



وزارة الاقتصاد  
الرقمي والريادة

**Ministry OF Digital Economy and Entrepreneurship**

**REQUEST FOR INTEREST**

**(RFI)**

**Activity Title: JORDAN METEOROLOGICAL DEPARTMENT WEBSITE**

**Submission Deadline: 30/7/2024**

**RFI NO: 42/eGovt/2024**

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# Section 1: Background

Jordan Ministry of Transport/Metrological Department in collaboration with the Ministry of Digital Economy and Entrepreneurship seeking to develop an advanced website and mobile application for weather monitoring and forecasting in the Hashemite Kingdom of Jordan. The aim is to provide services to citizens and beneficiaries, offering them the latest updates on weather conditions with high accuracy, as well as real-time weather warnings and forecasts.

## RFI Purpose

The purpose of this Request for Interest (RFI) is to seek expressions of interest from qualified companies to build and develop an advanced website and mobile application [This Request for Interest (RFI) aims to identify potential companies capable of providing the required services and contributing to the success of the initiative.

## System Requirements

**Weather Data Collection and Integration:** The system shall automate all needed processes of JMD including but not limiting to collect, display and archive weather data and to integrate system to the following data sources:

1. **Weather Data System:** The system designed to store and display weather data from various sources:
  - Automatic Weather Stations: 30 stations across the Kingdom, sending data every 5 minutes.
  - Meteorological Observation Stations: Meteorologists enter actual weather bulletins (Actual/Metar) hourly and weather bulletins (Synop) every 3 hours.
  - Application developed using Oracle Apex technology.
2. **Weather forecaster:** Meteorologists currently enter weather bulletins twice daily (morning and evening) for the current day and the next three days.
3. **Radar System:** The system sends radar data every 6 minutes via a microwave network to an FTP server in the Remote Sensing Department of the Meteorological Forecast Directorate. This data is processed to create various images and stored in several formats, including (.vol, .h5, and .png.)

The contractor's responsibilities include:

- a. Providing a mechanism to handle, decode, and display these formats on the website.
- b. Decoding the data before transferring it to the new website server.
- c. Organizing and mapping the data appropriately to meet meteorological requirements.

**4. MASSIR System:**

MASSIR consists of many components as the following: MASSIR-COMM, MASSIR Neo ,MASSIR-COMM Supervision ,MASSIR-VISION ,MASSIR-SAT Server ,and MASSIR-SAT Display

MASSIR system: handles various types of data as the following:

- a. Text messages (SYNOP, TEMP, METAR...)
- b. Binary products such as GRIB, BUFR, T4-DFAX
- c. Satellite and Radar images
- d. Non-standard WMO files in different formats (.doc, .bmp, etc.)

**5. Numerical Model Data:** Data exchange can be facilitated through various methods, including FTP, API, or any other method provided by the service provider. The choice of method and data type depends on the service provider.

Common formats used for data exchange are:

- a. nc (NetCDF - Network Common Data Form)
- b. grib (Gridded Binary File)
- c. grib2 (Gridded Binary Version 2)
- d. bufr (Binary Universal Form for the Representation of meteorological data)
- e. JSON (JavaScript Object Notation), available if the service provider offers an API.

**6. Satellite Service Provider**

- a. These companies provide space imagery of the Earth, either commercial or governmental, open-source or paid.

- b. The Meteorological Department has a reception station for EUMETSAT data via EUMETCAST broadcast using a Meteosat antenna.

Build all needed API to facilitate integration between system and other data source, based on MoDEE standard and to be published over government service bus (GSB)

## Additional Requirements

- Licenses Cost: Bidders must include the cost of any required licenses in their proposal if these licenses are not provided by MODEE.
- Data Migration: Bidders must migrate data from the current website's database to the new database, ensuring data integrity and compatibility.
- The system shall automatically update and integrate new data from these sources in real time.
- The solution will be hosted on GPC
- Mobile App for Android and IOS

## The proposed website should include

1. Homepage to include Interactive Map of the Hashemite Kingdom of Jordan
2. Weather Forecast Data Display:
  - Expected weather conditions for the next four days through the map.
  - Expected weather conditions for the next four days in a text format displayed below the map.
  - Expected weather conditions for the next ten days.
3. Numerical Model Forecast Data Display
4. Weather Observation Data Display
  - Weather radar
  - Satellite images
  - Traditional observation stations
  - Alerts
  - Aviation bulletin
  - Land transportation bulletin between cities and governorates.
5. The weather warnings.

## Section 2: RFI Administrative Requirements Response

### Participation to RFI

All interested firms should confirm their participation by sending the Intent to respond to the attention of Email: [eGov\\_tenders@modee.gov.jo](mailto:eGov_tenders@modee.gov.jo)

Firms responding to this RFI should have the required capabilities and experience in providing a similar comprehensive and efficient weather monitoring and forecasting system for the Jordanian Meteorological Department of the same scope, size, complexity and nature. These services and engagements must be accomplished during the last 8 years.

Interested firms should provide the following as part of their interest:

1. A brief statement of your interest in the project.
2. Relevant experience and qualifications within your team related to the project.
3. An overview of your proposed approach or methodology.
4. Any preliminary thoughts on how you would give us a solution to this project and any specific technical requirements may you need
5. Anticipated budget/ cost estimation
6. Reference to a similar project implemented by the company within the past 8 years

Where some skills are not available, the bidder should sub-contract with a reputable firm to cover for this specific skill(s), service(s), or equipment(s). The subcontractor must be approved by JMD and the contractor will be liable for all works performed by the sub-contractor.

### Questions/Clarifications

Interested firms are requested to submit their questions, request for clarifications directed toward the MoDEE at the following email address: Email: [eGov\\_tenders@modee.gov.jo](mailto:eGov_tenders@modee.gov.jo) by (25/7/2024).

Responses will be sent in writing no later than [28/7/2024].

### RFI Terms & Conditions

#### Labilities of MODEE

This RFI is only a request for interest about potential projects and no contractual obligation on behalf of MoDEE whatsoever shall arise from the RFI process. This RFI does not commit MoDEE to pay any cost incurred in the preparation or submission of any response to the RFI.

### Confidentiality & RFI Ownership

This RFI is both confidential and proprietary to MoDEE. All concerned parties agree that they will not duplicate, distribute, otherwise disseminate, or make available this document or the information contained in it without the express written consent of MoDEE.

Concerned entities shall not include or reference this RFI in any publicity without prior written approval from MoDEE, which, if granted shall be granted by the individual named above. Concerned entities must accept all of the foregoing terms and conditions without exception. All responses to the RFI will become the property of MoDEE and will not be returned.

### Preparation of your submission

Bidders must submit RFI to MoDEE no later than **12:00 PM on (30/7/2024)** (Jordan Local Time).

P.O.Box 9903

Amman 11191 Jordan

Tel: 00962 6 5805642

Fax: 00962 6 5861059

Email: [eGov\\_tenders@modee.gov.jo](mailto:eGov_tenders@modee.gov.jo)

Proposal should be submitted in well-sealed and wrapped envelope clearly marked, as follows:

**“JORDAN METEOROLOGICAL DEPARTMENT WEBSITE – RFI”.**

This part (envelope) should contain 1 original hard copies and 1 softcopy (USB Flash) [in Microsoft Office 2010 or Office 2010 compatible formats].