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A COMPUTERIZED INDUSTRIAL DATA BANK
(MOIEDAB)

FOR THE
MINISTRY OF INDUSTRY AND ELECTRICITY
KINGDOM OF SAUDI ARABIA

Prepared by

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UNIDO

Vienna

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MISSION REPORT

I. INTRODUCTION AND TERMS OF REFERENCE

The general purpose of the project in the Ministry of Industry and Electricity in Riyadh, Saudi Arabia is to set up an institutional infrastructure which will contribute through systematic collection, generation and processing of industrial and technological information to the greater flow of such information to governmental and private bodies and enterprises.

The specific duties of the mission can be summarized as follows:

1. To assist with selection of new hardware and appropriate software, or if the present hardware system is to continue, to assist in upgrading of hardware system and appropriate software;
2. To study comments made by different departments of the Ministry on the expert's report of the first part of the mission;
3. On the basis of (2) above, and recommendations in his report, to advise on the design of the industrial database system and to give necessary guidance in the implementation thereof;
4. To advise on the method of evaluation and monitoring of the system;
5. To advise on the training of personnel;
6. Prepare technical report in both English and Arabic.

II. IMPLEMENTATION

1. Selection of hardware:

My first meeting with Mr. Mohammed Ashour Abdullah al-Rifa'i, the new director of the Department of Planning and Budget and who supervises the Computer Center, convinced me that the Ministry was not prepared to adopt my earlier recommendation regarding the purchase of new computer hardware and off-the-shelf-software to establish the much needed industrial database which the Ministry wants to establish. Therefore, we agreed to go to the second alternative which I have proposed in the same study. This alternative calls for the improvement and upgrading of the present hardware system. I informed Mr. Ashour of the necessity to acquire a new and bilingual printer since the present printer is very slow and suffers from the poor printing quality. As a matter of fact, the only printer which is connected to the computer was down most of the time when I was at the MOIE. The addition of a new printer will enhance the printing capability of the existing computer and will result in having a spare terminal when one of the terminals ceases to function properly.

During my visit, I met with representatives of Electronic Systems Co. which was recently awarded the computer maintenance contract, and asked them to provide price quotations for installing and operating bilingual printers to DG 350. This data could not be obtained readily from the computer marketplace since the DG 350 system, as we stated before, is an old system which must be modified before adding to it any new peripherals.

I also discussed with Mr. Ashour and submitted to the Deputy Minister a third proposal which calls for the shared use of the new computer recently purchased by the Electricity Corporation. The VAX 11/730 computer is a new model which represents the latest in computer hardware technology for a minicomputer of this size. The software being used is top quality database management system which could be used to produce the desired MOIEDAB. If necessary, the Industrial Agency could negotiate with the Electricity Corporation a charge-back system which could benefit both agencies.

There are advantages and disadvantages for each of these alternatives. The use of the VAX computer may provide fast access and quality product, but it will also require more time from the MOIE computer center staff who must be trained on the use and programming of the new computer. There is also the danger of treating the computer tasks of the Industrial Agency as low priority that is handled when all the Electricity Corporation's Tasks are completed.

The use of DG 350 computer, on the other hand, does not require retraining of the present MOIE computer staff who are very familiar with operating the system and programming the machine. With the removal of most of the Electricity Corporation's work from the DG 350, the machine is now underutilized and therefore the MOIEDAB system will occupy a top priority in the Computer Center, both in its development and future maintenance.

2. Comments Made by Different Departments:

Comments on my report of the first mission were compiled by the Office of the Deputy Minister and were made available to me upon arrival to the MOIE. The comments were very constructive and expressed support and enthusiasm for the project. As a follow-up to these comments I decided to interview the directors of the three departments: Industrial Department(ILD), Foreign Investments Department(FID), and Statistics Departments. They all agreed that the time has come for the Ministry to computerize its industrial licenses system and follow the recommendations detailed in my report on the first mission. The director of the statistics department, however, warns that without additional staffing and the training of that staff, his department will not be able to process the license applications it now has. He did not agree with my recommendation that some of the existing staff could be relieved from their existing responsibilities to devote their time to organize, edit and verify the license applications available in his department and prepare them for input into the computerized system once it becomes operational.

The director of the FID was more optimistic and he informed me that his department has already selected six staff members to visit licensed factories and fill out reports which will be used to update data on the licenses granted to these factories. This is a commendable step in the direction of solving the problem of gathering information on the latest status of the licensed factories since many of these factories seem reluctant to provide the Ministry with the needed follow-up data requested by the Ministry.

There was a comment by the director of the statistics department regarding the restriction of input and output functions to the staff of the respective departments. According to this proposition, the staff of the ILD will not be allowed to enter or change data in the FID files and vice versa. This is a situation which needs to be investigated by the department heads and for them to reach a mutually acceptable agreement on this point. I could understand the reasons for not allowing departments to change or edit or alter in any way or fashion information entered by another department without prior authorization or approval. However, there is no reason why another department, say IL can not view data entered by the FID. This is known as viewing or showing data without altering it. The system in its design form will allow departments to view each others data but not to alter it. If this will not be acceptable to department heads, we can revise our plans so each department will be restricted by the use of authorized passwords to enter only its own files and not the others.

The system could be perfected at a later stage to allow for message exchange system. The objective of the message exchange system will be to facilitate communication and dialogue between users in the Ministry. It is an electronic mail system where messages are exchanged between the parties involved using the terminals available in their offices. This will expedite information transfer and exchange among the various departments.

3. Design of the Database

I held daily meetings with the computer center staff: Reynaldo Estudillo, Wilfredo Torio and Imad Rashid. I discussed with them database requirements, users' needs, and specifics of designing computer programs that take these needs and requirements into consideration. While the users' requirements are few at this time, we expect the users to articulate their needs and requirements once they begin using the system.

Input forms were discussed with the computer staff. Two forms were designed: Industrial License Input Form, License Alterations and Cancellations Input Form, and Foreign Investments Form. Types of reports to be generated were identified and their functions delineated. Input of data will be entered directly on the screen from the completed license application forms, instead of the old method of

recopying the data on special input sheets. The latter process is time consuming and will result in an increase in the number of errors made by the individual(s) transcribing the information from the actual license application. This procedure will be facilitated by the training of the staff from the ILD. This same staff will be responsible for the accuracy of data by eliminating the intermediaries.

The Industrial Database will consist of the following files:

A) Input files consisting of four such files:

1. International Standard Industrial Classification Code (ISIC) File:
This is a numeric field file consisting of six digits which represent the ISIC code and two digits for the product code.

2. Geographic File:

This is also a numeric field file consisting of three digits which represent each country and/or nationality of a foreign investor.

3. Transaction File:

This file will contain actual licenses. The information will be taken from the completed license application forms. This is a mixed field, i.e. alphanumeric.

4. Industrial License File:

This file will contain validated data from the transaction file. The master file will contain data on all licenses entered into the system. This file is also alphanumeric.

Input in the above files will be in both Arabic and English languages. Thus, the user can retrieve any of the codes by inputting the Arabic or English term and vice versa.

Once the geographic and ISIC codes which are currently available are input into the system, they must be edited and verified by staff members in the ILD and FID to ensure accuracy.

The enclosed computer flowcharts (Appendix 1) illustrate the procedures which will be followed in creating each of these four files. The other three charts show procedures for the master file update, print reports, and online inquiries.

B) Output Files:

The output files will consist of 25 files. These files have been identified in my report of the first part of my mission. The files are now known to the computer center staff. There will be two levels of information provided by MOIEDAB. At the first level, the system can deliver either all of the licensors available for a specific product or all of the products available from a specific licensor. At the second level, the system can provide detailed information about a particular industry or product and its licensors. The database will

also maintain statistical data for products on a list of parameters that are related and required for market analysis and evaluation. There will be three key elements in the system. They are: 1) product code; 2) geographic; and 3) type of information. The general industries file will provide the user with general information covering all manufacturing companies in the Kingdom. This file will be organized by industry. Information can be retrieved from the file by using the ISIC code. The code, like the other three codes will be available online.

System Flowchart:

As the attached system flow chart (Appendix 11) shows, a good part of the work on the MOIEDAB must be done outside the computer room. The flow of work will require the ILD and the FID in particular to receive and verify data in the license applications. If the data is incomplete, it must be returned to applicant for completion. If the application is complete, it must be assessed and approved and then sent on to the encoder/verifier. He will code all coded data and verify it. The license application will then be placed in folder or special cover for proper handling and then sent on to the control clerk who will prepare a transmittal form and send it along with the application to the Computer Department. There, the control clerk will verify the number of documents and send them to the data entry operator who will enter the documents into the computer. The data entry will be followed by computer validation. If the document is rejected, it will be added to the list of rejected documents. If it is accepted it will be added to the list of accepted documents. A series of comparisons will be made between the rejected or accepted documents and the accepted or rejected listings until corrections are made and incorporated in the corrected listing. This listing will then be used to update the master file and produce needed reports.

One of the most important aspects of the database is the follow-up. According to established procedures in the ILD and FID, follow-up letters are sent to projects and industries every six month. This is designed to ensure the gathering of the latest data on the progress being made by the licensed project. In the computerized system, the same follow-up letters will be prepared and sent to the projects. The system will be programmed in such a way that it will automatically issue a list of projects which are due for follow-up. A by-product of the system will be a word processing component which will contain a standard follow-up letter with variables in it which will allow the system operator to complete these variables based on the merits of the individual claims. These letters will be automatically addressed to the projects as it is identified in the system. The letters will be ready for mailing to these projects. Once the follow-up response is received by the ILD or FID, the information will be incorporated in a follow-up form, which in turn will be sent to the control clerk. The clerk will then prepare transmittal form and forward it to the Computer Center. There, the clerk will verify the number of documents transmitted and sign the transmittal form before sending it over to the data entry operator. The operator will enter the documents into

the computer and generate computer printouts of follow-up listings. The printouts will be checked against documents and the follow-up file will be completed.

The above description of the work flow shows that the ILD and FID are ultimately responsible for the gathering and verifying of the industrial data. No one else can do it for them, and no matter how sophisticated the computer system or how powerful the programs are, they are worthless if the data generated by the two departments is inaccurate, incomplete or outdated. The task of sorting out licenses and separating the licenses issued which are estimated at 3,000 from the actual in operation licensed factories which are known to be only 1,800 is not going to be easy, yet someone has to be responsible for completing this important task. Otherwise the MOIE may wind up having a good computer program for industrial licenses and no database.

In order for the work to proceed as smoothly as planned, the two departments must begin to pull out the industrial licenses applications, verify the data contained therein, update the license information through established procedures and ready the applications for input into the system during its first trial run and later on when the system is up and running. It is recommended, therefore that each department in the Ministry should select or appoint two staff members to be trained and later assume responsibility for storing and retrieving industrial data using MCIEDAB. The second person is a backup in case the first person leaves the Ministry or the department for some reason. Immediate selection should be made by the following departments: Industrial Licenses; Foreign Investments; and Statistics. These departments are the prime producers and users of data to be stored in or retrieved from the System. Other departments can select representatives from their staff at a later date. I will elaborate further on the subject of training of personnel in section 5.

Record Layout:

As the enclosed record and screen layouts (Appendix III) show, the Industrial Licenses Database record has been Arabized and defined as to the field name, its length, and format. The field name is derived from the IL application form. The length of the field is determined on the basis of our evaluation of each of these fields and whether or not the field will be coded. We have also identified the format of the field on the basis of our analysis and study of the available license applications. The format of the field can be numeric or alphabetic or mixed (alphanumeric). Some numeric fields will be compounded to facilitate mathematical computations.

Programs:

Each of the location and transaction programs will contain the following routines: 1. add; 2. change; 3. delete; 4. examine ('review'); and 5. print. I have also advised the programmers to write a program for updating the master file.

Time Table:

The time required to develop all programs will be eight to nine months using the present computer programmer and system analyst. It was made clear to Mr. Ashour, Director of the Department of Planning and Budget that the time could be cut in half if the two could be allowed to work overtime between now and February 1986. This will expedite the process and will enable the Ministry to have the programs ready for testing and trial runs before actual implementation.

Simultaneous with the time table for writing the programs should be a time table for readying all IL and FI applications for entry into the system. Any delay in this process will result in significant delays in the implementation of the MOIEDAB project.

4. Method of Evaluation and Monitoring of the System:

The most effective way to monitor the system will be through a MOIEDAB user's group or council formed in a standing committee. The group or council should consist of representatives of the prime users of the system in the Ministry, particularly the following departments: IL, FI and Statistics in addition to the CD programmers and system's analyst(s). The group will evaluate the system as its members use it on daily basis. Their comments and suggestions will be taken into consideration by the designers of the system and every effort must be made to implement all valid recommendations and suggestions that could lead to the improvement of the system and making it responsive to the needs of the users. If it becomes necessary, the services of this or another consultant could be requested to evaluate the system and its use. The ongoing evaluation, however, should take into consideration the structure and format of the database, the extent of its userfriendliness, its ability to relate fields together and combine them by using boolean operators (and, or, not) and availability of user aids and the ease by which these search or user aids could be used.

In addition to evaluating the system, the contents of the database should also be evaluated as to their up-to-dateness, accuracy and organization. The system's hardware will also be a factor in evaluating the system, for example the speed by which the system responds, the quality of printed reports both in English and Arabic languages and its ability to produce statistical charts and graphs in black & white and in color,

5. Training of Personnel:

The most effective and expedient form of training will be in-service training ,i.e. training by the Ministry's Computer Department staff. The training will concentrate on the use of the Ministry's computer hardware and the MOIEDAB system. This will include adding, editing, or deleting data. Since the MOIEDAB system as it is presently perceived will be user friendly, the training will be easy and fast.

The training program should take into consideration the needs of the MOIE to follow national policy of Saudization by selecting and training Saudi employees to take over positions currently being held by non-Saudis. Since the cancellation of the MOIE contract with SIAM Company which had Arab-speaking staff in the Ministry's Computer Department, the Ministry does not have Arab-speaking computer experts, except in the Computer Dept. of the Electricity Corporation. I would like to emphasize, once again, my earlier recommendation concerning the joint UNIDO/MOIE appointment of an Arab-speaking system's analyst capable of supervising the Computer Department (CD) in the absence of a Saudi Director of this Department, and who can work with the existing CD staff on the actual implementation of the MOIEDAB project, and train the Saudi staff in the Ministry on the use of the computer and the MOIEDAB system. A proposed job description for the system's analyst position was provided in my report of the first part of the mission. I would urge the Ministry to work with UNIDO on this important joint appointment.

As part of the training program, a user's manual should be produced. The manual should describe, in greater detail, the scope and contents of MOIEDAB, signon procedure, organization of the database, the search process, basicsearch logic, printing search results and documents online, displaying search results online. The manual must include the following chapters: General functions and description; Signing-in procedures; Inquiry System; Contents of the MOIEDAB system; and Message Exchange system. The manual should be written in Arabic and in such a way as to make it easy for a lay person (non-computer expert) to understand the system, follow instructions and operating procedures of MOIEDAB online inquiry system, the contents of MOIEDAB, its coverage, as well as its limitations. The manual must, therefore, be simple in its design, non-technical in its language and user-oriented.

To facilitate the system's use and training staff on its use, all codes will be interpreted in both Arabic and English and stored into the system as subfiles. This method will allow users to identify the code number for any coded subjects whether it is the IEIC code, or geographic, or materials code, or codes for cities and regions in Saudi Arabia.

I am also recommending that the system's guide or instruction manual be incorporated into the system and can be called online. This will facilitate use of the system by any authorized individual without the need to go back and forth to the printed manual.

5. I am pleased to submit this report in both English and Arabic as requested by UNIDO and the MOIE.

Acknowledgements:

I wish to express my sincere thanks to HE the Deputy Minister for Industrial Affairs and all directors of departments in the Ministry for their support and cooperation during the conduct of this study.

Special thanks to Mr. Mohammed Ashour and his staff in the Computer Center Department, Mr. Samir Gindi and Mr. Ranjit Withana and Mr. Gabriel Rezek, I hope that this report will help the Ministry in building a sound database for industrial information that will be of help to all industrialists and decision makers in the Kingdom of Saudi Arabia. I feel confident that the recommendations presented to the officials in the Ministry will, under their close supervision and with their support, lead to the establishment of the proposed database.

Dr. Mohammed M. Aman
November, 1985

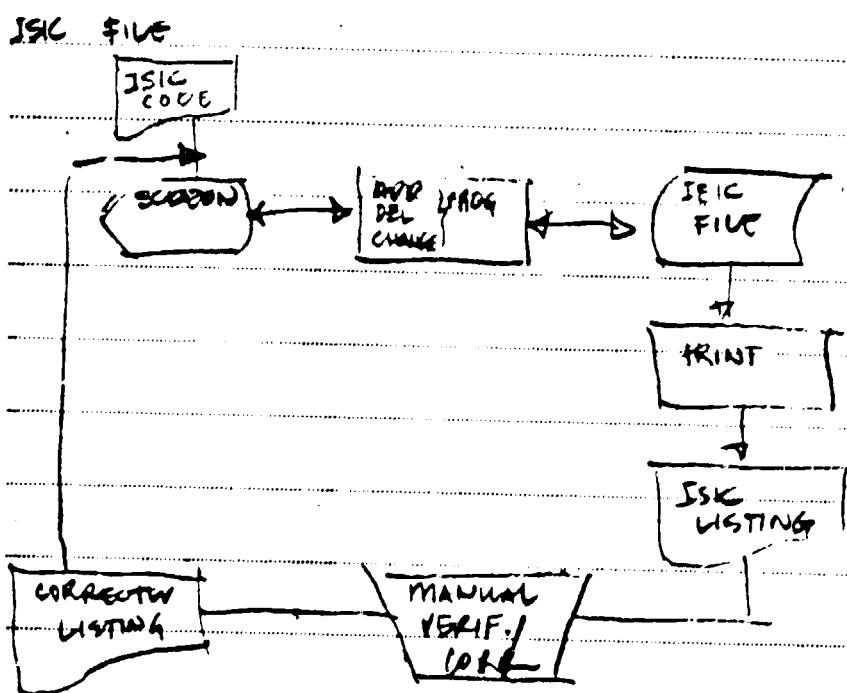
APPENDIX I

بشارة الرحمن الرحيم

التوقيع اسم المحرر
التاريخ الموضوع

المملكة العربية السعودية
وزارة الصناعة والكهرباء

COMPUTER FLOWCHART

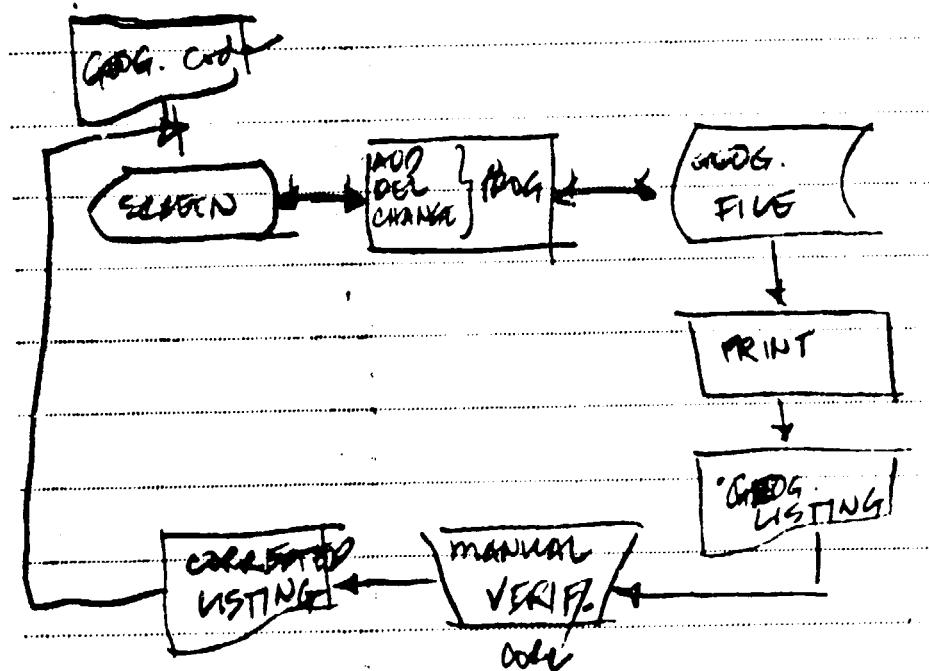


بيان رقم ٢٠١٣

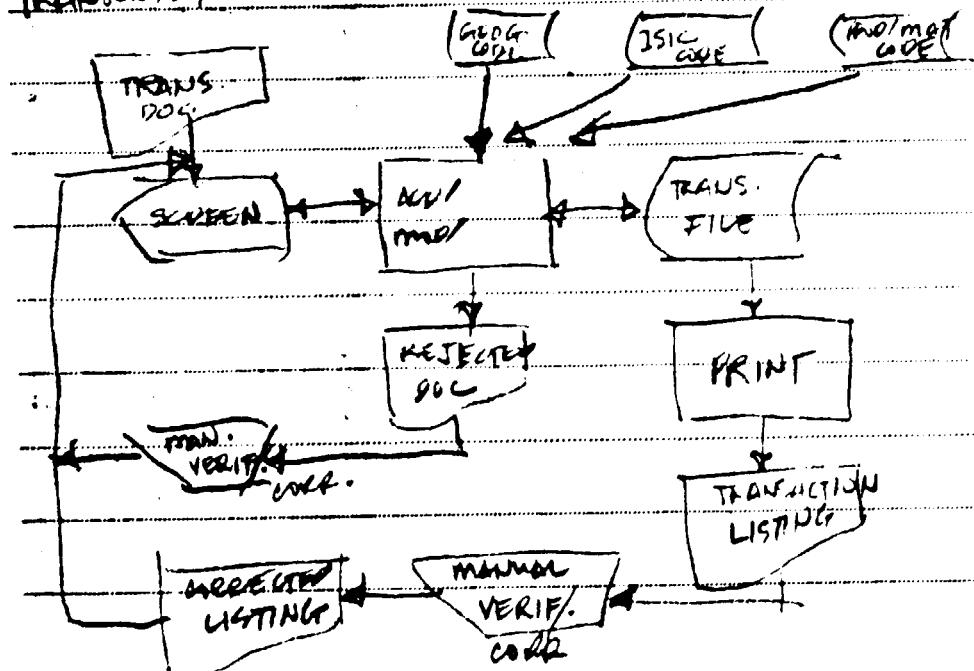
المملكة العربية السعودية
وزارة الصناعة والكهرباء

التوقيع اسم المعر
التاريخ الموضوع

GEOGRAPHIC FILES



TRANSACTION FILES



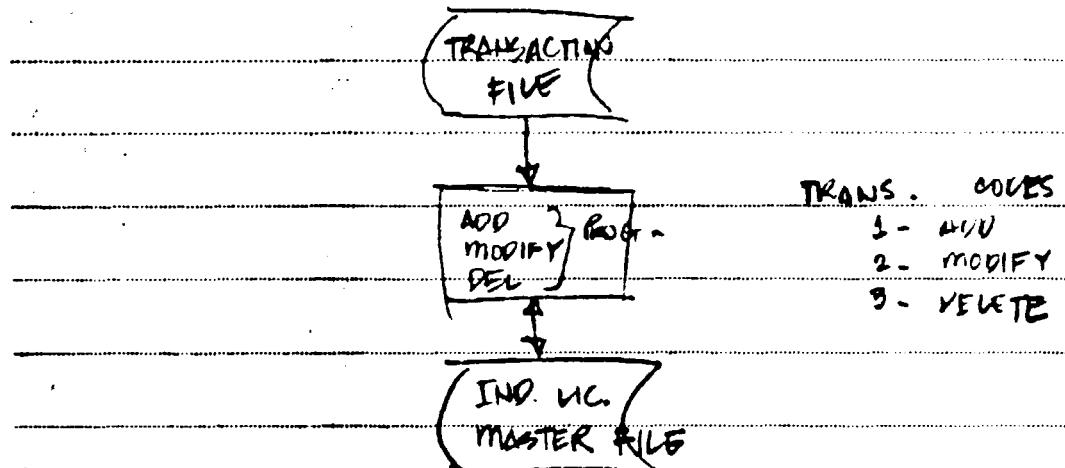
١٣
بسم الله الرحمن الرحيم

المملكة العربية السعودية
وزارة الصناعة والكهرباء

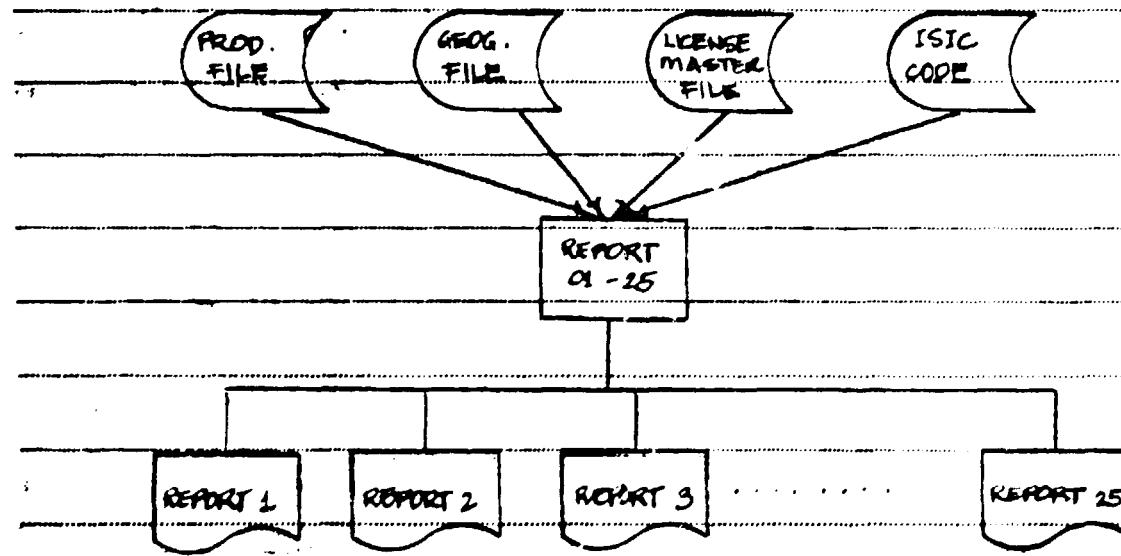
التوقيع _____ ٣ اسماه
التاريخ _____

الموضوع

MASTER FILE UPDATE



PRINTED REPORTS



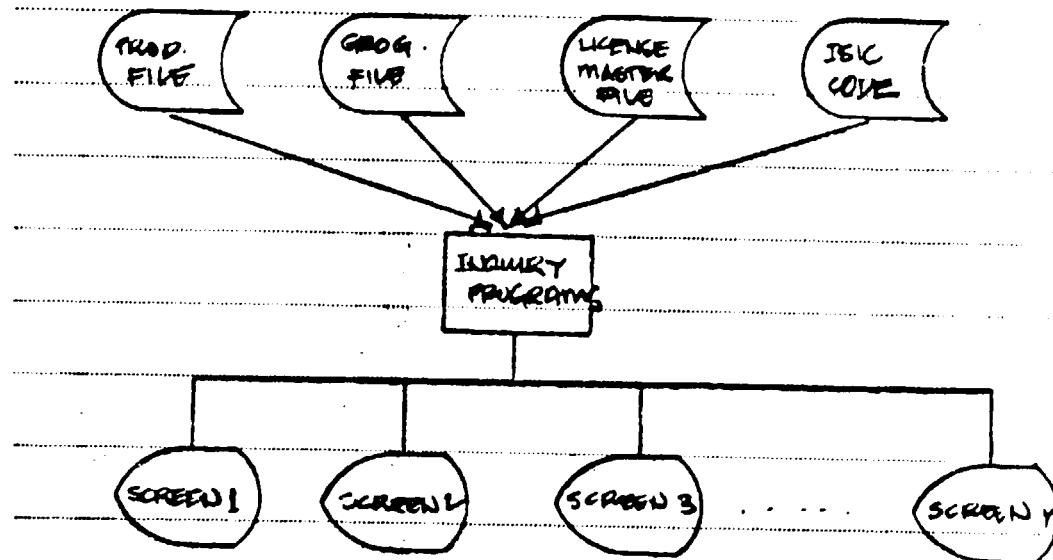
- ١٤ -
بشارة الرحمن الرحيم

المملكة العربية السعودية
وزارة الصناعة والكهرباء

التوقيع ٤ اسم المحرر
التاريخ

الموضوع

ON-LINE INQUIRIES

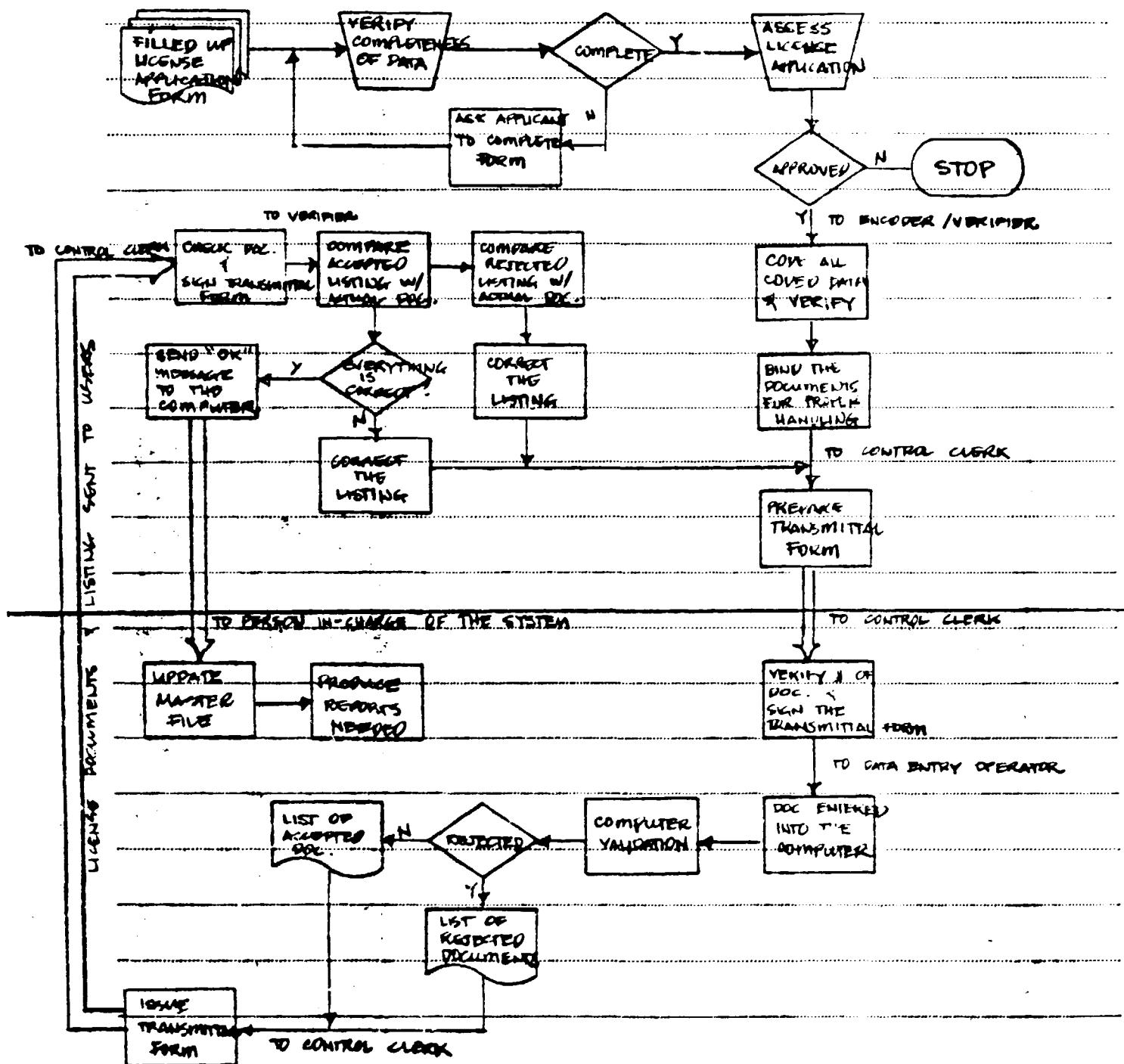


APPENDIX II

الرقم _____
اسم المحرر _____
التاريخ _____

SYSTEM FLOWCHART

الموضوع



بشارة الرحمن الرحيم

المملكة العربية السعودية

وزارة الصناعة والكهرباء

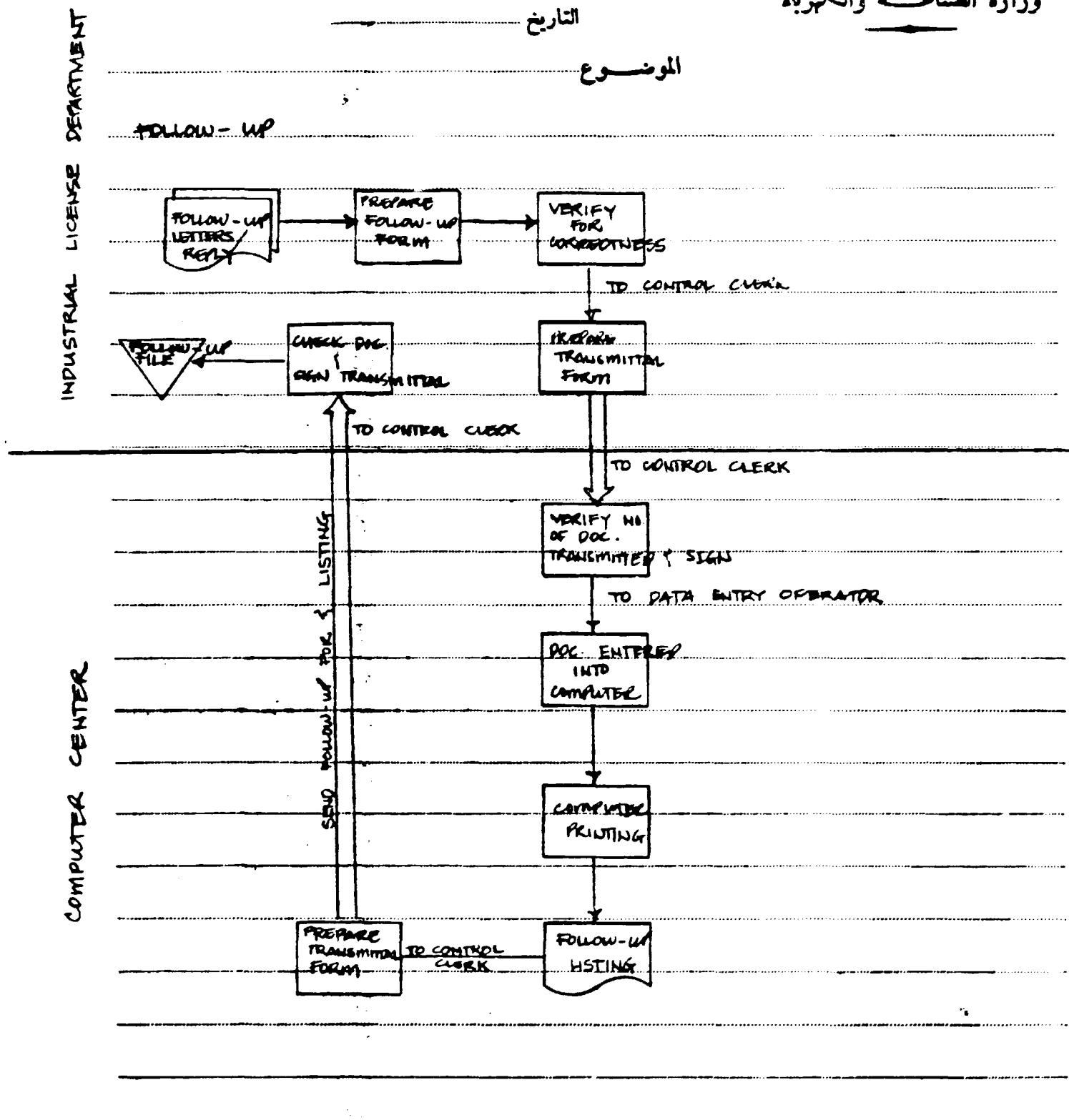
التوقيع

اسم المحرر

التاريخ

الموضوع

FOLLOW-UP



APPENDIX III

المملكة العربية السعودية
وزارة الصناعة والكهرباء

التوقيع _____ اسم المحرر _____
التاريخ _____ الموضع _____

RECORD LAYOUT

LICENSEE PROFILE (LICENPRO)

FIELD NAME	LENGTH	LOCATION	FORMAT
License Number	7	1-7	Numeric
1. License Details			
Company's Arabic Name	70	8-	Alphanumeric
Company's English Name	70	8-	Alphanumeric
Region	1		Numeric
City/Town	2		Numeric
License Date	7		Numeric
Investment Type	1		Numeric
Project Status	1		Numeric
Classification Code	6		Numeric
Statutory Entity	1		Numeric
Filler	5		
2 Project Owner & their Capital	occurs 16 times		
Arabic Name	40		Alphanumeric
English Name	40		Alphanumeric
Nationality / Nationality (2)	9		Alphanumeric
Address	60		Alphanumeric
Telephone	7		Numeric
Fax	15		Alphanumeric

بسم الله الرحمن الرحيم

المملكة العربية السعودية

وزارة الصناعة والكهرباء

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اسم المحرر _____
التاريخ _____

الموضوع _____

RECORD LAYOUT (Cont.)

<u>FIELD NAME</u>	<u>LENGTH</u>	<u>LOCATION</u>	<u>FORMAT</u>
1. Telegram	20		Alphanumeric
2. Share	99.999	3	Comp.-3
Filler	11		
3. Similar Projects	Occurs 60 times.		
Arabic Name	30		Alphanumeric
English Name	70		Alphanumeric
Region	1		Numeric
City/Town	2		Numeric
Annual Production Output	20		Alphanumeric
Follow-up Status	19		Alphanumeric
Filler	8		
4. Materials Imported	Occurs 16 times.		
Type			Numeric
Authorization Number	10		Numeric
Measurement Unit	10		Alphanumeric
First Year Amount	4(5)		Comp.-3
Second Yrs. Amount	9(5)		Comp.-3
Third Year Amount	9(5)		Comp.-3
Filler	8		
5. Products	Occurs 16 times.		
Type			Numeric
Number Of Working Hours	2		Numeric

المملكة العربية السعودية

وزارة الصناعة والكهرباء

التوقيع _____
 اسم المحرر _____
 التاريخ _____

الموضوع

RECORD LAYOUT (cont.)

<u>FIELD NAME</u>	<u>LENGTH</u>	<u>LOCATION</u>	<u>FORMAT</u>
Number of Annual Working Hours	3		Numeric
Annual Production Output	20		Alphanumeric
Filler	5		
(Materials Needed in Production	occurs 50 times		
Raw Material	20		Alphanumeric
Measurement Unit	10		Alphanumeric
Quantity	9(10)		Comp-3
Unit Price	99999.99	4	Comp-3
Amount	9(10)		Comp-3
Type	1		Numeric
Source	3		Numeric
Filler	5		
1. Machinery & Equipment	occurs 25 times		
Type	40		Alphanumeric
Quantity	9(4)	4	Comp-3
Unit Price	9(5).99	4	Comp-3
Amount	9(10)		Comp-3
Comments	15		Alphanumeric
Filler	5		
2. Manpower Requirements			
Job Classification	1		Numeric
Number of Saudi Employees	2		Numeric

التوقيع _____ اسم المحرر _____
التاريخ _____

المملكة العربية السعودية
وزارة الصناعة والكهرباء

الموضوع

Record Layout (Cart.)

<u>FIELD NAME</u>	<u>LENGTH</u>	<u>LOCATION</u>	<u>FORMAT</u>
Number of Non-Saudi Employees	2		Numeric
Total Number of Employees	2		Numeric
Average Monthly Wage	9(5)		Comp-3
Total Monthly Wage	9(6)		Comp-3
Total Annual Wage	9(7)		Comp-3
Benefit.	9(1)/9(2)	10 5	Alphanumeric Filler
9) Details of Project Management	300		Alphanumeric
Filler	10		
10) Plans For Training Saudi Employees	300		Alphanumeric
Filler	10		
11) Discussion On Equipment For Environmental Protection	300		Alphanumeric
Filler	10		
12) Land & Building Requirements			
Land Total Area	9(5)		Comp-3
Land Cost Per Square Mts.	9(3)		Comp-3
Land Rental Cost Per Square Mts.	9(1)		Comp-3
Land Total Value	9(6)		Comp-3
Land Total Annual Rental	9(7)		Comp-3
Buildings Total Floor Area	9(5)		Comp-3
Productor Building Total Area	9(5)		Comp-3
Productor Building Construction Type	1		Numeric
Productor Building Cost Per Square Mts.	9(4)		Comp-3

التوقيع

اسم المحرر

التاريخ

المملكة العربية السعودية

وزارة الصناعة والكهرباء

الموضوع

RECORD LAYOUT (cont.)

FIELD NAME	LENGTH	LOCATION	FORMAT
Production Building Total Cost	9(8)		Comp-3
Warehouses Total Area	9(5)		Comp->
Warehouses Construction Type	1		Numeric
Warehouse Cost Per Square Mile	9(4)		Comp->
Warehouses Total Cost	9(8)		Comp-3
Administration Building Total Area	9(5)		Comp-3
Administration Building Construction Type	1		Numeric
Administration Building Cost Per Square M.	9(4)		Comp-3
Administration Building Total Cost	9(8)		Comp-3
Total Building Cost	9(8) 8		
Electricity & Water Requirements			
Electricity Source	1		Numeric
Volt Required	1		Numeric
Operational Capacity	9(5)		Comp-3
Capacity For Lighting + Aircon	9(4)		Comp-3
Annual Electric Cost	9(6)		Comp-3
Water Source	1		Numeric
Water Annual Consumption Quantity	9(4)		Comp-3
Cost Per Ton	9(4)		Comp-3
Water Annual Cost	9(4)		Comp->
Fitter	8		

المملكة العربية السعودية

وزارة الصناعة والكهرباء

التوقيع _____
اسم المحرر _____
التاريخ _____

الموضوع

Record LABOR (Cont.)

FIELD NAME	LENGTH	SECTION	FORMAT
Capital			
Land	9(8)		Comp-3
Building	9(9)		Comp-3
Machinery & Equipment	9(10)		Comp-3
Installation Wages	9(6)		Comp-3
Vehicles	9(6)		Comp-3
Furniture	9(6)		Comp-3
Total Fixed Capital	9(11)		Comp-3
Annual Land Rental	9(7)		Comp-3
Annual Building Rental	9(7)		Comp-3
Raw Material	9(6)		Comp-3
Salaries + Wages	9(6)		Comp-3
Fuel	9(5)		Comp-3
Electricity	9(5)		Comp-3
Water	9(5)		Comp-3
Maintenance	9(6)		Comp-3
Marketing	9(6)		Comp-3
Total Marketing Capital	9(8)		Comp-3
Total Capital	9(11)		Comp-3
Filler	10		

المملكة العربية السعودية
وزارة الصناعة والكهرباء

التوقيع _____
اسم المحرر _____
التاريخ _____

الموضوع

RECORD LAYOUT (Cont.)

<u>FIELD NAME</u>	<u>LENGTH</u>	<u>LOCATION</u>	<u>FORMAT</u>
<u>1. Finance</u>			
Paid-up Capital	9(8)		Comp->
Percent	99.99		Comp->
Percent Interest	99.9		Comp-3
Interest	9(1)		Comp-3
Loan Period	99		Comp-3
Long Term Loan	9(8)		Comp->
Percent	9999		Comp-3
Percent Interest	99.9		Comp-3
Interest	9(1)		Comp-3
Loan Period	99		Comp-3
Short Term Loan	9(8)		Comp-3
Percent	9999		Comp-3
Percent Interest	99.9		Comp-3
Interest	9(1)		Comp-3
Loan Period	99		Comp->
Total	9(9)		Comp-3
Filler	10		

التاريخ _____
اسم المحرر _____
التاريخ _____

المملكة العربية السعودية
وزارة الصناعة والكهرباء

الموضوع

RECORD LAYOUT (Cont.)

FIELD NAME	LENGTH	LOCATION	FORMAT
16. Annual Operating Expenditure			
Building Installation	9(6)		Comp-3
Machinery & Equipment	9(6)		Comp-3
Installation Usages	9(5)		Comp-3
Vehicles	9(5)		Comp-3
Furniture	9(5)		Comp-3
Installation Expenses	9(6)		Comp-3
Total Consumption Cost	9(6)		
Building Rental	9(1)		Comp-3
Land Rental	9(1)		Comp-3
Total Rental	9(1)		Comp-3
Buildings & Installation Maintenance	9(5)		Comp-3 Total Gp. 22%
Machinery & Equipment Maintenance	9(6)		Comp-3
Transport Maintenance	9(6)		Comp-3
Furniture & Office Equipment Maintenance	9(6)		Comp-3
Total Maintenance	9(6)		Comp-3
Salaries	9(6)		Comp-3
Fringe Benefits	9(5)		Comp-3
Social Security	9(5)		Comp-3
Total Salaries & Wages	9(6)		Comp-3

التوقيع _____
 اسم المحرر _____
 التاريخ _____

المملكة العربية السعودية
وزارة الصناعة والكهرباء

الموضوع

RECORD LAYOUT (Cont.)

<u>FIELD NAME</u>	<u>LENGTH</u>	<u>LOCATION</u>	<u>FORMAT</u>
Raw Materials	9(6)		Comp->
Electricity	9(5)		Comp-3
Water	9(5)		Comp->
Fuel	9(5)		Comp->
Marketing	9(6)		Comp-3
Others	9(6)		Comp-3
Total Operating Expenses	9(7)		Comp->
Filler	10		

17. Profitability

Production Value at Sale Price	9(9)	Comp->
Annual Profit	9(7)	Comp->
Return on Capital Investment	99.9%	Comp-3
Filler	5	

التوقيع اسم المحرر
..... التاريخ

المملكة العربية السعودية
وزارة الصناعة والكهرباء

الموضوع

CODING SCHEME USED
For Input Document & System
City / Town

Region

المملكة العربية السعودية

وزارة الصناعة والكهرباء

التوقيع اسم المحرر
التاريخ الموضع

Statutory Entity

1- Individual Firm

2- General Partnership Co.

3- Limited Partnership Co.

4- Partnership Limited by Shares

5- Limited Liability Co.

6- Joint Stock Co.

Type of Investment

1- National

2- Foreign in Full

3- Joint

Project Status

1- Implemented

2- Not Yet Implemented

3- In Production

4- Not Yet In Production

Classification Code

Nationality

بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِيْمِ ۖ

الْعَسْكَرِيَّةُ

وزارة الصناعة والكهرباء

اسم المحرر _____ التوقيع _____

امان

التاريخ

الموضوع

Product

Material

1-
Boggi

2. Semi-finished

3 - finished

Courtesy

بسم الله الرحمن الرحيم

المملكة العربية السعودية

وزارة الصناعة والكهرباء

التوقيع _____ اسم المحرر _____
التاريخ _____ الموضوع _____

Job Classification

1- Administrative Staff

2- Engineers

3- Technical Workers

4- Non-Tech Workers

Type of Construction

1- Steel Hanger

2- Pre-engineered steel structure

3- Castered block structure

4-

Electricity Source

1- Public Network

2- Private generator sets

Volts Required

1- 380/220 volts

2- 13800 volts

For System

Water Source

1- Water Network

2- Drilling of Wells

3- Water Trucks

المملكة العربية السعودية

وزارة الصناعة والكهرباء

التوقيع _____ اسم المحرر _____

التاريخ _____

الموضوع _____

Programs

Location

1- Add

2- Change

3- Delete

4- Examine

5- Print

Transaction

1- Add

2- Change

3- Delete

4- Examine

5- Print

Report (25 reports)

Update the masterfile

APPENDIX IV

Kingdom of Saudi Arabia
Ministry of Industry and Electricity

SCREEN LAYOUT

الملكية العربية الشعوبية
وزارة النساء - لامعنة والبيه

Kingdom of Saudi Arabia
Ministry of Industry and Electricity

SCREEN LAYOUT

وزارة الفلاحة والرى

SCREEN LAYOUT									
SYSTEM	REPORT OPERATION	PROGRAM NAME	DATE	PAGE	MODULE	VERSION	PREPARED BY	REPORT DATE	PROGRAM NAME
1 - 10	11 - 80	21 - 30	31 - 40	41 - 50	51 - 80	61 - 70	71 - 80	12345678901234567890123456789012345678901234567890123456789012345678901234567890	

Ministry of Industry and Electricity
Kingdom of Saudi Arabia

SCREEN LAYOUT

Ministry of Industry and Electricity
乞那尼亞工業及電力部

۱۰۷۳

卷之三

For more information about the study, please contact Dr. John Smith at (555) 123-4567 or email him at john.smith@researchinstitute.org.

Figure 1. A schematic diagram of the experimental setup for the measurement of the thermal conductivity of the samples.

10. The following table shows the number of hours worked by 1000 workers in a certain industry.

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۱۰۷

ANSWER The answer is 1000. The first two digits of the product are 10.

• 100 •

185-24-¹ (185-24-¹)

10. The following table shows the number of hours worked by 100 employees in a company.

[View Details](#) | [Edit](#) | [Delete](#)

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SCREEN LAYOUT

Ministry of Industry and Electricity

۶۶۶

1-10 11-20 21-30 31-40 41-50 51-60 61-70 71-80
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MODULE NAME _____ VERSION _____
MEPDATA DATE/ON _____ PREPARED BY _____
PAGE _____ DATE _____

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କାନ୍ତିର ପଦମାଲା
କାନ୍ତିର ପଦମାଲା

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卷之三

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61-30 31-60 61-70

REPORT OF OPERATION
DATE

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SCREEN LAYOUT

Ministry of Industry and Electricity
Kuwait

۱۰۷

REPORT OF OPERATION
PROGRAM NAME
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VERSION
PUBLISHED BY

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PROGRAM NAME
VERSION
PREPARED BY
DATE
PAGE _____ OF _____
REPORT OPERATION
PROGRAM NAME
PAGE _____ OF _____

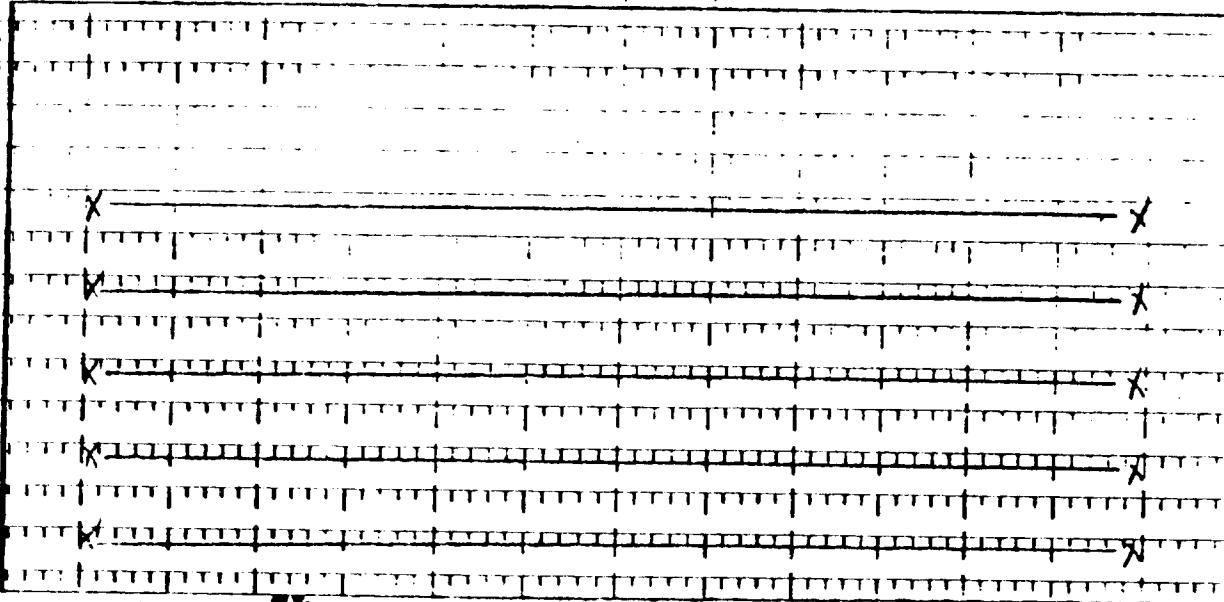
Ministry of Industry and Electricity
جامعة الراديو والتلفزيون

SCREEN LAYOUT

۱۰۷

PROGRAM NAME: WINDY DEMONSTRATION VERS. # 1 DATE 09-04-84 PREPARED BY PD0018

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<p style="text-align: center;">(F2) جزئیات پروژه (F1) که در آن مذکور شد</p> 									
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10	20	30	40	50	60	70	80	90	100

کمیابی اسلامی
جمهوری اسلامی ایران

SCREEN LAYOUT

وزارت صنعت و انرژی
جمهوری اسلامی ایران

SYSTEM	REPORT OPERATION	REPORT DATE	PAGE	DATE
MODULE	VERSION	PREPARED BY		
PROCESSOR NAME				

SCREEN LAYOUT

Ministry of Industry and Electricity
Zimbabwe

وَلِمَنْدَلْتَ وَلِمَنْدَلْتَ وَلِمَنْدَلْتَ

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DATA PREPARED BY VERSION MODEL NUMBER PROGRAM NAME

Kingdom of Saudi Arabia
Ministry of Industry and Electricity

المملكة العربية السعودية
وزارة الفضلاعامة والحكمة

SCREEN LAYOUT

A page of handwritten Arabic calligraphy on a grid background. The text is written in a fluid, cursive style. At the top, there is a large bracketed section containing several lines of text. Below this, there is a single line of text followed by a large, stylized section of text. The entire page is filled with dense, flowing script.

PROGRAM NAME _____ SYSTEM _____ VERSION _____ MODULE _____
REPORT OPERATION _____ PAGE _____ DATE _____ PREPARED BY _____

Ministry of Industry and Electricity
Alimqaboom al-Sa'idiyati Graibia

Ministry of Industry and Electricity
Kuwait Oil Company

SCREEN LAYOUT

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PROGRAM NAME	SYSTEM	VERSION	MODULE
REPORT OPERATION	REPORT OPERATION	PREPARED BY	VERSION
DATE	PAGE	PAGE	of

Ministry of Industry and Electricity
Kuwaiti Authority of Quality Control

PROGRAM NAME _____ SYSTEM _____ VERSION _____ MODULE _____
REPORT OPERATION _____ PREPARED BY _____ DATE _____ PAGE _____

SCREEN LAYOUT

Ministry of Industry and Electricity

Ministry of Industry and Electricity
ՀԱՅԱՍՏԱՆԻ ՀԱՆՐԱՊԵՏՈՒԹՅՈՒՆ

SCREEN LAYOUT

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וְיַעֲשֵׂה יְהוָה כָּל־אֲשֶׁר־יֹאמֵר לְךָ וְיַעֲשֵׂה

MODULE _____ VERSION _____
PROGRAM NAME _____ DATE _____
REPORT OPERATION _____ PAGE _____

Kingdom of Saudi Arabia
Ministry of Industry and Electricity

SCREEN LAYOUT

الملكية العربية المفهودة
وزارة الفلاحة والرى

SCREEN LAYOUT									
1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100
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Kingdom of Saudi Arabia

Ministry of Industry and Electricity

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1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 98

SERVICE NO. _____ DATE _____
 PROGRAM NAME _____ PAGE _____
 REPORT OPERATION _____ PAGE _____
 MODULE _____ PAGE _____
 VERSION _____ PAGE _____
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SCREEN LAYOUT

Ministry of Industry and Electricity
 Sri Lanka

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