

## **Project of Study and Development of "Standard Economic Model"**

### **Introduction:**

Within the frame of supporting the methods and mechanisms for making decisions for development of the economic, social and production sectors and activities, the financial sector in the United Arab Emirates seeks to develop a standard economic model to support the process of making effective decisions in the public policies of the state, activate the sustainable development of production and economic sectors and activities through the analysis of the current and historical data and information to reach standard indicators and future predictions that contribute to the provision of database which can be relied upon during the making of public federal and local decisions, in line with the current and expected economic and social parameters. Accordingly, the beneficiary authority seeks to delegate a consultant to prepare a project of study and development of a standard economic model as per the following objectives and pivots:

### **Objectives:**

The study aims to develop an economic model to support the decision making depending on the analysis of impacts of policies, parameters, macroeconomic and microeconomic events on the state economy, and the public policies in general, through providing the analytical interrelated methods and mechanisms which rely on the analysis of current data in order to estimate the indicators and future

predictions and the growth trends thereof in a manner that contributes to the development of various economic and social activities and amendment of the public policies as per the desired growth trends. The following are the long term and short term objectives:

- 1- To support and develop the economic and social activities through activating the organized planning methods for making of corrective decisions which support the development and stability of various production sectors, and activate the sustainable development strategies.
- 2- To analyze the direct and indirect factors and effects on the rate of economic development and public policies in a manner contributing to the development of local economy and enhancement of economic stability.
- 3- To support the decision maker in amending the public policies on the basis of the changes in the local, regional and international economic and social environment.

**Pivots of Study:**

The study includes defining and analyzing of the current data to develop a standard economic model to support the decision maker, and the pivots of study include the following stages:

**First Stage: Study and Evaluation of the Current Data and Main Indicators:**

The first stage depends on studying and evaluating of the current statistic data, indicators, macroeconomic and microeconomic parameters on the basis of desk research and the data and information available with the concerned authorities, as follows:

1- To define the most important indicators of macroeconomics and microeconomics affecting the structure of decision making model, in addition to the parameters and coefficients affecting the development of the model.

2- To define the required data, the extent of their availability to develop the model, as well as the analysis of suitability of the statistic data, their volume and period in order to be used as inputs for the model.

3- To analyze the technical aspects of current data in terms of availability of electronic databases and possibility of their interrelation and integration with other databases.

4- To define the initial features of the outputs expected from the proposed model relying on the available data.

5- To review and analyze the best internationally accepted economic practices and models and which are similar to economic nature and environment of the beneficiary authority.

### **Second Stage: Model Development**

Based on the results of the first stage, along with the analysis and definition of the available statistic data, the model will be developed

to support the process of decision making on the basis of the main indicators and economic parameters as follows:

- 1- To define the model assumptions and parameters and the list of inputs along with the explanation and description thereof.
- 2- To form the economic relations and equations in a mathematical manner, i.e. in a form of a series of equations or inequalities.
- 3- To conduct a trial application of the model using trial statistic data, testing the mathematical relations and equations and their effectiveness in realization of the model objectives and their impact on the economic parameters.
- 4- To define the techniques for analysis and reading of the model outputs so that they will be classified and graded in terms of priority as per their importance to the decision maker, along with providing the recurrent feedback techniques for the purpose of periodical evaluation and development of the model.
- 5- To convert the study of the proposed model including the inputs, outputs and practical equations to an analytical design applicable and developable to a software system characterized by flexibility and ease of use, provided that the design shall include schedules, fields and software relations etc.
- 6- To provide sensitivity analysis "What If?" and simulation within the model design so that several scenarios will be obtained for the economic indicators, along with their direct and indirect impact on the public, economic and social policies.
- 7- To implement the design using programming languages and proper databases, provided that the ministry works team shall

participate in the process of development, programming and technical support.

8- To document the design and the coding used during the programming, provided that the whole schedules, fields and parameters shall be defined.

### **Third Stage: Application of Electronic Model**

1- To download the electronic system to the ministry devices and ensure the proper and well operation as well as the software efficiency.

2- To train the system users so that the data input and output along with the analysis thereof will be ensured.

3- To prepare a user guiding manual.

### **Methodology:**

The consultant shall collect the data and proper information and meet the concerned authorities in order to conduct the theoretical and executive study, reach the objectives through achievement of the required pivots, and the proposed methodology shall include:

- The consultant's work plan, procedures and techniques which will be adopted and followed to fulfill the objectives and cover the pivots of the required study during the period specified for the implementation of the study.
- Conducting meetings with the concerned authorities, collect the data, and define the inputs of theoretical study.
- Preparation to provide a detailed presentation of the study results along with the recommendations.

- Conducting explanatory workshops for the concerned authorities, if needed, to discuss the study conclusions.
- Providing initial copies of the study reports, as per the stages defined for reviewing and evaluation of the same, so that later on the final reports will be provided taking into account the remarks, comments and evaluation results.
- The consultant shall provide constant representatives in the state during the project stages to closely manage the activities.
- Emphasizing the necessity of close cooperation with the work team during the whole stages of model development.
- Establish and execute a process of quality assurance which include planning, quality assurance and control for the whole pivots of the required work.
- Implement submission and acceptance procedures for the documents and reports submitted to the beneficiary authority for approval before starting with the subsequent stages.
- The beneficiary authority shall have the source code of the software, and the model along with the software shall considered as its property, as it may be copied and downloaded to several servers as per the work necessity.
- The ministry shall provide the database (Oracle 10 G) and the software development tools including (Oracle, Net Forms 6 I).

### **Requirements:**

Submittal of a comprehensive offer within (4) weeks from the date on which the request for offers is received, which clarifies and states the consultant's obligation to provide the following:

**Experience and Qualifications:** The offer should clarify the following:

- 1- The consultant's qualifications and experience in the field of preparation of similar projects along with the relevant matters.
- 2- Qualifications and names of the work team members along with their curriculum vitae and submittal of a schedule summarizing their experiences, qualifications and current employers, taking into consideration the availability of high academic degrees or equivalent scientific diplomas, noting that its preferred that the work team shall include at least one member who speaks Arabic. (Complete the form in appendix no. 1).
- 3- The consultant's ability to achieve the objectives and pivots in a high professional manner.
- 4- The consultant's ability to submit the required outputs with outstanding quality without any deficiencies or material errors.

**Reports:** The offer should mention that the consultant will minimum submit the following:

- 5- Submittal of progress reports on the work progress as per the execution plan and which clarifies the fulfillment of the required pivots and objectives.
- 6- Submittal of two copies of the final study report for the first stage, in addition to a soft copy in English, provided that it shall include an executive work plan clarifying the subsequent steps and an executive summary which includes summary of the study,

conclusions, and recommendations as well as the appendices to the study and results of the meetings etc.

7- Submittal of the study, model design and source code as per the used programming tools and databases.

8- Provision of staff training plans on how to use the model and the equations thereof, and to analyze the data and prepare the reports.

9- Provision of the user manual for the model and software.

**Other Contents:** The offer should include in detail the following:

10- Explanation and clarification of the consultant's methodology during the implementation of the study and the additional proposed pivots, if any.

11- Cost details as per the required pivots.

12- Execution period as per a time table associated with the fulfillment of the required pivots.

### **Study Term:**

The consultant should submit the report on the first stage of the study project within (12) weeks from the date of contract signing, provided that the process of model development, download and training of the staff inside the ministry shall be within (28) weeks from the date of completion of the first stage.

### **Evaluation and Selection of the Consultant:**

The consultant shall be selected as per the criteria adopted at the beneficiary authority, where qualitative, quantitative and



competitive criteria will be defined to evaluate the offers depending on the consultant's proposed methodology, competences and experiences of the work team members, their dedication for the project, the costs and fulfillment of pivots of the proposed study, where the total evaluation marks have been distributed to the technical and financial aspects by means of the weighted average method to evaluate the offers and the total technical evaluation mark has been determined at a percentage of 75% and the financial evaluation at a percentage of 25% of the overall evaluation amounting to 100%.

**Responsibilities:**

**Consultant's responsibilities include the following:**

- 1- Submittal of study and development project which includes and covers at minimum the whole required pivots as per the request for offers.
- 2- The team manager shall submit periodical reports and their content and organize the tasks and responsibilities of the work team.
- 3- The team manager shall participate in the workshops, meetings, presentation of the study results, if needed.

**Responsibilities of the beneficiary authority shall include the following:**

- 1- Evaluation of the offers, selection of the consultant and approval of the work team proposed by the consultant.

- 2- Ensuring the quality of work during the stages of study implementation.
- 3- Approval of work methodologies and initial reports along with commenting and evaluating the same.
- 4- Organization of the meetings and interviews as well as organization of the workshops and halls for displaying the project results.
- 5- Facilitation of data and information collection techniques and provision of the same in papers or in electronic form. (See appendix no. 2).
- 6- Provision of logistic support to the work team at the beneficiary authority during the period of study execution.
- 7- Provision of offices and place for the work team.