for non-compliance with internal policies. If the vendor is unable to produce the required documentation, the vendor must be willing to work with IGPA/Takamul to receive training and support in the development of relevant policies.

7. TECHNICAL DIRECTION

The Regional Service Delivery Coordinator is responsible for day-to-day supervisory work and coordination (e.g., receives initial submission of all communications, weekly reports, deliverables, and approval requests including meeting and event dates, etc.). The IGPA/Takamul Service Delivery Team Lead is responsible for providing written technical approval for all deliverables.

8. SPECIAL CONSIDERATIONS

IGPA/Takamul supports vendors which do not discriminate based on race, religion, gender, ethnicity, pollical party affiliation, disability, or any other minority/vulnerability/marginalized identity. In line with this policy, IGPA/Takamul aims to have equal access to training as well as participation. For the selection criteria, IGPA/Takamul attempts to reflect the demographics of the target communities and government institution in the composition of training participants. The identification with any minority/vulnerable population/marginalized group does not supersede the need to select participants who meet the minimum requirements.

APPENDIX A of the statement of work - TOPOGRAPHICAL AND FEATURES SURVEY SCOPE OF WORKS

1. Background

One of the major activities proposed for improving solid waste management is preparing concept designs and associated costings for rehabilitating substandard dumpsites, either abandoned or currently operating.

A topographical and features site survey is necessary for this concept design to be developed.

2. Objective

The general objective of this scope of work is to support developing a concept design and costings for upgrading the current dumpsite/s. This concept will allow far better utilisation of the site thereby significantly extend the operating life of the facility, and in parallel, reduce the current significant environmental and health issues associated with site operations.

3. Activity summary/description

The exact location of the area to be surveyed will be determined on site, but tenderers should allow for a maximum area of 20 ha to be surveyed at each of the 3 landfill sites.

This Scope of Work includes the following activities:

1. Mobilise to the site, after seeking approval from the vendor and the municipality to obtain site access
2. Establish the site boundaries, noting the GPS locations of the corners of the site to be surveyed.
3. Establish a temporary benchmark on the site. There is no requirement to locate and level the temporary benchmark to a permanent survey marker.
4. Determine the location and extent of the main features on the site, as well as providing a description of the feature on the plan, as follows;
    - The survey site boundary
    - The footprint /edge of all waste piles noting whether the files are:
        - old waste which has not been previously burnt
        - old waste, which is not on fire nor smoldering at present, but has been previously burnt
        - old waste which is currently on fire or portions are smoldering and smoking
        - current/active waste disposal area which is on fire or smoldering at present
        - current/active waste disposal area which is not on fire nor has signs of previous burning
    - The location of any new landfill cells under construction
    - The location of any existing fences and gates
    - Any access roads within the site (note if gravel, asphalt, or concrete)
    - Any major stormwater drainage systems, including open unlined drains, culverts and pipes
    - Any permanent building or other construction, including any pump stations, weighbridges, huts, and offices.
    - Any temporary buildings or sheds
    - Any water feature, including exposed groundwater ponds
    - Any major vegetation, such as large trees or hedges
    - Any major excavations

- Any easements over the site, such as for future roads or power lines or major water trunk mains

5. Take sufficient spot levels over the site to allow a contour plan with 0.5m intervals to be developed for the entire site.

4. Deliverable

Electronic copies of the plans listed above in both PDF and also AutoCAD or CivilCAD, with details presented in three separate layers in the electronic files presenting the following:

- the site boundary outline,
- features described in English and Arabic, and
- 0.5m contours

Appendix B of the statement of work - SITE GEOTECHNICAL AND ENVIRONMENTAL SURVEY SCOPE OF WORKS AND LABORATORY TESTING REQUIREMENTS

1. Introduction

The scope of works specified is to undertake such work so as to adequately define the geotechnical and environmental conditions to allow the landfill design to proceed, and in particular, the rehabilitation requirements. This will include all works required to achieve this description, and include but not be limited to the following items.

2. Field Work – Excavation of Pits

1. Develop a grid of nine pits over the proposed site
   - Locate the test pits on a grid of 3 pits by 3 pits giving a grid of 9 pits spread over the site, including two pits below the waste mound. This means that the excavator will have to move some waste so it can reach the natural soil below. (If an artificial liner is provided, the liner must be repaired after the pits are backfilled.)
   - Three (3) of these nine pits (1 remote from waste as a control site and two from under the waste mound/s) will be the **main** pits and logged in detail, as specified below, based on the unified soil classification (USC) system. The control site pit will be selected to be remote from the waste mounds but must have generally the same soil profile as the other 2 main test pits under the waste mound.
   - The remaining six pits will just be used to determine the general soil profile in terms of spatial variation across the site, but these 6 supplementary pits will not have to be logged in detail.
   - The location of all pits shall be recorded using GPS so they can be marked on the topographical survey plan

2. In-situ infiltration tests shall be undertaken on the surface of any clay/silty clay layer using the double ring infiltrometer method. (See equipment and method in Annexure below). This shall be done at three (3) sites near to the 3 MAIN test pits where the pits are to be fully logged.

3. Excavate the nine test pits to a depth of at least 4 metres**.** If the pit continually collapses due to unconsolidated and/or saturated ground conditions, then the pit shall be logged to the maximum practical depth. Depths of pit wall collapse shall be noted.

4. **<u>For each of the three (3) main pits</u>**
   - Log and classify the soil types encountered and the strata depth according to the Unified Soil Classification system, including usual parameters such as color and stiffness.
   - Particular attention shall be paid to identifying the presence, type, depth and thickness of any impermeable layers, such as clay or clayey bands
   - Note features such as the presence of tree roots or other structure that may alter the gross permeability of the soil strata.
   - Determine the standing water level in each of these three main pits, if standing water is encountered. If the water level is slow in stabilizing, the pit shall be left open until a stable water level can be determined.
   - Undertake the usual field tests to confirm the soil classifications, such as stiffness.

- An undisturbed sample shall be collected from a representative soil layer in each of three MAIN pits for geotechnical tests such as permeability in an oedometer test rig.
- Sufficient additional sample volume shall be collected of any clay/low permeability layer from the 3 main pits selected above, for soils laboratory analysis of the Liquid Limit, Shrinkage and Plasticity Index and Emmerson Pin test for dispersivity.
- Collect a separate set of soil samples for environmental testing at 200mm and 1200mm depth below the natural surface regardless of soil types, from the 3 main pits (2 under waste mound/s and one remote from waste mounds).
- Collect **samples of groundwater** if the pits breach the water table, from the 3 main pits selected above. (2 groundwater samples from under the waste mound and one from the remote site separate from any waste piles)
- Pits shall be backfilled immediately upon completion of the site work and compacted and levelled back to sensibly meet with the natural surface profile. The only reason for keeping a pit open would be while waiting for the water level in the pit to stabilize.

5. ***For the remaining six (6) pits***,
    - Generally, note and record the soils profile in overview, just based on inspection
    - Measure the depth from the surface to the top of any impermeable layers, such as clay or clayey bands, or any permeable layers such as sand or gravel.
    - Measure the thickness of the soil band/s
    - There is no need for formal soils logging or sampling in these six supplementary pits. These six pits are just to identify any clay or highly permeable layers, and general soils profiles based on observation.

3. Soils Laboratory Testing – soil properties

- The three undisturbed clay/clayey samples from the main pits shall be tested for permeability in an oedometer test rig.
- The three disturbed clay/clayey samples from the same main pits shall be subjected to laboratory analysis for the Liquid Limit, Linear Shrinkage, Plasticity Index and Emmerson Pin test for dispersivity.

4. Environmental Laboratory Testing – soil contamination

The six (6) soil samples taken from the three main pits (1 at 200mm below the surface and 1 at 1200mm below the surface in each of the 3 main pits) are to be analyzed for the following parameters. It is critical that the soil samples are appropriately labelled so the results can be geo-located on the site:

- Volatile Organic Compounds (VOC's) in Soil
  Benzene, Toluene, Ethylbenzene, m/p-xylene, o-xylene, Naphthalene, Total Xylenes, Total BTEX

- TRH (Total Recoverable Hydrocarbons) in Soil
  TRH C10-C14, TRH C15-C28, TRH C29-C36, TRH C37-C40, TRH >C10-C16 (F2), TRH >C10-C16 (F2) – Naphthalene, TRH >C16-C34 (F3), TRH >C34-C40 (F4), TRH C10-C36 Total, TRH C10-C40 Total

- PAH (Polynuclear Aromatic Hydrocarbons) in Soil
  Naphthalene, 2-methylnaphthalene, 1-methylnaphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene,

Benzo(b&j)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo(a&h)anthracene, Benzo(ghi)perylene, Carcinogenic PAHs, Total PAH

- Speciated Phenols in Soil
  Phenol, 2-methyl phenol (o-cresol), 3/4-methyl phenol (m/p-cresol), Total Cresol, 2-chlorophenol, 2,4-dimethylphenol, 2,6-dichlorophenol, 2,4-dichlorophenol, 2,4,6-trichlorophenol, 2-nitrophenol, 4-nitrophenol, 2,4,5-trichlorophenol, 2,3,4,6/2,3,5,6-tetrachlorophenol, Pentachlorophenol, 2,4-dinitrophenol, 4-chloro-3-methylphenol

- Organochlorine Pesticides in Soil
  Hexachlorobenzene (HCB) , Alpha BHC, Lindane, Heptachlor, Aldrin, Beta BHC, Delta BHC, Heptachlor epoxide, o,p'-DDE, Alpha Endosulfan, Gamma Chlordane, Alpha Chlordane, trans-Nonachlor, p,p'-DDE, Dieldrin, Endrin, o,p'-DDD, o,p'-DDT, Beta Endosulfan, p,p'-DDD, p,p'-DDT, Endosulfan sulphate, Endrin Aldehyde, Methoxychlor, Endrin Ketone, Isodrin, Mirex

- Organophosphate Pesticides in Soil
  Dichlorvos, Dimethoate, Diazinon (Dimpylate), Fenitrothion, Malathion, Chlorpyrifos (Chlorpyrifos Ethyl), Parathion-ethyl (Parathion), Bromophos Ethyl, Methidathion, Ethion, Azinphos-methyl (Guthion)

- PCBs in Soil
  P Arochlor 1016, Arochlor 1221, Arochlor 1232, Arochlor 1242, Arochlor 1248, Arochlor 1254, Arochlor 1260, Arochlor 1262, Arochlor 1268, Total PCBs (Arochlors)

- Total Recoverable Metals in Soil
  Arsenic, As; Cadmium, Cd; Chromium, Cr; Copper, Cu; Lead, Pb; Mercury, Hg; Nickel, Ni; Zinc, Zn

5. Environmental Laboratory Testing – water

Assuming that the three main pits reach the groundwater table, the three groundwater samples collected from the main pits shall be analysed for the following parameters. It is critical that all the groundwater samples are appropriately labelled so the results can be geo-located on the site:

- Biochemical Oxygen Demand/ BOD
- Chemical Oxygen Demand / COD
- pH
- Fecal Coliform
- Conductivity
- Total Dissolved Solids
- Nitrogen Scan

- Volatile Organic Compounds (VOC's)
  Benzene, Toluene, Ethylbenzene, m/p-xylene, o-xylene, Naphthalene, Total Xylenes, Total BTEX

- TRH (Total Recoverable Hydrocarbons)
  TRH C10-C14, TRH C15-C28, TRH C29-C36, TRH C37-C40, TRH >C10-C16 (F2), TRH >C10-C16 (F2) – Naphthalene, TRH >C16-C34 (F3), TRH >C34-C40 (F4), TRH C10-C36 Total, TRH C10-C40 Total

- PAH (Polynuclear Aromatic Hydrocarbons)
  Naphthalene, 2-methylnaphthalene, 1-methylnaphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b&j)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo(a&h)anthracene, Benzo(ghi)perylene, Carcinogenic PAHs, Total PAH

- Speciated Phenols
  Phenol, 2-methyl phenol (o-cresol), 3/4-methyl phenol (m/p-cresol), Total Cresol, 2-chlorophenol, 2,4-dimethylphenol, 2,6-dichlorophenol, 2,4-dichlorophenol, 2,4,6-trichlorophenol, 2-nitrophenol, 4-nitrophenol, 2,4,5-trichlorophenol, 2,3,4,6/2,3,5,6-tetrachlorophenol, Pentachlorophenol, 2,4-dinitrophenol, 4-chloro-3-methylphenol

- Organochlorine Pesticides
  Hexachlorobenzene (HCB) , Alpha BHC, Lindane, Heptachlor, Aldrin, Beta BHC, Delta BHC, Heptachlor epoxide, o,p'-DDE, Alpha Endosulfan, Gamma Chlordane, Alpha Chlordane, trans-Nonachlor, p,p'-DDE, Dieldrin, Endrin, o,p'-DDD, o,p'-DDT, Beta Endosulfan, p,p'-DDD, p,p'-DDT, Endosulfan sulphate, Endrin Aldehyde, Methoxychlor, Endrin Ketone, Isodrin, Mirex

- Organophosphate Pesticides
  Dichlorvos, Dimethoate, Diazinon (Dimpylate), Fenitrothion, Malathion, Chlorpyrifos (Chlorpyrifos Ethyl), Parathion-ethyl (Parathion), Bromophos Ethyl, Methidathion, Ethion, Azinphos-methyl (Guthion)

- PCBs
  P Arochlor 1016, Arochlor 1221, Arochlor 1232, Arochlor 1242, Arochlor 1248, Arochlor 1254, Arochlor 1260, Arochlor 1262, Arochlor 1268, Total PCBs (Arochlors)

- Total Metals
  Arsenic, As; Cadmium, Cd; Chromium, Cr; Copper, Cu; Lead, Pb; Mercury, Hg; Nickel, Ni; Zinc, Zn

6. Reporting

The reports for each landfill site must separately address the following as a minimum:

1. A short site report describing the site activities, staff and equipment used.
2. Soils logs of the three (3) MAIN pits under the waste mound/s describing the features required above, printed at one (1) log per A4 page. These logs must be produced electronically (computer generated) and a copy of the electronic files provided with the final reports.
3. Plots from the in-situ infiltrometer tests, and calculated infiltration rates, assuming that there was sufficient clay content within the soil profile to warrant undertaking the infiltrometer test (described below).
4. A table of the general soil profile in the six (6) SUPPLEMENTARY pits.
5. A short report detailing the laboratory results and providing basic interpretation of soil properties, and including the results of;

    - Liquid Limit, Shrinkage, Plasticity Index and Emmerson Pin test for dispersivity.
    - Permeability testing from the oedometer test rig.
    - Any other laboratory tests considered essential to adequately describe the soil profiles.
    - Environmental testing results for both soil and groundwater

ANNEXURE of the statement of work - Specific Test Procedure - Double-ring infiltrometer

A Double-ring infiltrometer of 30 cm diameter and 60 cm diameter shall be used for this investigation.

1: Hammer the 30 cm diameter ring at least 15 cm into the soil. Use the timber to protect the ring from damage during hammering. Keep the side of the ring vertical and drive the measuring rod into the soil so that approximately 12 cm is left above the ground.

2: Hammer the 60 cm ring into the soil or construct an earth bund around the 30 cm ring to the same height as the ring and place the hessian inside the infiltrometer to protect the soil surface when pouring in the water.

3: Start the test by pouring water into the ring until the depth is approximately 70-100 mm. At the same time, add water to the space between the two rings or the ring and the bund to the same depth. Do this quickly.

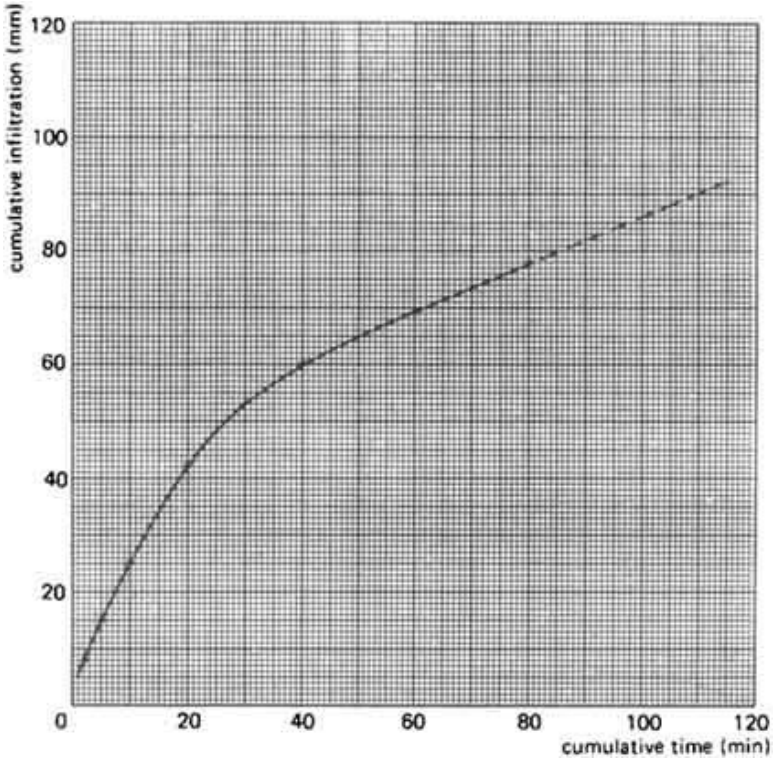
4: Record the clock time when the test begins and note the water level on the measuring rod.

5: After 1-2 minutes, record the drop in water level in the inner ring on the measuring rod and add water to bring the level back to approximately the original level at the start of the test. Record the water level. Maintain the water level outside the ring similar to that inside.

6: Continue the test until the drop in water level is the same over the same time interval. Take readings frequently (e.g. every 1-2 minutes) at the beginning of the test, but extend the interval between readings as the time goes on (e.g. every 20-30 minutes).

The basic infiltration rate shall be determined from plotting the infiltration rate to see when it has stabilized. Once the values of the Infiltration rate are constant, the basic infiltration rate has been reached. See typical infiltration plot below.

Typical Plot of Cumulative Infiltration versus Time



Vendor Requirements

The vendor company, together with its staff and subcontractors, should collectively have the following qualifications and experience:

- Ten years' broad experience in all aspects of Solid Waste Management.
- Demonstrated experience in consultation and assessing potential impacts and benefits on women and disadvantaged groups, and incorporating these learnings into the relevant aspects of design and more particularly site operations following rehabilitation
- Experience undertaking or managing topographical and features surveys
- Experience in undertaking or managing soils logging
- Experience in undertaking or managing environmental surveys, including installation of soil sampling pits and soil sampling protocols
- Experience undertaking or managing groundwater sampling for environmental analysis, subject to depth limitations.
- Demonstrated experience undertaking or managing landfill development, and especially, designing rehabilitation interventions for a controlled landfill,
- Demonstrated experience working with municipal waste collection and haulage systems, and preferably waste transfer stations
- Demonstrated experience with workshop presentations on solid waste management issues

The core team will be a:

- Project manager to lead the project and be responsible for overall implementation,

- Senior solid waste management LANDFILL engineer/s to lead technical meetings, prepare population and waste generation estimates together with landfill staging sizes, manage topographical survey and environmental investigations, determine appropriate rehabilitation approaches, prepare and cost concept designs for discussion and agreement with IGPA/TAKAMUL specialists, prepare the concept design reports and supervise CAD drawing preparation, present final material in a workshop. Note that this role may be split amongst a senior SWM specialist/s and less experienced engineer/s to undertake procedural matters such as data gathering and projections, quantity calculations and costings and site supervision of surveys.
- Senior solid waste management TRANSFER STATION engineer/s to lead technical meetings, obtain SWM data and undertake appropriate validation and checking, prepare population and waste generation estimates together with transfer station staging sizes, prepare and cost two concept designs for each municipality for discussion and agreement with IGPA/TAKAMUL specialists, prepare the concept design reports and supervise CAD drawing preparation, present final material in a workshop. Note that this role may be split amongst a senior SWM specialist/s and less experienced engineer/s to undertake procedural matters such as data gathering and projections, quantity calculations and costings.

The core team will need to be supported by non-scoring technical and support staff including:

- Junior solid waste management engineers to support the two senior SWM specialists
- CAD drafter/s to prepare CAD drawings, and a
- Logistics person to generally assist the SWM specialist/s with data gathering and organizing site visits and workshop preparation.

Project Manager

- Engineering or similar university-level qualification
- At least 10 years' experience in managing similar donor funded projects in Iraq related to infrastructure concept development
- General knowledge of SWM desirable
- Master's degree or equivalent in engineering or a related discipline is desirable
- Must be fluent in both English and Arabic.

Solid Waste Management LANDFILL Specialist/s

This role may be fulfilled by the combination of a senior fully qualified SWM specialist/s as per the experience requirements listed below, and be supported by less experienced staff who can undertake the day-to-day and procedural activities in support of this role, under the direct supervision of the more experienced SWM specialist and the project manager.

- At least 10 years' experience in all aspects of municipal solid waste management is essential, including general background on solid waste management data and ground-truthing, waste management priorities and issues at landfills, leachate and stormwater management, landfill operations, theoretical and practical knowledge of controlled landfill development and cell staging

- Direct experience in obtaining solid waste management data, particularly as it relates to waste tonnages generated on population projections and interpretation, and particularly experience with regard to ensuring SWM data integrity
- Experience with either undertaking or managing topographical and features surveys
- Experience with undertaking or managing soil sampling for logging under the USC system
- Experience with undertaking or managing environmental sampling for soils and groundwater
- Experience leading or contributing to landfill rehabilitation concept development and design
- Technical report writing in both Arabic and English
- Preparing SWM workshop material and taking a lead role in presenting the findings of the activity
- Master's degree or equivalent in engineering or a related discipline is desirable
- Must be fluent in both English and Arabic.

Solid Waste Management TRANSFER STATION Specialist/s

This role may be fulfilled by the combination of a senior fully qualified SWM specialist/s as per the experience requirements listed below, and be supported by less experienced staff who can undertake the day-to-day and procedural activities in support of this role, under the direct supervision of the more experienced SWM specialist and the project manager

- At least 10 years' experience in all aspects of municipal solid waste management is essential, including general background on solid waste management data and ground-truthing, waste management priorities and particularly issues with waste collection and haulage and particularly how that may relate to transfer stations, theoretical and practical knowledge of transfer station development and staging
- Direct experience in obtaining solid waste management data, particularly as it relates to waste tonnages generated and population projections and interpretation, and particularly experience with regard to ensuring SWM data integrity
- Experience leading or contributing to waste haulage systems development, and preferably transfer stations
- Technical report writing in both Arabic and English
- Preparing SWM workshop material and taking a lead role in presenting the findings of the activity
- Master's degree or equivalent in engineering or a related discipline is desirable
- Must be fluent in both English and Arabic.

Project Timing

DAI anticipates a period of performance of approximately 32 weeks for this scope of work.

10.2 Attachment B: Proposal Cover Letter

[On Firm's Letterhead]

<Insert date>

TO: Click here to enter text.

DAI Global, LLC

We, the undersigned, provide the attached proposal in accordance with **RFP-**Click here to enter text.**-**Click here to enter text. issued on Click here to enter text.. Our attached proposal is for the total price of <Sum in Words ($0.00 Sum in Figures) >.
I certify a validity period of Click here to enter text. days for the prices provided in the attached Price Schedule/Bill of Quantities. Our proposal shall be binding upon us subject to the modifications resulting from any discussions.
Offeror shall verify here the items specified in this RFP document.
We understand that DAI is not bound to accept any proposal it receives.
Yours sincerely,

Authorized Signature:
Name and Title of Signatory: Click here to enter text.
Name of Firm: Click here to enter text.
Address: Click here to enter text.
Telephone: Click here to enter text.
Email: Click here to enter text.
Company Seal/Stamp:

10.3 Attachment C: Detailed Budget and Price Schedule

The budget below includes examples of the types of costs that may be included in the budget. Actual budget submissions may include different costs and should be prepared in line with the offerors' technical proposal. Please provide a budget per directorate included in the proposal.

Please include an accompanying budget narrative linking costs with the work required in Attachment A. Additional supporting documentation for any of the costs included below may be requested.

Detailed Budget Template:

Line Item	Unit	Quantity	Unit Price	Total Cost	Budget notes (details, calculation, specification, and/or justification)
LABOR					
For example, Team Leader and project manager	(e.g., day)	(e.g., # of days)	(e.g., cost per day)		
For example, expert					
Other staff					
Other staff					
Staff Subtotal					
Fringes and benefits					
G&A					
Fringes					
Staff Subtotal					
TRAVEL COSTS					
For example, local transportation					
For example, per diem					
For example, international travel					
For example, hotel costs					
Other travel cost					
Travel Subtotal					
OTHER DIRECT COSTS (ODC)					
For example, workshops and Meetings					
For example, Room rental (1 day in a local hotel)					
For example, Printing documents/maps					
For example, Anticipated ODC					
ODC Subtotal					
Total Program Expenses Subtotal					
INDIRECT COSTS AND FEE					
Fee					
GRAND TOTAL (USD)					

Price Schedule

Milestone No.	Milestone Description and Required Documentation	Payment Amount (%)	Price (USD)
Milestone No. 1		20%	$
Milestone No. **2**		%30	$
Milestone No. **3**		%30	$
Milestone No. **4**		20%	$
Total		100%	$

Offerors must submit comprehensive budget narrative/ budget notes that provide information on each of the line items in the budget and explain why these items are needed to implement the activity.

If indirect rates are charged, Offerors must provide supporting computations for the allocation for indirect/overhead costs. A copy of an audit report and balance sheet and a profit and loss (P&L)/income & expenditure/revenue & expenditure statement OR a copy of the current Negotiated Indirect Cost Rate Agreement (NICRA).

10.4 Attachment D: Instructions for Obtaining a DUNS Number - DAI'S Vendors, Subcontractors

Note: There is a Mandatory Requirement for your to Provide a DUNS number to DAI

I. SUBCONTRACTS/PURCHASE ORDERS: Organization All domestic and foreign organizations which receive first-tier subcontracts/ purchase orders with a value of $30,000 and above are required to obtain a DUNS number prior to signing of the agreement. *Your organization is exempt from this requirement if the gross income received from all sources in the previous tax year was under $300,000. Please see the self-certification form attached.*

II. MONETARY GRANTS: All foreign entities receiving first-tier monetary grants (standard, simplified and FOGs) with a value equal to or over $25,000 and performing work outside the U.S. must obtain a DUNS number prior to signing of the grant. All U.S. organizations who are recipients of first-tier monetary grants of any value are required to obtain a DUNS number; the exemption for under $25,000 applies to foreign organizations only.

NO SUBCONTRACTS/POs ($30,000 + above) or MONETARY GRANTS WILL BE SIGNED BY DAI WITHOUT PRIOR RECEIPT OF A DUNS NUMBER.

Note: The determination of a successful offeror/applicant resulting from this RFP/RFQ/RFA is contingent upon the winner providing a DUNS number to DAI. Organizations who fail to provide a DUNS number will not receive an award and DAI will select an alternate vendor/subcontractor/grantee.

Background:
Summary of Current U.S. Government Requirements- DUNS

The Data Universal Numbering System (DUNS) is a system developed and managed by Dun and Bradstreet that assigns a unique nine-digit identifier to a business entity. It is a common standard world-wide and users include the U.S. Government, European Commission and the United Nations. The DUNS number will be used to better identify related organizations that are receiving U.S. federal funding, and to provide consistent name and address data for electronic application systems.

Instructions detailing the process to be followed in order to obtain a DUNs number for your organization begin on the next page.

THE PROCESS FOR OBTAINING A DUNS NUMBER IS OUTLINED BELOW:

1. Log on to the D&B (Dun & Bradstreet) DUNS registration website to begin the process of obtaining a DUNS number free of charge.

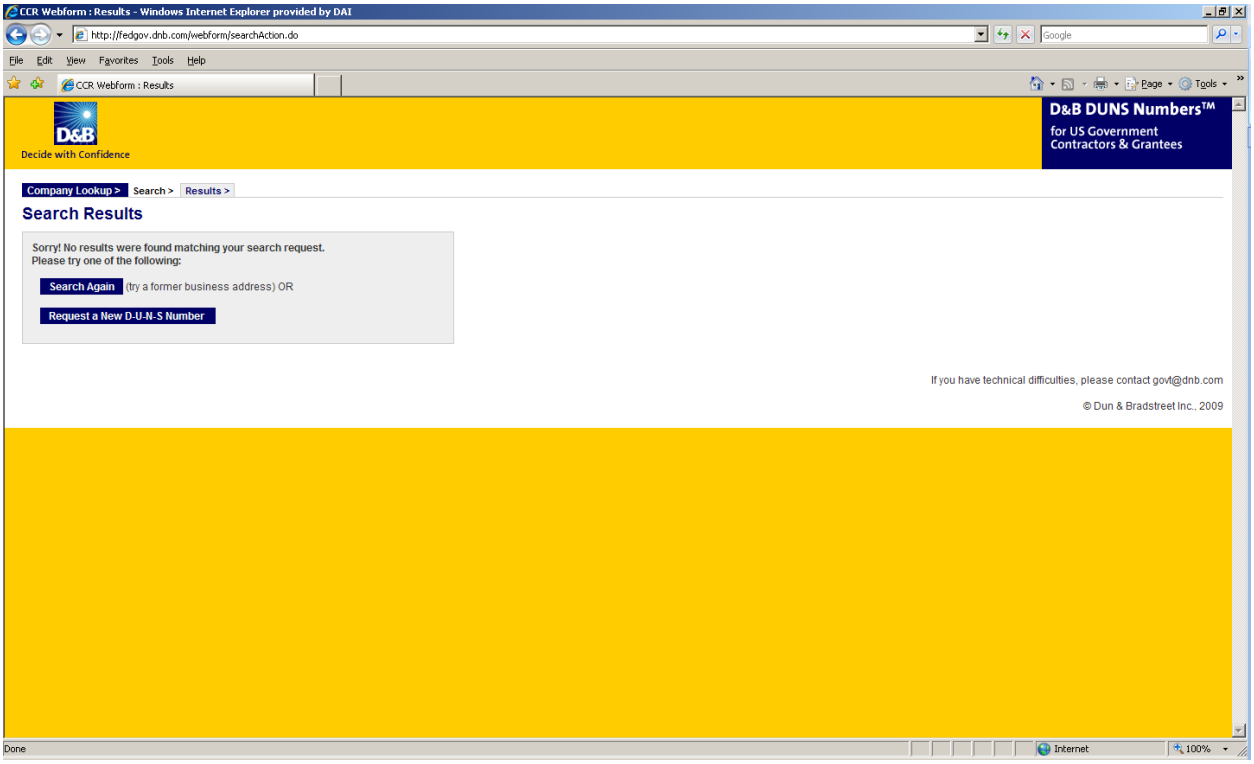
   http://fedgov.dnb.com/webform/index.jsp

   Please note there is a bar on the left for Frequently Asked Questions as well as e-mails and telephone numbers for persons at Dun & Bradstreet for you to contact if you have any questions or difficulties completing the application on-line. DAI is not authorized to complete the application on your organization's behalf; the required data must be entered by an authorized official of your organization.

2. Select the Country where your company is physically located.

3. You will first be asked to search the existing DUNS database to see whether a DUNS number already exists for your organization/entity. Subcontractors/grantees who already have a DUNS number may verify/update their DUNS records.

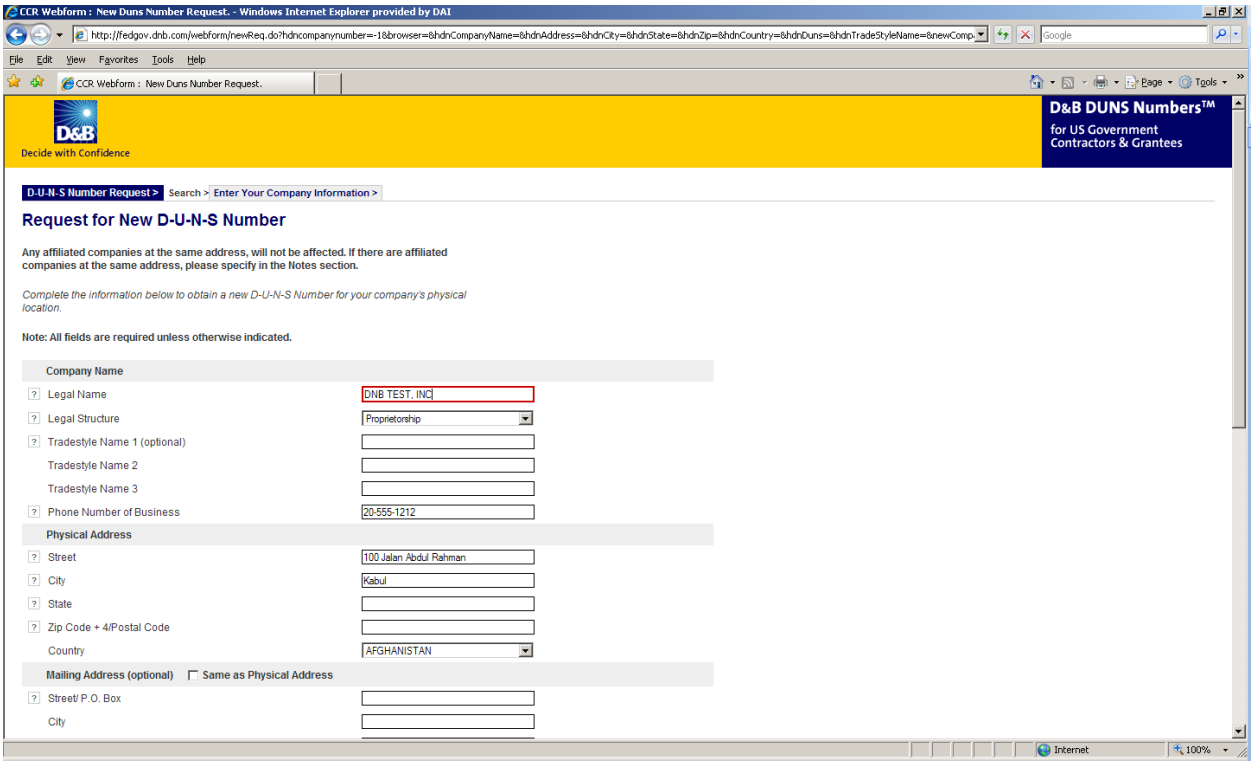
4. Potential DAI subcontractors/vendors/grantees who do not already have a DUNS number will be shown the screen below. To request a new DUNS Number, the "Request a New D-U-N-S Number" button needs to be selected.



5. Enter the information regarding your organization listed on the next three screens. (See screen shots below.) Make sure you have the following information available (in English) prior to beginning the process of entering this Section in order to ensure successful registration.

   - Legal Business Name (commas are allowed, periods are not allowed)
   - Address
   - Phone
   - Name of Owner/Executive
   - Total Number of Employees
   - Annual Sales or Revenue (US Dollar equivalent)
   - Description of Operations

6. Note that some fields are Optional, however all other fields must be completed to proceed further with the application process. For example, all applicants must complete the Organization Information sections. The Company Name and Physical Address fields are self-populated based on information previously entered during the initial DUNS search. The question marks to the left of the field provide additional information when you click on them.



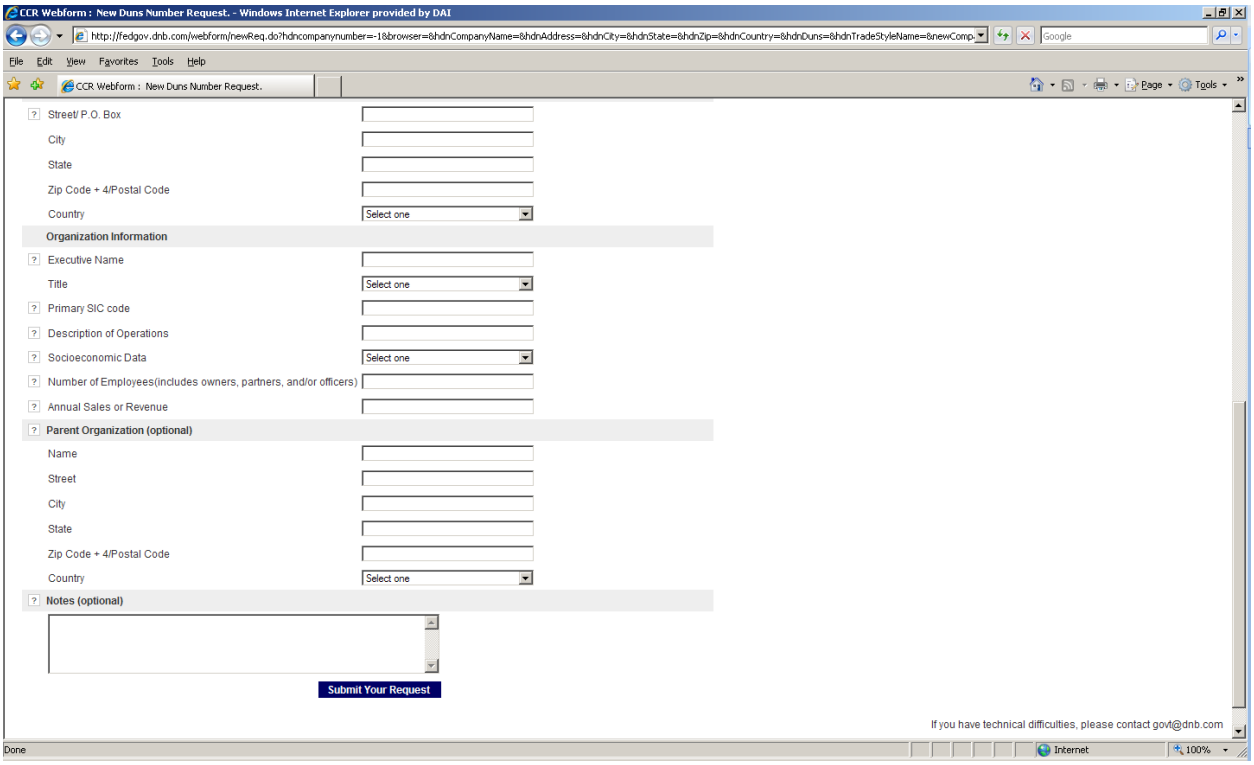
7. You must select the legal structure of your organization from the pull down menu. To assist you in selecting the appropriate structure that best represents your organization, a brief description of the various types follows:

- **Corporation –** A firm that meets certain legal requirements to be chartered by the state/province in which it is headquartered by the filing of articles of incorporation. A corporation is considered by law to be an entity separate and distinct from its owners. It can be taxed; it can be sued; it can enter into contractual agreements.
- **Government** - central, province/state, district, municipal and other U.S. or local government entities. Includes universities, schools and vocational centers owned and operated by the government.
- **Limited Liability Company (LLC) -** This is a type of business ownership combining several features of corporation and partnership structures. It is designed to provide the limited liability features of a corporation and the tax efficiencies and operational flexibility of a partnership. Its owners have limited personal liability for the LLC's debts and obligations, similar to the status of shareholders in a corporation. If your firm is an LLC, this will be noted on the organizations registration and licensing documents.
- **Non-profit -** An entity which exists for charitable reasons and is not conducted or maintained for the purpose of making a profit. Any money earned must be retained by the organization, and used for its own expenses, operations, and programs. Most organizations which are registered in the host country as a non-governmental organization (NGO) rather than as a commercial business are anon-profit entities.

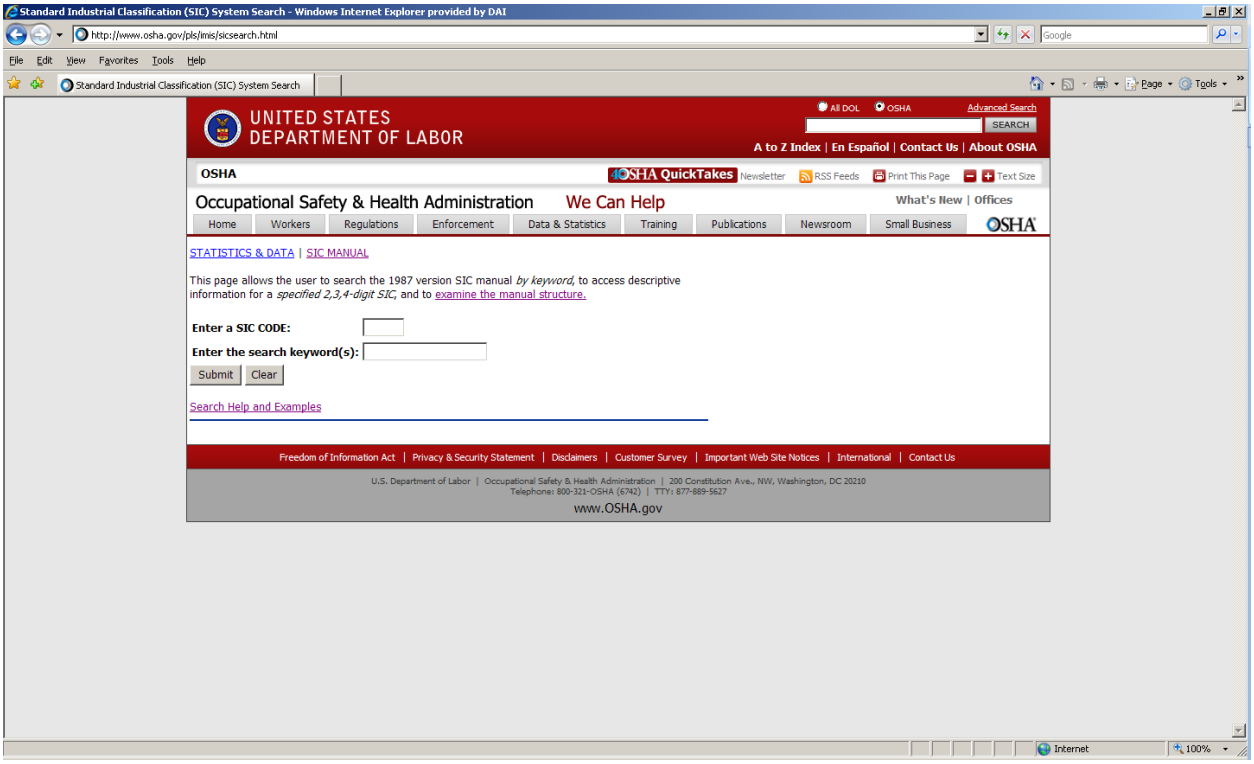
Community based organizations, trade associations, community development councils, and similar entities which are not organized as a profit making organization should select this status, even if your organization is not registered formally in Country as an NGO.

- **Partnership-** a legal form of operation in which two or more individuals carry on a continuing business for profit as co-owners. The profits and losses are shared proportionally.
- **Proprietorship**-These firms are owned by one person, usually the individual who has day-to-day responsibility for running the business. Sole proprietors own all the assets of the business and the profits generated by it.

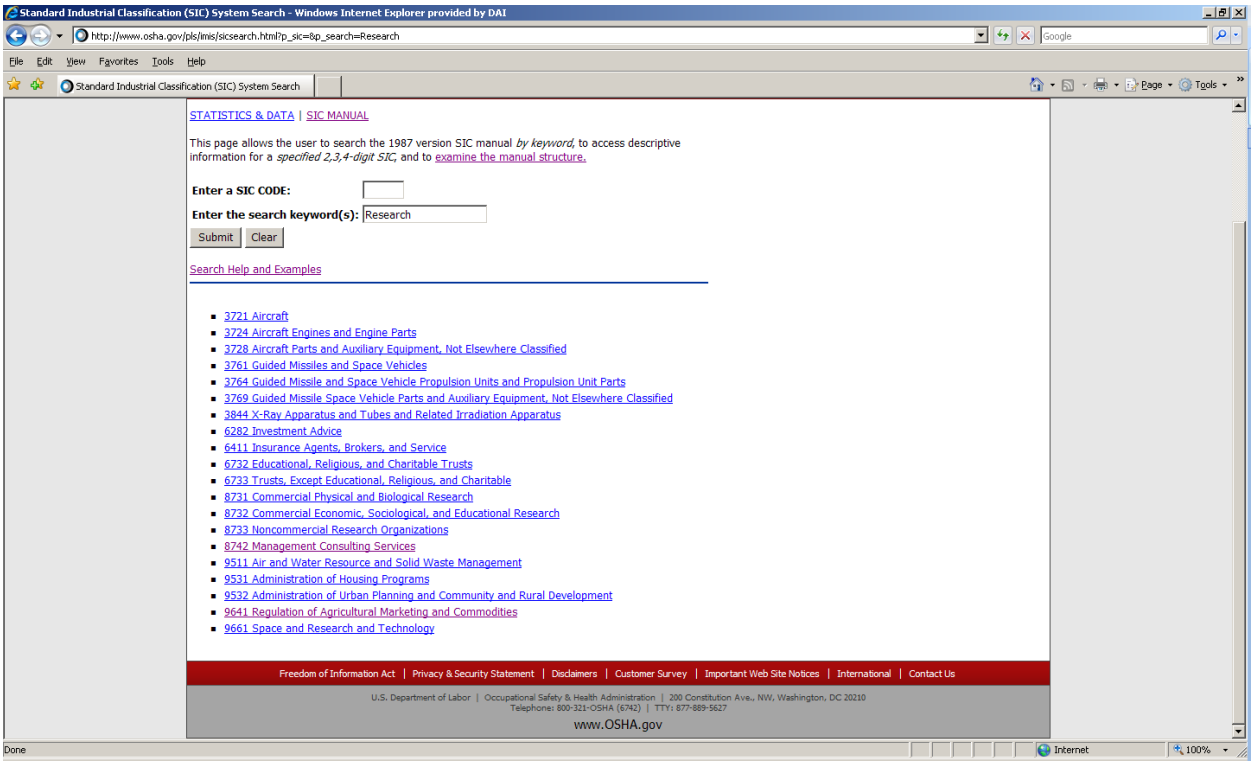
8. One of the most important fields that must be filled in is the Primary SIC code field. (See screen shot below.) The Primary Standard Industrial Code classifies the business' most relevant industry and function.



9. If you are unsure of which SIC Code your organization's core business falls under, please refer to the following website: http://www.osha.gov/oshstats/sicser.html



You will need to enter certain keywords to bring up the potential SIC Codes. In the case above, “Research” was entered as the keyword, and resulted in the following:



PLEASE NOTE: Many of the DAI subcontractors and grantees fall under one of the following SIC codes:

8742 Management Consulting Services

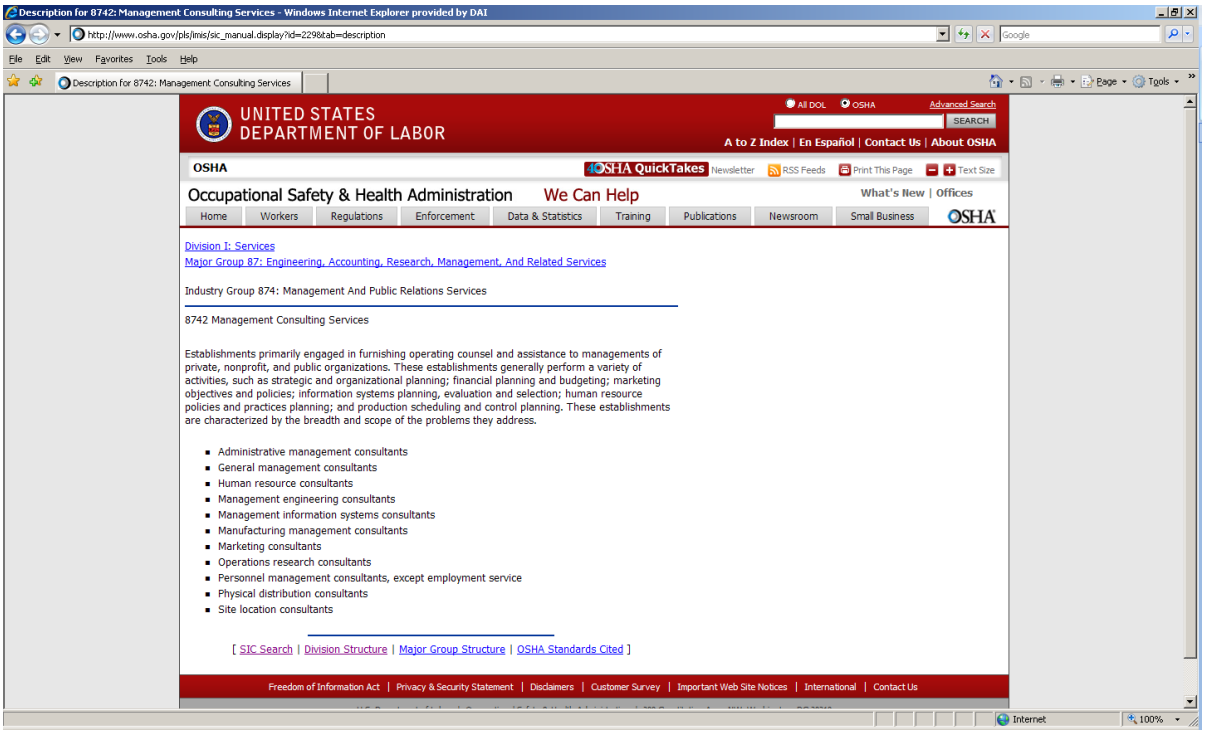
1542 General Contractors-Nonresidential Buildings, Other than Industrial Buildings and Warehouses or one of the codes within:

Industry Group 357: Computer And Office Equipment

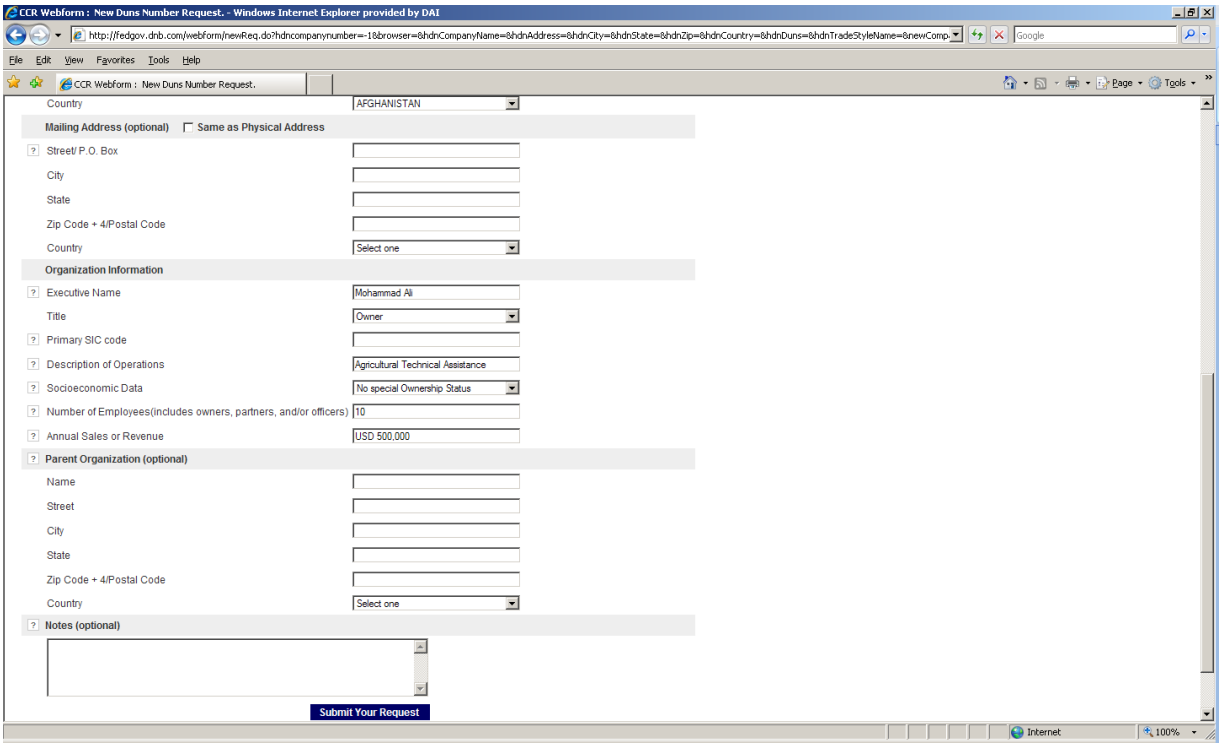
Industry Group 355: Special Industry Machinery, Except Metalworking

Industry Group 356: General Industrial Machinery And Equipment

Industry Group 359: Miscellaneous Industrial And Commercial

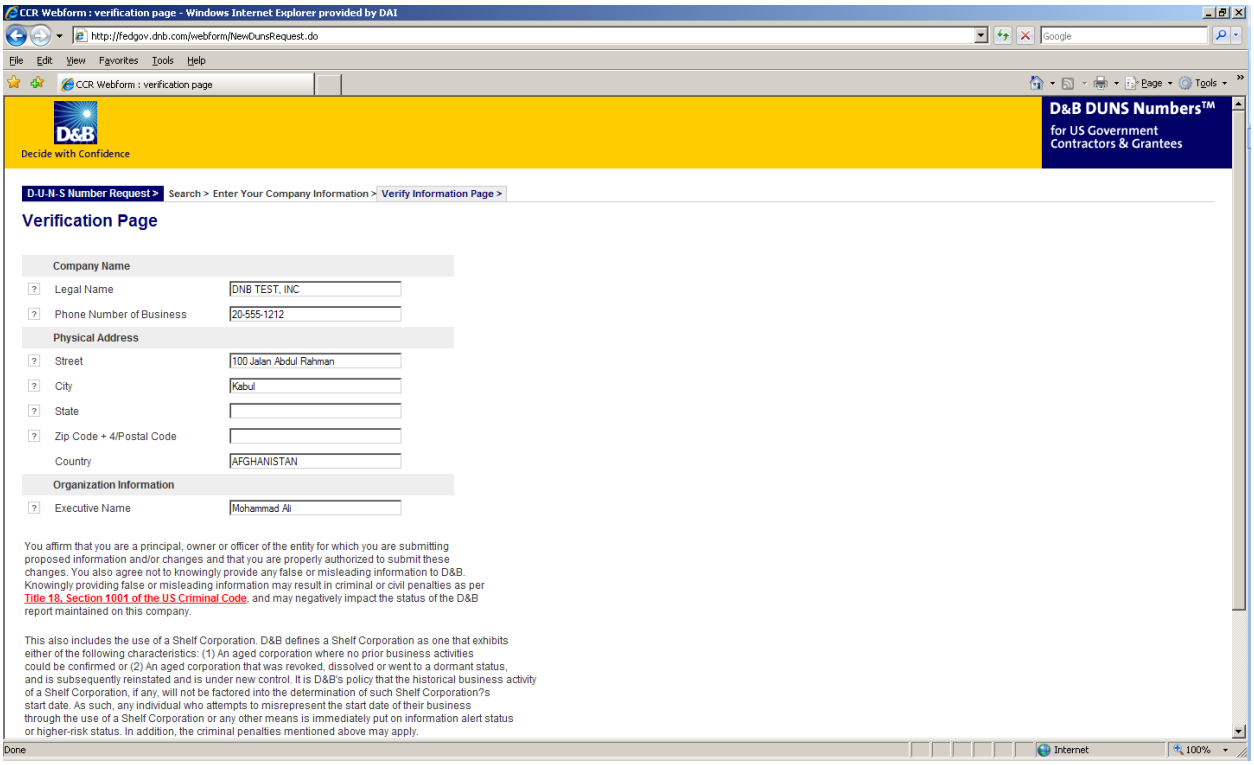


10. Description of Operations- Enter a brief description of the primary services you provide the example below, “agricultural technical assistance” was chosen as the primary function of the business.



11. The Annual Sales or Revenue figure should be provided in USD (US Dollar) equivalent.

12. Once all of the fields have been completed, click on “Submit Your Request” to be taken to the Verification page.
13. Note: Representative (Principal, Owner or Officer) needs to verify and provide affirmation regarding the accuracy of the data under criminal or civil penalties as per Title 18, Section 1001 of the US Criminal Code.
14. Once “Yes, Continue” button is clicked, the registration application is sent to D&B, and a DUNS number should be available within 24-48 hours. DUNS database can be checked in 24-48 hours by entering the Business Information in the Search window – which should now display a valid result with the new DUNS number for the entity.



10.5 Attachment E: Self Certification for Exemption from DUNS Requirement'

Legal Business Name: _____

Physical Address: _____

Physical City: _____

Physical Foreign Province (if applicable): _____

Physical Country: _____

Signature of Certifier _____

Full Name of Certifier (Last Name, First/Middle Names): _____

Title of Certifier: _____

Date of Certification (mm/dd/yyyy): _____

The sub-contractor/vendor whose legal business name is provided herein, certifies that we are an organization exempt from obtaining a DUNS number, as the gross income received from all sources in the previous tax year is under USD $300,000.

*By submitting this certification, the certifier attests to the accuracy of the representations and certifications contained herein. The certifier understands that s/he and/or the sub-contractor/vendor may be subject to penalties, if s/he misrepresents the sub-contractor/vendor in any of the representations or certifications to the Prime Contractor and/or the US Government.

The sub-contractor/vendor agrees to allow the Prime Contractor and/or the US Government to verify the company name, physical address, or other information provided herein. Certification validity is for one year from the date of certification.

10.6 Attachment F: Past Performance Form

Include projects that best illustrate your work experience relevant to this RFP, sorted by decreasing order of completion date.

Projects should have been undertaken in the past three years. Projects undertaken in the past six years may be taken into consideration at the discretion of the evaluation committee.

#	Project Title	Description of Activities	Location Province/ District	Client Name/Tel No/Email	Cost in US$	Start-End Dates	Completed on schedule (Yes/No)	Completion Letter Received? (Yes/No)	Type of Agreement, Subcontract, Grant, PO (fixed price, cost reimbursable)
1									
2									
3									
4									
5									

10.7 Attachment G: Representations and Certifications of Compliance

1. Federal Excluded Parties List - The Bidder Select is not presently debarred, suspended, or determined ineligible for an award of a contract by any Federal agency.

2. Executive Compensation Certification- FAR 52.204-10 requires DAI, as prime contractor of U.S. federal government contracts, to report compensation levels of the five most highly compensated subcontractor executives to the Federal Funding Accountability and Transparency Act Sub-Award Report System (FSRS)

3. Executive Order on Terrorism Financing- The Contractor is reminded that U.S. Executive Orders and U.S. law prohibits transactions with, and the provision of resources and support to, individuals and organizations associated with terrorism. It is the legal responsibility of the Contractor/Recipient to ensure compliance with these Executive Orders and laws. Recipients may not engage with, or provide resources or support to, individuals and organizations associated with terrorism. No support or resources may be provided to individuals or entities that appear on the Specially Designated Nationals and Blocked persons List maintained by the US Treasury (online at www.SAM.gov) or the United Nations Security Designation List (online at: http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml). This provision must be included in all subcontracts/sub awards issued under this Contract.

4. Trafficking of Persons – The Contractor may not traffic in persons (as defined in the Protocol to Prevent, Suppress, and Punish Trafficking of persons, especially Women and Children, supplementing the UN Convention against Transnational Organized Crime), procure commercial sex, and use forced labor during the period of this award.

5. Certification and Disclosure Regarding Payment to Influence Certain Federal Transactions – The Bidder certifies that it currently is and will remain in compliance with FAR 52.203-11, Certification and Disclosure Regarding Payment to Influence Certain Federal Transactions.

6. Organizational Conflict of Interest – The Bidder certifies that will comply FAR Part 9.5, Organizational Conflict of Interest. The Bidder certifies that is not aware of any information bearing on the existence of any potential organizational conflict of interest. The Bidder further certifies that if the Bidder becomes aware of information bearing on whether a potential conflict may exist, that Bidder shall immediately provide DAII with a disclosure statement describing this information.
7. Prohibition of Segregated Facilities - The Bidder certifies that it is compliant with FAR 52.222-21, Prohibition of Segregated Facilities.

8. Equal Opportunity – The Bidder certifies that it does not discriminate against any employee or applicant for employment because of age, sex, religion, handicap, race, creed, color or national origin.

9. Labor Laws – The Bidder certifies that it is in compliance with all labor laws.

10. Federal Acquisition Regulation (FAR) – The Bidder certifies that it is familiar with the Federal Acquisition Regulation (FAR) and is in not in violation of any certifications required in the applicable clauses of the FAR, including but not limited to certifications regarding lobbying, kickbacks, equal employment opportunity, affirmation action, and payments to influence Federal transactions.

11. Employee Compliance – The Bidder warrants that it will require all employees, entities and individuals providing services in connection with the performance of an DAI Purchase Order to comply with the provisions of the resulting Purchase Order and with all Federal, State, and local laws and regulations in connection with the work associated therein.

By submitting a proposal, offerors agree to fully comply with the terms and conditions above and all applicable U.S. federal government clauses included herein, and will be asked to sign these Representations and Certifications upon award.

10.8 Attachment H: Branding and Marking Plan

Note: This is not required as part of the proposal. It is included as information for the Offeror. Upon subcontract award, this will be the first deliverable due.

Appendix N: Marking Plan

Sub Project Number and Name:_____

Name of Implementing Partner:_____

Name and Title of Partner's Agent:_____

Name and Title of DAI Project Manager:_____

Instructions: This form has been created to provide implementing partners (subcontractors and grantees) and DAI Project Managers with a summary of marking requirements found in the Project's Branding Implementation Plan (BIP). This form must be completed by the DAI Project Manager in conjunction with the agent of the implementing partner.

Subproject Activities

Provide a short summary of the activities to be completed including the project location. For example, what materials or equipment will be purchased? What events will take place?

Include 2-3 sentence summary here:

Please place an "X" below for each activity that will take place as part of this Sub project. The implementing partner will be responsible for ensuring the Marking noted in the table below is implemented according to standards and templates provided.

Mark "X"	Activity/Documents	Required Marking
Activities		

Mark "X"	Activity/Documents	Required Marking
Documents		
	Reports	
	Certificates (training	
	Invitations	
	Other	

Co- Branding and Co-Marking:

DAI logo must not appear on any USAID funded programmatic material.

Requests for Exceptions or Waivers of Marking Requirements – If you do not feel it is possible to mark one or more of the items or events listed above, please describe below (1) what marking you want to be exempt from (2) how the activity or item meets the requirement for an exception or waiver.

Include full detailed justification here:

10.9 Attachment I: Insurance and Risk Allocation

By submitting an offer to this RFP, you agree to the following Insurance and Risk Allocation requirements:

1- Insurance: The Subcontractor shall purchase and maintain through the course of the Work such insurance as will protect the Subcontractor, Client and Contractor from the following claims which may arise out of or result from its operations hereunder (whether by itself, any Subcontractors, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable): claims under workmen's compensation, disability benefit, and other similar employee benefit acts; claims for damages because of bodily injury, occupational sickness or disease, or death, of its employees or any other person; claims which are sustained by any person as a result of the actions of the Subcontractor or by any other person; and claims for damages because of injury to or destruction of tangible property, including loss of use resulting there from. If requested, the Subcontractor will provide the Contractor with satisfactory evidence of compliance with this requirement.

The Subcontractor further agrees that if DAI should legally incur any reasonable cost whatsoever resulting from the lack of the aforementioned Insurance, on the part of the Subcontractor, while engaged in work, the Subcontractor will, to the extent permitted by applicable law, indemnify, and hold harmless DAI and the Client Organization from any such costs which they may legally be required to pay. The Subcontractor agrees to flow down the substance of this clause to all applicable consultants.

2- Indemnification: To the extent permitted by applicable law, the Subcontractor shall defend, indemnify, and hold harmless the Client and the Contractor, and its agents, officers and directors and employees from and against any and all claims, liability, losses, cost or expenses, including attorney's fees, arising out of the acts, errors or omissions of the Subcontractor, its officers, agents, employees, and anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable. This indemnification obligation shall not be limited in any way by required, actual, or available insurance coverage. The Subcontractor agrees to flow down the substance of this clause to all applicable consultants.

Likewise, DAI shall defend, indemnify, and hold harmless the Subcontractor and their agents, officers and directors, and employees from and against all claims, liability, losses, cost or expenses, including attorney's fees, arising out of the acts, errors or omissions of DAI, its officers, agents, employees, subcontractors, and anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

3- Intellectual Property Rights: Intellectual Property Rights: The Subcontractor warrants that it is not aware of any copyright, patent, trademark, trade secret or other proprietary right that it might infringe upon in providing the work required under the Agreement. The Parties shall indemnify and save each other harmless from any and all claims, suits, liability, expense or damages for any alleged or actual infringement of any copyright, patent, trademark, trade secret or other proprietary right arising in connection with the work provided by the Subcontractor under this Agreement.

Any deliverable produced under this subcontract shall be the property of DAI's Client, if applicable and as defined in DAI's prime contract with its Client. Additionally, any pre-existing item from either party shall remain the property of that party throughout the life of this subcontract agreement, and said party shall retain all rights and privileges to ownership. Any item that is jointly developed during the course of this subcontract agreement shall be either owned by DAI's Client or jointly owned by both parties, dependent upon the terms and conditions of DAI's prime contract with its Client.

4- DBA Insurance: Subcontractor shall, throughout the period when work is performed and until final acceptance by DAI, carry and maintain, and ensure that all Subcontractors carry and maintain, DBA insurance in accordance with the applicable laws. It is required that a copy of DBA insurance policies shall be submitted to the DAI Contract Administrator prior to the commencement of any overseas work. To meet this requirement, the Subcontractor is requested to immediately submit the copy of Subcontractor's existing DBA insurance policies and DBA insurance certification to the DAI Contract Administrator.

5- Proof of Insurance. Prior to the commencement of the Work, Subcontractor shall provide for Contractor's review evidence of Insurance reflecting full compliance with the requirements set forth in Article 7, as applicable in the form of a Certificate of Insurance and other related documents. Such documents shall be kept current and in compliance throughout the period when work is being performed and until final acceptance by Contractor, and shall, based on Subcontractor's best efforts, provide for thirty (30) days advance written notice to Contractor in the event of cancellation. Failure of Subcontractor or any Subcontractors to furnish Proof of Insurance, or to procure and maintain the Insurance required herein, or failure of Contractor to request such proof of coverage shall not constitute a waiver of the respective Subcontractors obligations hereunder.

10.10 Attachment J: Proposal Checklist

Offeror: _____

Have you?

☐ Submitted your proposal to DAI electronic E-mail address IGPAProcurementINBOX@dai.com (as specified in General Instructions above?

Does your proposal include the following?

☐ Signed Cover Letter *(use template in Attachment B)*

☐ Price Proposal (submitted in PDF and Excel format as described in section 4)

☐ Technical Proposal

☐ Past Performance *(use template in Attachment F)*.

☐ Documents use to determine Responsibility (As required in section "Responsibility Determination"):

1. Business Registration: Please provide a copy of official Iraqi business registration and required license(s) to operate in Iraq (e.g., organization registration in Iraq, or/and the organization proxy registration in Iraq – in case of non-Iraqi organization, please submit home country business registration as well), the organization also must be eligible to perform work under applicable laws and regulations of Iraq.
2. Evidence of a DUNS number (explained below in section 8.4).
3. The source, origin, and nationality of the products or services are not from a Prohibited Country (explained below in section 8.3).
4. Offerors must have adequate financial resources to finance and perform the work or deliver goods or the ability to obtain financial resources without receiving advance funds from DAI (e.g. Bank Statement, … etc.).
5. Ability to comply with required or proposed delivery or performance schedules (e.g. detailed price schedule, … etc.)
6. Have a satisfactory past performance record (e.g. appreciation letters or previous performance evidence, … etc.).
7. Have the necessary organization, experience, accounting, and operational controls and technical skills (e.g. organizational structure, … etc.).
8. Insurance and Risk Allocation (as defined in **Attachment I**)