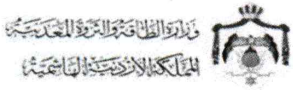


## **TERMS OF REFERENCE TOR**

### **Data Review, Gap analysis and Target Identification of Phosphate Resources in the Hashemite Kingdom of Jordan**

**Tender No: 17/E/supplies/2025**

**Ministry of Energy and Mineral Resources “MEMR”**



TERMS OF REFERENCE (TOR)  
Data Review, Gap analysis and Target Identification of Phosphate Resources  
in the Hashemite Kingdom of Jordan

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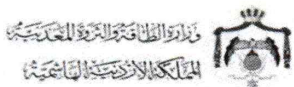


## **1. Introduction & Background:**

Jordan is among the world's leading producers of phosphate with phosphate deposits forming an essential component of the national economy. Phosphate ores in Jordan are primarily found in sedimentary sequences from the Upper Cretaceous to the Eocene period, particularly concentrated in the central, eastern and southern regions such as Al-Hasa, Al-Abiad, Eshidiya, Al Risha and Ruseifa. Mining activities began in the early 20<sup>th</sup> century and expanded significantly in the 1950s, contributing heavily to national exports and employment.

It is worth noting that during the past five years; large discoveries of Jordanian phosphate ore have been identified, spanning a vast area in the Risha region, east of al-Safawi, in the eastern part of the Kingdom. Two memoranda of understanding were signed with two companies to conduct studies on the exploitation of the ore within an area estimated at 600 km<sup>2</sup>. The two companies implemented extensive drilling programs, exploration activities are ongoing. There are also additional areas that have not been studied and require further evaluation, located outside the area covered by the memoranda of understanding.

Despite decades of extraction, significant portions of Jordan remain either underexplored or unexplored for phosphate resources. Additionally, urban expansion, evolving environmental regulations and technological advances in exploration call for a modern reassessment of the country's phosphate potential. This study aims to provide a structured approach to evaluate existing data, identify new opportunities, and recommend further exploration.



## **2. Project Objectives:**

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1. Compile, review, and analyze all existing geological, geophysical, geochemical, and exploration data related to phosphate deposits in Jordan to create a comprehensive knowledge base.
2. To identify data gaps and produce a desktop study to provide preliminary resource estimates in the areas where sufficient exploration and drilling data are available.
3. To compile, review, and validate all existing data and documentation related to Jordan's phosphate geology, including drilling logs, geological reports, mining records, academic research, and remote sensing data.
4. To estimate the potential phosphate resources quantities (inferred resources) according to the compiled and interpreted data, with committing to apply international resource reporting standards.
5. To assess the reliability, accuracy, and completeness of previous studies, maps, and models, and integrate them into a unified geospatial database.
6. To identify, locate and prioritize the promising zones of phosphate resources that are underexplored or un-assessed and suitable for conducting further exploration and assessment.
7. To identify zones where phosphate is present but not economically or technically exploitable, including areas affected by urban development, land uses restrictions, environmental constraints or any other related constrains.
8. Develop a recommended exploration program to address the identified gaps, including specific drilling targets, proposed methodologies, and estimated work volumes.
9. Provide decision-making support for national authorities and stakeholders by presenting a clear, actionable overview of Jordan's phosphate potential and the steps required to optimize its development and sustainable use.
10. To incorporate recent technologies and techniques such as remote sensing, digital elevation modeling, and satellite imagery interpretation into the geological assessment process.
11. Collect new geological, lithological, and assay data to support updated resource modeling and estimation.
12. Provide actionable recommendations for the development, management, or further exploration of Jordan's phosphate resources, based on the integrated findings.

### 3. Scope of Work:

This Tender will be carried out under one phase. The Bidder will define the reviewed data and identify the main gaps, in addition to design a comprehensive work plan for a futuristic exploration and drilling campaign with clear methodology and timeframe. Details and scope of work are as the following:

#### A. Data Collection, Compilation, and Review

- Collect and compile existing data from various sources, including but not limited to:
  - Geological maps (surface and subsurface)
  - Drilling data (core and RC logs, assays, lithology logs)
  - Geophysical and geochemical surveys
  - Historical resource and reserve estimates
  - Mining and production records
  - Previous exploration and feasibility studies
  - Academic and other relevant Researches
- Digitize and catalog the data into an organized and accessible format (Excel, GIS layers, databases).
- Assess data quality, integrity, and completeness, noting issues such as:
  - Missing data or incomplete datasets
  - Outdated methodologies
  - Inconsistent data formats or sources

#### B. Geological and Technical Review

- Conduct a regional geological review of phosphate-bearing formations in Jordan, including:
  - Stratigraphy, lithology, and depositional environments
  - Structural and tectonic controls relevant to phosphate mineralization
  - Ore body geometry, grade distribution, and mining characteristics
- Review and summarize the historical exploration programs, including:
  - Drilling programs
  - Sampling protocols and assay quality
  - Geological interpretations and resource modeling

### C. Resource Evaluation Assessment

- Review the existing phosphate resource and reserve estimates, focusing on:
  - Classification (Measured, Indicated, Inferred, etc.)
  - Methodology used (cut-off grades, estimation methods, etc.)
  - Compliance with international standards (JORC, NI 43-101, CRIRSCO)
  - Reliability and validity of the resource statements
- Identify areas with potential for resource expansion or upgrade, either by additional data or re-interpretation.

### D. Gap Analysis

- Identify data and knowledge gaps, such as:
  - Areas lacking sufficient exploration data
  - Insufficient drilling density or missing QA/QC data
  - Lack of modern resource models or 3D geological modeling
  - Inadequate environmental or socio-economic data for project advancement
  - Gaps in infrastructure analysis, such as transportation or processing capabilities
- Determine what additional work is required to upgrade existing phosphate resources to modern reporting standards (JORC, NI 43-101, etc.).

### E. Recommendations and Roadmap

- Develop a practical roadmap for:
  - Future exploration programs (targeting, drilling plans, sampling strategies)
  - Additional studies required (geological, environmental, socio-economic)
  - Steps to convert identified resources to reportable reserves

- Identify, locate and prioritize the promising zones of phosphate resources that are underexplored or un-assessed and suitable for conducting further exploration and assessment.
- Identify zones where phosphate is present but not economically or technically exploitable, including areas affected by urban development, land uses restrictions, environmental constraints or any other related constraints.

#### **F. Comprehensive Exploration and Drilling Work Plan**

- **Specific drilling targets** prioritized based on geological potential, data review, and exploration rationale
- **Detailed drilling program design**, including the number of drill holes, proposed locations (coordinates), depths, drilling methods (coring, RC, etc.), and sampling protocols
- **Estimated work volumes and resource allocation**, including logistical considerations, manpower, equipment needs, and timeframes
- **Cost estimates and budget breakdown** for the proposed drilling and associated activities
- **QA/QC protocols and data management procedures** to ensure data integrity

#### **G. Reporting and Documentation**

- Prepare the following reports:
  - Data Inventory Report (all data sources compiled and assessed)
  - Desktop Study Report (geological and technical synthesis)
  - Gap Analysis Report (identification of data gaps and recommended actions)
  - Final Integrated Report, consolidating all findings with maps, tables, and appendices
  - Inferred Resource Estimation, in the areas where sufficient data are available
  - Potential and Promising zones for phosphate resources to conduct further exploration.

- Consolidated Work Plan for the drilling program including all activities with clear timelines.
- Provide all deliverables in editable formats (Word, Excel, GIS layers, shape files, PDF).

#### **H. Presentation and Workshop**

- Conduct a presentation or workshop for stakeholders to present findings, discuss recommendations, and receive feedback.

### **4. Instruction for the Bidders:**

These instructions are for the interested Bidders, International and National consultants or firms who are specialized in mineral exploration (particularly Phosphate exploration) and resource estimation are invited to bid under the following instructions:

- All Bidders interested in bidding for this Tender shall comply with the Jordanian laws and regulations related to the bidding process.
- The Bidder shall provide a bid bond is equal to 6000 Jordanian dinars or, amount which is equivalent to 8951 dollars from a local Jordanian bank acceptable to the Government, valid during the proposal validity. After the Contract signature, MEMR shall return the bid bonds to the unsuccessful Bidders. The conditions for losing and liquidating the Bid Bond are subject to the provisions of the Jordanian Regulations and Tendering Directives.
- Bidder shall submit three (3) separate envelopes; one for the technical proposal and one for the financial proposal. The third document is the Bid Bond shall be submitted by the same time of the technical and financial proposals.
- The Bidders are expected to submit a Technical Proposal and one Financial Proposal as specified in the Tender.
- The final evaluation and selection of the winning bid will be done in accordance with a composite formula covering the relative evidences of the technical and financial proposals as further explained.



- The final evaluation and selection of the winning bid will be done in accordance with a composite formula covering the relative evidences of the technical and financial proposals as further explained.
- For accounting and evaluation purposes, Bidders are requested to submit itemized prices inclusive of all costs, fees, taxes and other expenses according to the Jordanian laws and regulations.

A man-month chart illustrating local and expatriate staff effort is to be provided with a detailed breakdown of all fees including 0.0075 stamp duty, 11% income tax, 16% sales tax and a total sum price for all the activities pertaining to the required Services.

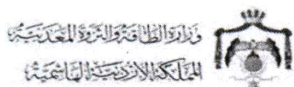
- Proposals are binding to the Bidders for period of (120) days from the date of submission.
- If the proposal is successful, successful Bidder will be expected to sign a contract with the Ministry of Energy and Mineral Resources "MEMR", using the enclosed standard form.
- All Bidder are requested to submit accredited, confirmed and documented information and references for all similar services and staff resumes that will be involved in the Services.
- The Contractor shall submit a Performance Guarantee of 10% of tender price issued or endorsed and ratified by a local bank operating in Jordan, as insurance for the Contractor's fulfilment of his contractual obligations before releasing his submitted Bid Bond.
- The Bidder is required to provide a bank insurance with same amount of the advance payment requested. The insurance shall be valid until the task is delivered and accepted by MEMR.
- All Bidders shall bear all costs associated with the preparation and submission of their proposals and contract signing.
  - Late fees shall be imposed in accordance with Government Procurement System No. 8 of 2022 and shall be calculated at the rate of (100) dinars for each day of delay and not exceeding (15%) of the referral value.

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## 5. Special Conditions:

1. The duration of the tender execution is 9 (nine) months (270 calendar days), starting from the date of the tender contract signing.
2. All of the deliverables must be submitted in English.
3. The Bidder must demonstrate a proven track record in mining, geology, and resource estimation, with specific experience in evaluating phosphate reserves or similar mineral projects.
4. The bidder must possess expertise in geological, geochemical, and mining engineering, along with relevant competencies in metallurgy, process/industrial engineering, and geo-economic analysis.
5. The Successful Bidder is responsible for collecting all relevant data and conducting office studies using all reliable and credible sources. It must also obtain all previous exploration reports, maps, datasets, satellite imagery, and academic or government publications that support the scope of this tender.
6. Experts to be allocated for this tender should have university degrees in their specialty and should have adequate experience in similar projects. Team leader or project manager position should have at least 15 years of experience in the scope of the work and in team leading.
7. CVs of experts are also required and should be included in the offer.
8. In addition, Bidder shall submit an organization chart for the project showing team leader, experts and other supporting specialists in his proposal.
9. The expected team should include experts in the following areas:
  - Mineral Resource Estimation
  - Geology
  - Geochemistry
  - Geophysics
  - Mining Engineering
  - Process/Industrial Engineering
  - Mechanical Engineering
  - Geo-economic Analysis.



10. Bidders Teams and Experts technical qualifications should have the following:
  - At least 10 years of experience in phosphate exploration.
  - A Proven track record of resource estimation and geological modeling.
  - Proficiency in GIS and 3D geological modeling tools.
  - A multidisciplinary team comprising geologists, geochemists, GIS specialists, and drilling experts.
  - At least one competent / qualified person (CP/QP) that has signed off a phosphate exploration and resource estimation report previously.
11. Apart from the pre-assigned reporting requirements, a monthly progress report must be submitted by the bidder to show the work advancement in accordance with the scope required.
12. One month After from the contract signing, the Bidder must submit an **"Inception Report"** that must include:
  - List of all collected data.
  - Understanding of the assignment.
  - Updated Methodology and work plan.
  - Updated Project schedule with milestones.
13. Work Plan Development:

The Bidder must develop a **comprehensive, actionable, and technically sound work plan** for underexplored or un-assessed potential areas, which must include:

  - Proposed drilling targets and justifications.
  - Methodology, logistics, estimated work volume.
  - Proposed QA/QC protocols for field execution.
  - Estimated budget and timeline.

This work plan will be reviewed by the Client and external reviewers and must be updated based on feedback before approval.
14. The areas where inferred resource calculations are possible, the Bidder must submit the following:

- 
- Separate blocks divided according to the inferred resource with 1,000,000 tons (one million tons) of phosphate deposit.
  - For each of the above divided blocks, the bidder must produce a full geodatabase that include but not limited to: digitized geological map, structural map, drilling database, assay database, 3d geological models, grade block model (if possible), cross sections ...etc.
  - One promotion report per each block comprises all the above and signed by the CP/QP.
15. Payment of the Contract Price is to be scheduled as:
- 10 % as the advance payment and provide advance payment guarantee.
  - 10% at the approval of the Inception Report.
  - 30% at the approval of the Gap Analysis Report.
  - 50% at the approval of the Final Report and the other related deliverables.
16. Reports Approval:
- Any revisions, modifications or feedbacks must be presented to the Contractor by the official communication channels.
  - All reports and technical deliverables submitted by the Contractor shall be considered non-approved unless and until an explicit written approval is issued by MEMR. No report shall be deemed accepted or eligible for payment without such written approval. In the event a report is not approved, MEMR shall notify the Contractor in writing, specifying the required modifications and providing a timeline for rectification
17. The Contractor shall bear full and sole responsibility for managing and overcoming any operational, logistical, technical, or administrative challenges that may arise during the execution of the services. Under no circumstances shall such difficulties be considered grounds for delay, additional compensation, or non-performance, unless explicitly approved in writing by the Client.
18. All data provided or generated during the project shall remain the property of the Client. The Bidder must maintain strict confidentiality of all project materials.
19. The Bidder is strictly prohibited from sharing any project-related data, maps, reports, or findings with any third party without obtaining the prior written consent of the Client (MEMR). Any breach of this obligation shall be considered a material violation of the Contract and may subject the Bidder to legal and financial liability, including but not limited to penalties

and/or the enforcement of a Non-Disclosure Agreement (NDA), as deemed appropriate by the Client

20. the inquiry period ends on 7/9/2025, and the appendix of answers to inquiries will be published on 14/9/2025, corresponding to sunday, and the bids will be deposited in the ministry building on sunday, corresponding to 21/9/2025

## 6. General Conditions:

### A. Proposal Submission Requirements:

#### ➤ Technical proposal detailing the following:

1. Methodology, Work and Study Approach.
2. Detailed timeline explaining all planned activities with specific starting and ending dates and clear milestones.
3. Track record of the Bidder expertise with accredited documentation from the relevant entities.
4. Team CVs and relevant experience with accreditation of a valid membership for the Competent / Qualified Person.
5. Detailed Work plan including all planned activities with thorough description and specifics.
6. Deliverables schedule must be indicated clearly in the timeline

#### ➤ Financial proposal (separate sealed envelope).

#### ➤ Bid Bond (separate and sealed envelope).

- B. The Bidder must be registered and licensed in Jordan or partner with a registered local entity.
- C. All prices must be quoted in Jordanian Dinar (JOD) or dollars.
- D. The selected Bidder must comply with all Jordanian labor, tax, and environmental regulations.
- E. The relevant purchasing committee has the right to cancel the tender invitation or any of its items or the award decision or to re-tender at any time or at any stage without stating the reasons unless the contractor has been notified of the purchase order and the award decision.

## 7. Deliverables

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1. **Inception Report** that must include:

- List of all collected data.
- Desktop Study: Geological overview of Jordan's phosphate resources, Review of existing resource and reserve estimates (JORC, NI 43-101 or other standards, if applicable), Summary of past exploration programs and mining operations,
- Understanding of the assignment.
- Updated Methodology and work plan.
- Updated Project schedule with milestones.

2. **Gap Analysis Report** that Identify data and knowledge gaps, including but not limited to:

- Areas lacking sufficient exploration data.
- Insufficient drilling density or missing QA/QC data.
- Lack of modern resource models or 3D geological modeling.
- Inadequate environmental or socio-economic data for project advancement.
- Gaps in infrastructure analysis, such as transportation or processing capabilities.
- Determine what additional work is required to upgrade existing phosphate resources to modern reporting standards (JORC, NI 43-101, etc.).
- Evaluation of known deposits and prospects and Review of regional and global phosphate market positioning.
- Data Inventory & Compilation: Digital catalog of datasets (Excel + GIS formats), Identification of data sources, data holders, and data formats and Assessment of data quality, completeness, and relevance.

3. **Final Report** that must integrate all project deliverables into a single document, providing a complete and unified assessment of phosphate resources across the Kingdom of Jordan. It should be constructed as the following:
- Data Review and Gap Analysis section, which compiles and evaluates all existing geological and exploration data, identifies deficiencies with precise geographic coordinates, and recommends areas for further investigation.
  - Geological Surveys and Mapping section details field mapping, structural analysis, and remote sensing data, presenting updated geological maps and structural interpretations of phosphate-bearing formations.
  - Target Area Identification, where all gathered data is integrated using GIS and geological modeling techniques to prioritize high-potential phosphate zones for further exploration.
  - A detailed section addressing urban expansion zones, their boundaries with phosphate ore deposits, and zones where phosphate is present but not exploitable due to constraints.
  - Inferred Resource Estimation and Modeling section, where advanced geostatistical methods and 3D geological modeling techniques are applied to classify and quantify phosphate resources according to industry best standards, complete with sensitivity analyses.
  - Comprehensive Exploration and Drilling Work Plan that includes:
    - Specific drilling targets prioritized based on geological potential, data review, and exploration rationale
    - Detailed drilling program design, including the number of drill holes, proposed locations (coordinates), depths, drilling methods (coring, RC, etc.), and sampling protocols
    - Estimated work volumes and resource allocation, including logistical considerations, manpower, equipment needs, and timeframes
    - Cost estimates and budget breakdown for the proposed drilling and associated activities
    - QA/QC protocols and data management procedures to ensure data integrity



- High-resolution maps that clearly show: (1) high-potential mining zones, (2) currently exploited areas, (3) unexplored or underexplored zones, and (4) areas requiring further study with clear geographic extents.
4. Complete GIS database for all data including but not limited to maps, boreholes, Landsat images, remote sensing data, image classification, band math and manipulation, structural analysis and delineations, lineaments, 3d models, cross sections, block models, and any other related data (raw or interpreted) used in the scope of work.

## 8. Proposals Evaluation and Selection

- A. The submission of the Technical and Financial Proposals shall be clearly titled, and shall contain three (3) main documents. One clearly titled as Technical Proposal, one as the Financial Proposal that has to contain the price offers, and the third as the Bid Bond that shall be delivered according to MEMR instructions.
- B. **Technical Evaluation**, Technical proposals will be evaluated using the Following criteria:

Requirement	Points		
		Requirement	Points
The adequacy of the proposed methodology and work plan and approach in responding to the tender	25	Compliance and completeness	5
		Relevance and logic sequence	5
		Innovative ideas	5
		Work schedule / Staffing schedule	5
		Project organization structure and key personnel	5
Related experience of the firm in the field of the Services	50	Major similar Services that the firm or joint venture has undertaken over the past seven years and the nature of these Services, The Similar	30



TERMS OF REFERENCE (TOR)

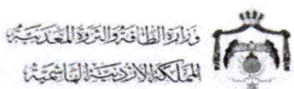
Data Review, Gap analysis and Target Identification of Phosphate Resources  
in the Hashemite Kingdom of Jordan

		Experience means, Number of Assignments and this will entail the following information (Name of Projects, Duration, Date, Name of Clients, Topics, and a brief rundown of the projects)	
		Number of years that the firm or joint venture has been in operation in the field of the required Services.	10
		Number of years that the firm or joint venture worked in the Middle East.	10
<p>Qualification and competence of key personnel.</p> <p>Key personnel specialized in the required assignment, mainly technical Mining, Geologist, and Engineering.</p> <p>The Similar Experience of the Key Personnel means, Number of the Assignments executed by the Named Experts and this will entail the following information: (Name of Projects, Duration, Date, Name of Clients, Topics, and a brief rundown of the projects).</p>	25	Related qualification and competence of experts /university degree/number of years of experience/team leadership in previous projects/time with consulting firm (minimum 3 years)/experience in developing countries/ and serving governments/experience in the mining sector.	15
		Specific experience in mining and its relevant industries on strategic plans, market research, diagnostic studies, defining mineral industries business models and economic development plans and similar experience in the middle east/ experience in preparation of reform plans of various scales.	10

**The consultant or firm will be disqualified if he gets less than 70% of the points allocated for any of the items under A above.**

**C. Financial Proposals:**

- The price offers must be submitted clearly in relation to services.
- Proposals must be submitted with various items separately priced as specified in the schedules of price breakdown, as per milestones which will constitute part of the Contract when approved by MEMR.
- Proposals submitted without itemization shall not be taken into consideration.



- The prices must be written in figures and in words. In case of contradiction between figures and words, words alone shall rule.
- At any time during the Project, MEMR may request a Change by notifying the Contractor in writing of the specific Change desired. In such case, the cost of such Change shall be computed in accordance with man-hour rates set out in the Financial Proposal and separately stated in the invoice.
- Basis of charges of variation to the scope shall be included in the Proposal. A list of man-hours rates is required to be submitted to serve as the basis for adjustment of Contract price in case of modifications required by MEMR. However, MEMR will make every effort to resolve areas of potential adjustments as early as possible in the Project so that changes will be minimized.
- The lump sum price will be submitted based on cash payments through wire transfers according to the time schedule.
- A total sum price for all the activities pertaining to the bid is expected.
- The total amount stated on the Contractor or firm remuneration schedule shall cover all cost required to perform the Services as in the tender.
- Payments shall be made as per approved milestones.

#### **D. Evaluation of the Technical and Financial Proposals**

The following formula will be used to determine the total score of each submission:

$$R = \frac{(75) \% \times TP}{Tmax} + \frac{(25) \% \times Fmin}{FP}$$

Where:

R: Total score

TP: Technical points of the proposal under consideration.

FP: The price of the proposal under consideration.

F min: Lowest price among all opened financial proposals.

T max: Maximum Technical mark among all opened Proposals.

The tender scoring the highest number of points will be notified for contract award.

## 9. Available Data:

The Contractor is responsible for securing and collecting data and previous studies, identifying their references, and subsequently documenting them in the final reports. The following data may be used, but the Contractor is not satisfied with them:

The primary sources available for phosphate exploration data include:

- All previous reports (paper and electronic) prepared by the Ministry of Energy and Mineral Resources on phosphate in all regions of Jordan, listed in Table 1 with the year of publication.
- Geological maps of phosphate in Jordan, with their numbers, scale, and availability of the bulletin, are listed in Table 2.

The above data will be made available to interested parties. It is the Contractor's responsibility to identify any additional data and incorporate it (assuming more data are available) into the form and subsequent report. If the data is incomplete, corrupted, or inconsistent, the Contractor is responsible for working with the Jordanian government and the Ministry of Energy and Mineral Resources to reconcile the data.

**Table 1: All previous reports for phosphate in Jordan.**

No.	Report Name	Year
1	Development of Phosphate Production_ Al Hassa Region	1962
2	Esh-Shadiya Phosphate Project_Vol_2_Lithological Logs Of Boreholes Drilled In Sheet No. 58_Nra	1974
3	Geology Of The Mushash El Marmak Area_Phosphate Prospect_Shidiya District	1990
4	Phosphate Exploration_&_Beneficiation Studies	1974
5	Shidiya Phosphate Project_Phase Ii_Report On Ore Beneficiation Tests	1986
6	Shidiya Phosphate Project _Appendix 1	1986
7	Shidiya Phosphate Project_Phase Ii Ore Beneficiation Material Balance And Flow Sheets	-
8	Target Areas For Phosphate In Qa Shuibiki Sheet_Shidiya District	1993
9	The Expansion Of The Phosphate Industry In Jordan Part- Iv Engineering & Transport Section B Survey Of Inland Transport ~1	1965

10	The Expansion Of The Phosphate Industry In Jordan Part-I Evaluation Of The Financial Position	1965
11	The Expansion Of The Phosphate Industry In Jordan Volume- V Financial Evaluation Of An Integrated Phosphate Industry & S~I	1965
12	The Expansion Of The Phosphate Part Ii Market & Markiting	1965
13	The Expansion Of The Phosphate Part Iii Management	1965
14	The Geology Of Ash Shidiya 3149-I & Isfir Al Mahatta 3150-Ii_ Wajdi K Halaseh	1997
15	الفوسفات نشأته وتكوينه، أنواعه، طرق تعدينه، طرق معالجة وتركيزه، تصنيعه واستخداماته.	1997
16	Phosphate Shidiya	2015
17	Phosphate Al Risha	2022

**Table 2: All geological maps that Cover Phosphate Areas (Bulletins).**

No	Map name	Map Scale	Bulletin occurrence
1	Siwaqa	1:50000	Available
2	Wadi Maghar	1:50000	Available
3	Jabal Al Mutaramil	1:50000	Available
4	Al Hisa (Al 'Aina)	1:50000	Available
5	Wadi Al Buway'ija	1:50000	Available
6	Wadi Al Bahyia	1:50000	Available
7	Al Husayniyya Al Janubiyya (Jarf Ad Darawish)	1:50000	Available
8	Isfir Al Mahtta	1:50000	Available
9	Ash Shidiyya (Fassu'a)	1:50000	Available
10	Wadi Abu Mil	1:50000	Not Available
11	Jibal Kabid	1:50000	Available
12	El Jafr	1:100000	Available

## 10. Appendices:

1. Technical Proposal- Standard Form
2. Financial Proposal - Standard Form
3. Standard Form of Contract
4. Performance Guarantee Form



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**Appendix 1: Technical Proposal- Standard Form**

**TECH-1:** Technical Proposal Submission Form

**TECH-2:** Contractor's Organization and Experience.

A. Contractor's Organization

B. Contractor's Experience

**TECH-3:** Comments or Suggestions on the Terms of Reference and on Counterpart Staff and Facilities to be provided by MEMR

A. On the Terms of Reference

B. On the Counterpart Staff and Facilities

**TECH-4:** Description of the Approach, Methodology and work plan for performing the Service.

**TECH-5:** Team Composition and Task Assignments.

**TECH-6:** Curriculum vitae (CV) for Proposed Professional Staff.

**TECH-7:** Staffing Schedule

**TECH-8:** Work Schedule.



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**FORM TECH-1: Technical Proposal Submission Form**

[Location, Date]

To: [MEMR]

Dear Sir,

We, the undersigned, offer to provide the **Consultancy Services** in accordance with your Request for Proposal dated [-----] and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal, and a Financial Proposal and the Bid Bond.

We are submitting our Proposal in association with: *[Insert a list with full name and address of each associated Contractor]*

We hereby declare that all the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

If negotiations are held during the period of validity of the Proposal stated in the TOR, we undertake to negotiate based on the proposed staff. Our Proposal is binding upon us and subject to the modifications resulting from agreed Contract.

We undertake, if our Proposals are accepted, to initiate the consulting services related to the assignment no later than the agreed date.

We understand you are not bound to accept any Proposal you receive.

Yours sincerely,

Authorized Signature [In full and initials]:

Name and Title of Signatory:

Name of Firm:

Address:



### **Power of Attorney (POA)**

Please attach a signed and scanned POA document as part of your proposal.



## **FORM TECH-2: Contractor's Organization and Experience**

### **A - Contractor's Organization**

*[Provide here a brief (two pages) description of the background and organization of your firm/entity and each associate for this assignment.]*



## B - Contractor's Experience

*[Using the format below, provide information on each assignment for which your firm, and each associate for this assignment, was legally contracted either individually as a corporate entity or as one of the major companies within an association, for carrying out consulting services similar to the ones requested under this assignment.]*

Assignment name:	Approx. value of the contract in current US \$:
Country:	Duration of assignment (months):
Location within country:	
Name of Client:	Total N° of staff-months of the assignment:
Address:	Approx. value of the services provided by your firm under the contract (in current US\$:
Start date (month/year):	N° of professional staff-months provided by associated Contractors:
Completion date (month/year):	
Name of associated Contractors, if any:	Name of senior professional staff of Contractor firm involved and functions performed (indicate most significant profiles such as Project Director/Coordinator, Team Leader):
Narrative description of Project:	
Description of actual services provided by Contractor staff within the assignment:	

Firm's

Name: \_\_\_\_\_



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**FORM TECH-3: Comments and suggestions on the terms of reference**

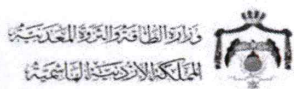
*[Present and justify here any modifications or improvement to the Terms of Reference you are proposing to improve performance in carrying out the assignment (such as deleting some activity you consider unnecessary, or adding another, or proposing a different phasing of the activities). Such suggestions should be concise and to the point, and incorporated in your Proposal.]*

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#### **FORM TECH-4: Description of Approach, Methodology and Work Plan**

[Technical approach, methodology and work plan are key components of the Technical Proposal. You are suggested to present your Technical Proposal divided into the following three chapters:

- a) Technical Approach and Methodology,
  - b) Work Plan, and
  - c) Organization and Staffing,
- a) Technical Approach and Methodology. In this chapter, you should explain your understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. You should highlight the problems being addressed and their importance, and explain the technical approach you would adopt to address them. You should also explain the methodologies you propose to adopt and highlight the compatibility of those methodologies with the proposed approach.
- b) Work Plan. In this chapter you should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by MEMR), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan.
- c) Organization and Staffing. In this chapter, you should propose the structure and composition of your team. You should list the main disciplines of the assignment, the key expert responsible, and proposed technical and support staff.



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**FORM TECH-5: Team Composition and Task Assignment**

Professional Staff				
Name of Staff	Firm	Area of Expertise	Position Assigned	Task Assigned



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**FORM TECH-6: Curriculum Vitae (CV) for proposed professional staff**

**1. Proposed Position** [*only one candidate shall be nominated for each position*]: \_\_\_\_\_

**2. Name of Firm** [*Insert name of firm proposing the staff*]: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

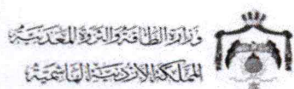
**3. Name of Staff** [*Insert full name*]: \_\_\_\_\_

**4. Date of Birth:** \_\_\_\_\_ **Nationality:** \_\_\_\_\_

**5. Education** [*Indicate college/university and other specialized education of staff member, giving names of institutions, degrees obtained, and dates of obtainment*]: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**6. Membership of Professional Associations:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**7. Other Training** [*Indicate significant training since degrees under 5 - Education were obtained*]: \_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**8. Countries of Work Experience:** *[List countries where staff has worked in the last ten years]:* \_\_\_\_\_

**9. Languages** *[For each language indicate proficiency: good, fair, or poor in speaking, reading, and writing]:* \_\_\_\_\_

**10. Employment Record** *[Starting with present position, list in reverse order every employment held by staff member since graduation, giving for each employment (see format here below): dates of employment, name of employing organization, positions held.]:*

From [Year]: \_\_\_\_\_ To [Year]: \_\_\_\_\_

Employer: \_\_\_\_\_

Positions held: \_\_\_\_\_

<b>11. Detailed Tasks Assigned</b>	<b>12. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned</b>
<i>[List all tasks to be performed under this assignment]</i>	<i>[Among the assignments in which the staff has been involved, indicate the following information for those assignments that best illustrate staff capability to handle the tasks listed under point 11.]</i>  Name of assignment or project: _____  Year: _____



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	Location: _____
	Client: _____
	Main project features: _____
	Positions held: _____
	Activities performed: _____

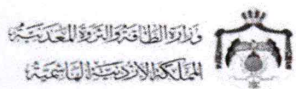
### 13. Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes my qualifications, my experience, and myself. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.

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

*[Signature of staff member or authorized representative of the staff]*  
*Day/Month/Year*

Full name of authorized  
representative: \_\_\_\_\_  
\_\_\_\_\_



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### FORM TECH-7: Staffing

N°	Name of Staff	Staff input (in the form of a bar chart)														Total staff-month input	
		1	2	3	4	5	6	7	8	9	10	11	12	n	Total		
1																	
2																	
3																	
n																	
Total																	

- For Professional Staff the input should be indicated individually; for Support Staff it should be indicated by category (e.g.: draftsmen, clerical staff, etc.).
- Months are counted from the start of the assignment.



### FORM TECH-8: Work schedule

N°	Activity <sup>1</sup>	Months <sup>2</sup>												
		1	2	3	4	5	6	7	8	9	10	11	12	n
1														
2														
3														
4														
5														
n														

- 1 Indicate all main activities of the assignment, including delivery of reports (e.g.: inception, interim, and final reports), and other benchmarks such as Client approvals.
- 2 Duration of activities shall be indicated in the form of a bar chart.



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**Appendix 2: Financial Proposal - Standard Forms**

Financial Proposal Standard Forms shall be used for the preparation of the Financial Proposal according to the instructions provided under the TOR. Such Forms are to be used whichever is the selection method indicated in the general announcement.

FIN-1 Financial Proposal Submission Form

FIN-2 Breakdown of Costs by Activity

FIN-3 Breakdown of Remuneration

FIN-4 Reimbursable expenses



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**Power of Attorney (POA)**

Please attach a signed and scanned POA document as part of your proposal.



**FORM FIN-1: Financial proposal submission form**

[Location, Date]

To: [Name and address of Client]

Dear Sirs,

We, the undersigned, offer to provide the [Name of the services]

Exclusivity Agreement in accordance with your Request for Proposal dated [Insert Date] and our Technical Proposal. Our attached Financial Proposal is for the sum of [Insert amount(s) in words and figures in foreign prices]. This amount is inclusive of the local taxes.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations and agreement, up to expiration of the validity period of the Proposal.

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorized Signature [In full and initials]: \_\_\_\_\_

Name and Title of Signatory: \_\_\_\_\_

Name of Firm: \_\_\_\_\_

Address: \_\_\_\_\_

**FORM FIN-2: Breakdown of costs by activity<sup>1</sup>**

<b>Group of Activities (Phase):<sup>2</sup></b> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/>	<b>Description:<sup>3</sup></b> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/>
<b>Cost component</b>	<b>Costs (JOD)</b>
Remuneration <sup>4</sup>	
Reimbursable Expenses <sup>4</sup>	
Subtotals	

1 Form FIN-2 shall be filled at least for the whole assignment. In case some of the activities require different modes of billing and payment (e.g.: the assignment is phased, and each phase has a different payment schedule), the Contractor shall fill a separate Form FIN-2 for each group of activities. Provided must coincide with the Total Costs of Financial Proposal

2 Names of activities (phase) should be the same as, or correspond to the ones indicated in the second column of Form TECH-8.

3 Short description of the activities whose cost breakdown is provided in this Form.

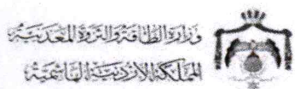
4 Remuneration and Reimbursable Expenses must respectively coincide with relevant Total Costs indicated in Forms FIN-3.



### FORM FIN-3: Breakdown of Remuneration<sup>1</sup>

(This Form FIN-3 shall only be used when the Lump-Sum Form of Contract has been included in the RFP. Information to be provided in this Form shall only be used to establish payments to the Contractor for possible additional services requested by the Client.

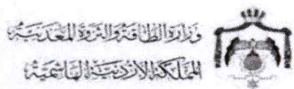
Name <sup>2</sup>	Position <sup>3</sup>	Staff-month Rate <sup>4</sup>
Foreign Staff		[Home]
		[Field]



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<b>Local Staff</b>		
		[Home]
		[Field]

1. Form FIN-3 shall be filled in for the same Professional and Support Staff listed in Form TECH-7.
2. Professional Staff should be indicated individually; Support Staff should be indicated per category (e.g.: draftsmen, clerical staff).
3. Positions of the Professional Staff shall coincide with the ones indicated in Form TECH-5.
4. Indicate separately staff-month rate and currency for home and field work.
- 5.
- 6.
- 7.

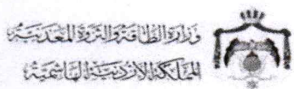


#### FORM FIN-4: Reimbursable Expenses

(This Form FIN-4 shall only be used when the Lump-Sum Form of Contract has been included in the RFP. Information to be provided in this Form shall only be used to establish payments to the Contractor for possible additional services requested by the Client.

N°	Description <sup>1</sup>	Unit	Unit Cost <sup>2</sup> (JOD)

- 1 Mention the items that are applicable or add other items according the TOR.
- 2 Indicate unit cost and currency.



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## Bid Bond Form

Ministry of Energy and Mineral Resources

P.O. Box 140027

Amman, Jordan

### Bid Bond Form

In Respect of Consulting Services for Developing a Mining Sector and Mineral Resources Strategy for Jordan

By this bid bond we [ ]

Whose address is [ ]

[ ] Hereby guarantee Messer [ ]

[ ] of [ ]

[ ] And hold at our disposal the sum of ----- Jordanian Dinars  
(JD -----) a total period of (120) days.

This bid bond shall be free of interest and payable in cash on your first written demand without contestation made within a period of [120] days from the final date for the receipt of Tenders.

This Proposal Security should be returned to us upon its expiry or upon fulfilment of our undertaking whichever is earlier.

Authorized Signatories

(To be issued by a local registered bank)

## ADVANCED PAYMENT GUARANTEE

To M/S

We, (Bank name)

....., has  
guaranteed by a Financial Guarantee

(ContractorName)....., for an  
amount of ....., as

an Mobilization Advance Payment Guarantee for the

contract:..... Tender no. (.....)

in accordance with the Contract Conditions to ensure the obligation of the Contract or for payment  
of the Mobilization Advance Payment in accordance with the conditions of the Contract.

Provided that the Guarantee is rendered by us as operative, we undertake to pay the amount(s)  
claimed up to the aggregate amount of .....upon receipt of your  
first written demand duly signed by your authorized signatory. Such signature(s) must be verified  
by any local bank, stating that the contractor has failed to execute the Contract Agreement in  
accordance with the Contract.

This Guarantee is not operative at present. It will become operative by means of amendment.

Such amendment will be issued by (Bank

name)....., only after receipt by the

applicant in specific written instructions stating that the Mobilization Advance Payment of

(amount).....credited to guaranteed account and after the

Guarantee becomes operative it shall remain valid until (date).....The

total amount of our present Guarantee shall be reduced by any payment effected by our bank

hereunder further to your claim(s) under this Guarantee, if any. Any claim under this Guarantee

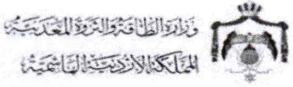
must not be presented to us before rendering the Guarantee as operative. This Guarantee shall

become null and void after its expiry date or upon the fulfillment of our undertaking whichever

may occur first. It is understood that any claim received by us after the date of expiry shall not be  
considered irrespective whether or not this Guarantee has been returned to us.

Yours Faithfully

**END OF FORM**



**Appendix 3: Standard Form of Contract**

# **Contractor's Services Contract**



#### **Appendix 4: Performance GUARANTEE FORM**

Date: Effective Date

To.....

We have the pleasure to inform you that our bank

....., has  
guaranteed by a financial guarantee the Contractor

....., for the  
sum of JOD.....

as a performance guarantee for Contract Ref. ....

for the .....

Being a performance guarantee binding the Contractor to offer Services in accordance with the conditions of the Contract.

We undertake to deposit with you the said amount mentioned above or the remaining amount due upon your first demand, without warning or reservation or any other condition, and notwithstanding any objection on the part of the Contractor.

This guarantee shall remain valid for the period from the date of issue until the satisfactory completion of the required Services by the Contractor and accepting the completion report by MEMR in accordance with the contract. The validity of the said guarantee shall be extended automatically until the final completion report for the Services and shall not be withdrawn by the Contractor without MEMR's written approval.

Issued in.....

Signature of Witness.....

Signature of Guarantor Bank.

Name of Witness.....

Date.....

Date.....