

TAPR IQC Egypt
Technical Assistance to Support Economic Policy Reform

USAID Contract No. 263-Q-00-97-00104-00
Task Order 1: Delivery of TAPR Core Management Team

Central Bank Computer Training and Database Software Assessment



Submitted to:
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Submitted by:
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Scope of Work: Central Bank Computer Training and Database Software Assessment

Background: During 1997 and 1998, assistance was provided to the Department of Economic Research (DER) of the Central Bank centered on the establishment of an Oracle computer database, econometric training, and the development of an econometric model of the Egyptian economy. The DER has concluded that the database is not fully functional and the associated software has not been fully completed or installed.

The DER has said (1/31/00 letter) that the database involves time series data for the four sub-departments of Domestic Economy, Money and Banking, External Sector, and International Economy. The current status of incomplete work, as described by the DER, is:

- For the Domestic Economy, 60% of the GDP data base can not be updated or retrieved through the analyzer, the program cannot identify the change in the base year, modifications of past series data on state budgets and national accounts cannot be done, and two PCs report an error message related to the Oracle administrator.
- For Money and Banking and the External Sector, the Oracle data cubes have not been built. Therefore transplanting data from Excel to the cubes and subsequent analyses are not possible.
- For the International Economy, the initial link procedures between the server of the LAN and the PCs in the DER have not been done.
- Programming for rates of growth and relative importance of data series was not completed for all sub-departments.
- The Arabic support version of the database is not available.

In contrast to the above, an earlier status report (9/28/98) by the TA contractor involved describes the status of the Oracle database as follows:

- National Economy installed and demo to staff completed.
- International Economic Institutions installed and demo completed.
- Balance of Payments is ready for installation, but held up pending replacement of the NT license. Installation and demo to be provided as soon as obtained.
- Money and Banking installed but demo postponed because of scheduling difficulties with DER staff.

Regarding training, as of the date of the above contractor's report only a one-day course for experienced end users was said to remain to be delivered. The contractor's report also noted a difference between their view of the **contractually required** computer training they were to provide (training in the use of Oracle to knowledgeable computer users) and the opinion of the head of DER as to **needed** training (substantial training in basic computer use as well as training in Oracle).

In an earlier contractor's status report (undated, but appears to be about October 1997), training issues were also discussed. The comments made were:

- The DER staff has such a heavy regular workload that it has been difficult for them to attend computer-training sessions.

- The level of knowledge of economic concepts of the DER staff should be strengthened through a series of short courses (international finance, finance and financial markets, microeconomics and macroeconomics, and public finance).
- Knowledge of econometric models needs to be strengthened.
- Knowledge of how to use survey data in economic models needs to be strengthened.
- Staff skills need to be increased in the conduct of economic research, in the use of econometric software, in mathematics and statistics, and in writing clearly in Arabic.

Next Steps:

(1) A program of computer training for the staff in each of the four sub-departments is to be provided. This will include:

- The core professional staff will receive one week of training in the use of the Oracle software.
- The entire professional staff will receive one week of refresher training in software tools related to the Oracle database.

The training team will consist of two trainers, each for 10 days. Each trainer will spend 5 days developing a training program tailored to the specific needs of the DER and 5 days providing the training. One trainer will be an oracle specialist. His program will be for the core staff in each of the four divisions of the DER and will be developed with a focus on the specific professional use planned for the Oracle software. The other trainer will provide training in software tools related to the Oracle database. His program will be based on an assessment of the current level of basic computer knowledge of the DER staff.

(2) An assessment is required of the problems the DER is having with the database software. This should include:

- A determination of the aspects of the database software installation which are not complete.
- A determination of the elements of the software development which are incomplete or contain errors.

On the basis of this assessment, a detailed work plan for addressing the database problems is to be prepared.

A three-person team is required for ten-days each, over a one-month period to carry out the database software assessment. The team should consist of:

- Three computer specialists as follows:
 - A System Analyst – Team Leader (10 days), knowledgeable regarding the relevant statistical presentations and related analyses that the DER intends to utilize the computer software for. The specialist shall outline the overall assessment project plan, follow-up and supervise the achievement of the task report. He shall be the designated point of contact (POC) with the bank authorities. At the end of the activity, the team leader will prepare a status report.

- A Software Designer (10 days): knowledgeable regarding Oracle data base construction, utilization, and related training requirements. The Software designer shall analyze the current system, define analysis deviation and suggest/recommend application structure modifications, if needed.
- A Computer Programmer (10 days): knowledgeable in programming and solving programming software/hardware problems. The programmer will be implementing the designer's and Analyst designs, revise application coding, define environment and coding errors, suggest/recommend coding modifications with the software designer and team leader.

The Team Leader/System Analyst along with the Software designer and computer programmer specialists shall review documentation available at the DER on the Oracle database software. The team shall discuss with responsible DER staff the detailed nature of their operational problems. The Team Leader/system analyst should review with appropriate DER staff the reporting and analytical uses the database is to support, the nature of the problems in achieving this intent, and any additional computer utilization or analytical method training required.

On the basis of their reviews and discussions the team will prepare a report on their findings. The conclusion of this report will describe the technical support needed to make the Oracle database functional as well as any further staff training needed.

The team will work under the direct supervision of the TAPR Chief of Party and the day to day oversight of the TAPR Project Specialist.

The DER should make their staff available for discussions, review of the database issues, and training needs assessment on a priority basis. The CBE shall make their management staff available after working hours. The contractor may need to shut the system down which could cause disruption to the CBE's daily work.