



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



TOGETHER
for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

RESTRICTED

19364

DP/ID/SER.A/1535
9 January 1992
ORIGINAL: ENGLISH

INTEGRATED INFORMATION NETWORK FOR EFFECTIVE MANAGEMENT OF
RESEARCH AND DEVELOPMENT INSTITUTIONAL ACTIVITIES

DP/EGY/88/031

THE ARAB REPUBLIC OF EGYPT

Technical report: Integrated information network*

Prepared for the Government
of the Arab Republic of Egypt
by the United Nations Industrial Development Organization,
acting as executing agency for the United Nations Development Programme

Based on the work of Mieczyslaw Muraszewicz,
chief technical adviser

Backstopping officers: M. Boutoussov and J. Pavlik
Institutional Infrastructure Branch

United Nations Industrial Development Organization
Vienna

* This document has not been edited.

Explanatory Notes

Value of the local currency "Egyptian pound"

1 US \$ = 3.33 Egyptian pounds (December 1991)

Abbreviations:

CTA Chief Technical Adviser

RAMSES Research-Access data Management System for Engineers and Scientists

R&D Research and Development

Abstract

Muraszkiewicz, M., Chief Technical Adviser (CTA)
UNIDO

Integrated Information Network for Effective Management of
R+D Institutional Activities
Report (return mission) /EGY/88/031

This report presents the results of the mission undertaken by the CTA in December 4-19, 1991 to the Ministry of Industry of Egypt in Cairo within the project, "Integrated Information Network for Effective Management of R+D Institutional Activities (DP/EGY/88/031). The CTA was attached to the Ministry of Industry of Egypt.

The mission was aimed at (i) establishment and instructing a team of the MINISIS database application programmers and a team of the RAMSES network trainers; (ii) starting the process of transferring the MICRO ISIS databases to MINISIS environment; (iii) establishment of a training programme which includes the collection of data from R+D centers; (iv) initiating the collection of proforma invoices from various vendors. All the above objectives have been reached.

As the mission follow up it is recommended:

- to continue transferring the RAMSES databases (software and data) from MICRO ISIS to MINISIS environment;
- to collect current data (year 1991) from R+D center and to input them into the databases;
- to finalize the physical network building;
- to organize advanced training on the RAMSES network use for the Ministry staffers and R+D specialists.

TABLE OF CONTENTS

ABSTRACT	3
INTRODUCTION	5
CONCLUSIONS AND RECOMMENDATIONS	6
I. Activities	7
II. Outputs	7
III. Action Programme (Follow-up)	8
Annexes:	
1. Documents Used	9
2. Persons Contacted	10
3. Training Programme	11
4. Note for the File	12
5. UNDP Telex	13
6. Export/Import and Transfer Facilities (SPECS)	14

INTRODUCTION

The Chief Technical Adviser (in the sequel called CTA) was attached to the Ministry of Industry of Egypt. The mission lasted from Dec. 4 to Dec. 19, 1991 and constitutes the third part of CTA's intervention; the first one took place in January 1990, the second one was performed in May/June, 1991. Originally the present mission was planned for 7 weeks and was about to complete the project execution; however, unexpectedly, on the Counterpart Government request "due to the preparation of the 5th Country Programme and introducing programme approach" (citation from the UNDP telex on Dec.9, 1991, Annex 5) was reduced to 2 weeks.

The main immediate objective of the project "Integrated Information Network for Effective Management of R+D Institutional Activities (DP/EGY/88/031) is the following: to design and establish a nucleus of the integrated information network (later on called RAMSES Research-Access data Management System for Engineers and Scientists) in order to provide facilities for efficient management and co-ordination of R+D institutions belonging to the research infrastructure of the Ministry of Industry in Egypt. In practical terms the Ministry was supposed to obtain the following:

- (i) the vendor independent network for efficient data exchanging ensuring interoperability of various technical and human resources employed in the field of R+D management;
- (ii) R+D databases at two levels: headquarters level (based on MINISIS running on the HP 3000 computer) and an R+D institution level (based on Micro CDS ISIS, running on HP VECTRA QS/165). Databases on both levels are to be compatible and interlinked;
- (iii) trained staff to run the network.

The above has not been yet the case mainly because of the postponement of the mission of the consultant on Telecommunication (Dr. W. Bauertfeld, II-51) and the reduction of the CTA's intervention; however, the work (consistent with the so far project outputs) has been done towards reaching the project objectives.

CONCLUSIONS AND RECOMMENDATIONS

1. The unexpected decision made by the Government Counterpart to postpone the mission of the consultant on telecommunication and to reduce CTA's assignment from 7 weeks to 2 weeks "due to the preparation of the 5th Country Programme" (cf. UNDP telex attached, Annex 5) might turn out to be critical for the project execution strategy and might cause negative effects.
2. The follow up programme aimed at the completion of the project given in the CTA's report 141 remains, to a large extent, valid, in particular the following tasks have to be undertaken in order to reach the original objectives of the project:
 - to continue transferring the RAMSES databases (software and data) from MICRO ISIS to MINISIS environment;
 - to prepare a set of Users Guides and Manuals on the operation of the MINISIS databases and the RAMSES network.
 - to collect the current data (year 1991) from R+D center and to input them into the databases;
 - to finalize physical network building, in particular to acquire 2 public ("normal") telephone lines from ARENTU (national telephone service company) and a leased line from EGYPTNET (provider of X.25 service in Egypt);
 - to test thoroughly the databases in the network environment ("acceptance test");
 - to purchase additional equipment (printer, extension of the HP memory, furniture);
 - to provide advanced training on the RAMSES network use for the Ministry staffers and R+D specialists.

I. ACTIVITIES

I was informed about the Government Counterpart decision which changes the project execution strategy by Mr. T. Sabry from UNDP. This decision has not been consulted with me (cf. my Note for File, Annex 4). It affected the schedule of work and forced me to limit my activities to the following tasks:

1. Establishment and instructing a team of the MINISIS database application programmers and a team of the RAMSES network trainers.
2. Starting the transfer of MICRO ISIS databases to MINISIS environment.
3. Establishment of a training programme which includes the collection of data from R+D centers.
4. Collection of proforma invoices from various vendors.
5. Keeping permanent contact with ORASCOM, which is the main project contractor, and supervision of its work concerned with the project.

II. OUTPUTS

1. The team of MINISIS database application programmers (4 persons), the team of the RAMSES network trainers (5 persons) were established and the team to refine the MICRO ISIS databases software (3 persons) was reestablished. The teams have been given the detailed instructions concerned with their respective tasks.
2. The MICRO ISIS database software on EXPERTs was transferred to the MINISIS environment and demonstrated.
3. The methodology and facilities to transfer data from MICRO CDS/ISIS to MINISIS environment, and *vice versa*, have been established. The transfer of data from/to a remote PC terminal to/from the HP 3000 was performed (for the tools cf. Annex 6).
4. An advanced training programme which includes the collection of data from R+D centers was set up (cf. Annex 3).
5. Proforma invoices from various vendors have been collected, including ORASCOM's offer on upgrading the HP memory.

III. ACTION PROGRAMME (FOLLOW-UP)

Below are given the most important tasks to be undertaken in order to complete the project.

1. To continue transferring the RAMSES databases (software and data) from MICRO ISIS to MINISIS environment.
2. To prepare a set of Users Guides and Manuals on the operation of the MINISIS databases and the RAMSES network.
3. To collect the current data (year 1991) from R+D center and to input them into the databases.
4. To finalize physical network building, in particular
 - to acquire 2 public ("normal") telephone lines from ARENTO (national telephone service company) and a leased line from EGYPTNET (provider of X.25 service in Egypt);
 - to render a contract to ORASCOM (already approved by UNIDO) on assistance, maintenance and training regarding the hardware and telecommunication components of the network.
5. To test thoroughly the databases in the network environment ("acceptance test").
6. To purchase additional equipment (printer, extension of the IIP memory, furniture).
7. To provide advanced training on the RAMSES network use for the Ministry staffers and R+D specialists.

DOCUMENTS USED

1. Bankowski J., Wysocki A., Guidelines for the Establishment or Redesign of Industrial and Technological Information Service System, including Selection of Software and Hardware, UNIDO/IS.597, Jan.15, 1986.
2. El Sherif H., El Shooky E., Industrial Information Development in Egypt, paper presented to UNIDO/INTIB Workshop for National Focal Points on Industrial Information Networking and Cooperation, Moscow, USSR, May 30, 1988.
3. Integrated Information Network for Effective Management of R+D Institutional Activities, Project Document. DP/EGY/88/031/01/37.
4. Muraszkievicz M., Integrated Information Network for Effective Management of R+D Institutional Activities, UNIDO technical report (second mission), June 14, 1991.
5. Page W., Survey of R&D activities and conceptual design of the Integrated Information Network for R&D, UNIDO technical report, 25 Jan. 1990.

PERSONS CONTACTED

Ministry of Industry

Dr. Yuzef Mazhar	First Under Secretary at the Ministry of Industry
Ms. Nagwa Zayed Abdel-Aziz	Manager of Information Center for the Ministry of Industry and its Organizations
Mr. Shams El Den Mohamed Salem	Supervisor of Information Systems Center for the Ministry of Industry and its Organizations
Mr. Mahmoud Aly Salem	General Manager Hewlett Packard

UNDP

Mr. Tharwat Sabry	Senior Programme Officer
-------------------	--------------------------

Others

Mr. Adel E. Eweida	Supervisor of Computer Section, Academy of Scientific Research and Technology
Mr. Per Lind	UNIDO consultant

Training Programme

The training is addressed to the R+D specialists to be participated in the RAMSES network.

Day *Subject*

Basic training, (for information officers and database administrators),
venue: Ministry of Industry

- 1 Installation of the RAMSES MICRO ISIS software
 Browsing all the RAMSES databases
 Exercises
- 2 Information retrieval language
 Inverted file
 Retrieval
 Exercises
- 3 Data entering, updating, deletion
 Generating reports
 Exercises

Advanced training (for database administrators),
venue: Ministry of Industry

- 1 More sophisticated retrieval
 Data export/import
 Exercises
- 2 Defining databases (FDT, FST, PFT, worksheets)
 Exercises
- 3 Introduction to CDS/MICRO ISIS PASCAL
 Exercises

Data collection (under the supervision of the members of the Ministry training team)
venue: R+D centers

- 1 Installation of the RAMSES MICRO ISIS software
 Testing
 Revision
- 2 Data inputting
- 3 Data inputting
- 4 Data inputting

NOTE for the FILE

Referring to the UNDP telex (copy attached) requesting on behalf of the Government Counterpart (i) postponement of Mr. Bauerfield's mission and (ii) reduction of my present assignment from 7 weeks to 2 weeks due to the preparation of the 5th Country Program, I state the following:

- (a) I was given a copy of the above mentioned telex on Dec. 11, 1991.
- (b) The above requests have not been consulted with me although they change dramatically the project execution strategy.
- (c) The work planned to be accomplished within 7 weeks in order to complete the project and reach its objectives included, *inter alia*,
 - transfer of 6 databases (software and data) from MICRO ISIS to MINISIS;
 - preparation of a set of Users Guides and Manuals on the operation of the MINISIS databases and the RAMSES network.
 - collection of current data (year 1991) from R+D center and inputting them into the databases;
 - finalization of physical network building;
 - testing thoroughly the databases in the network environment ("acceptance test");
 - purchase of additional equipment (printer, extension of the HP memory, furniture);
 - advanced training on the RAMSES network use for the Ministry staffers and R+D specialists.

This work cannot be performed over the 2 week period. Within this period I have undertaken the following activities which seem to be relevant to and *consistent* with any further project development plan:

- establishment and instructing a team of the MINISIS database application programmers and a team of the RAMSES network trainers;
- starting to transfer the MICRO ISIS databases to MINISIS environment;
- establishment of a training program which includes the collection of data from R+D centers;
- collection of proforma invoices from various vendors, and technical discussions with ORASCOM.

Dec.12, 1991


.....
M. Murasziewicz

Receivers:

- | | |
|---------------------------------|-------------------------------|
| Mr. Mazhar | - Ministry of Industry, Cairo |
| Mr. M. Boutoussov, Mr. J Pavlik | - UNIDO, Vienna |
| Mr. T. Sabry | - UNDP, Cairo |

SUBJECT FILE
COPY

OUTGOING TELEX

FILE No.: EGY/88/031

DATE: 7 DECEMBER 1988

TO

UNIDO VIENNA

TEXT

MISC 1518

-----BEHRENS/CREYDT INFO HAMDY/BOUTOUSSOV URGENT RE
EGY/88/031 DUE TO PREPARATION FIFTH COUNTRY PROGRAMME AND
INTRODUCTION PROGRAMME APPROACH GOVERNMENT COUNTERPART REQUEST
FOLLOWING:

AAA POSTPONEMENT MISSION BAUERFELD UNTIL FURTHER NOTICE.

0

420544 UNH UIF

ZCZC CAAD053

RR VIF

.CAIRO (UNDP) 10 1105

BT

MISC 1518 BEHRENS/CREYDT INFO HAMDY/BOUTOUSSOV URGENT RE
EGY/88/031 DUE TO PREPARATION FIFTH COUNTRY PROGRAMME AND
INTRODUCTION PROGRAMME APPROACH GOVERNMENT COUNTERPART REQUEST
FOLLOWING:

AAA POSTPONEMENT MISSION BAUERFELD UNTIL FURTHER NOTICE

BBB DURATION MISSION MURASCKIEWICZ TO BE ONLY TWO WEEKS RPT TWO
WEEKS AND NOT SEVEN WEEKS.

(MERCADER)

COL CKD

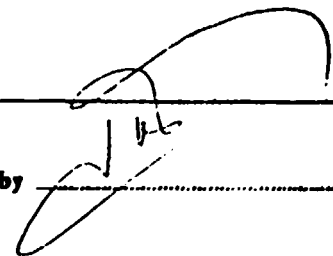
NNNN

R

Drafted by

BA/na

Authorized by



Export/Import and Transfer Facilities (SPECS)

Advance-Link HP68000F Version B.02.00.
Copyright (c) Hewlett-Packard Company (HP Co) 1982-1989.
Press ALT with II for keyboard help.

editor

HP32201A.07.17 EDIT/3000 WED, DEC 18, 1991, 9:12 AM

(C) HEWLETT-PACKARD CO. 1985

/t import.

/1 all

1 UJOB IMPORT,MGR.OSSAMA
2 !FILE ISO=ISO;DEV=DISC
3 !MINISISE
4 10
5 DUMP FROM=SPECS1,TO=SPECS
6 SUBSET=ALL

/t export.

/1 all

1 UJOB EXPORT,MGR.OSSAMA
2 !PURGE ISO
3 !FILE ISO=ISO;DEV=DISC
4 !MINISISE
5 10
6 LOAD FROM=SPECS,TO=SPECS1
7 SUBSET=ALL.

/exit

:minisise

db specs

01 ----- DB HEADER SCREEN -----
DATA BASE NAME ISPEC27 | DATA BASE TYPE
[RD] DATA MODEL [TEXT]
02 FILE TYPE (1=MASTER * 2=KSAM * 3=ANY * 4=THES)
[1]
NON-MINISIS FILE TYPE (1-32767) [1]
03 GROUP [PUB]]
MASTER FILE NAME .. [MSPECS]] MAXIMUM SIZE OF MASTER FILE [300]
XREF FILE NAME [XRSPECS]] MAXIMUM NUMBER OF ISNS . [500]
AUTO-NUMBERING (Y/N) [Y]] NUMBER OF PS SETS FOR UPDATE (0-8) [1]
USER-DEFINED PROMPTING SEQUENCE(Y/N) []]
BIBLIOGRAPHIC LEVEL INDICATOR (Y/N) []]
REGISTER ACCESS IN AUDIT TRAIL(Y/N) []]
AUDIT TRAIL FILE NAME []]
MPE TRANSACTION LOGGING (Y/N) [1]] LOGID NAME..... [1]]
OFFLINE INVERSION LOGGING (Y/N) ... [1]] DEFAULT QUERY FIELD TAG
[A070]
NAME OF EXIT FOR VALIDATION []]
DEFAULT PRINT FORMAT FILE [PSPECS]]
NAME OF PARAMETER FILE [TAREK9]]

db specs1

01 ----- DB HEADER SCREEN -----
DATA BASE NAME ISPECS1 | DATA BASE TYPE[CD]
 DATA MODEL[TEXT]
30 ISO TYPE [CDS/ISIS]] LENGTH OF RECORD LEADER ... [24]
LENGTH OF ISO TAG .. [3]] LENGTH OF DISPLACEMENT FIELD [5]
LENGTH OF LENGTH FIELD . [4]] TYPE OF DISPLACEMENT (C/B/P) . [C]
TYPE OF LENGTH FIELD (C/B/P) [1]] TAG OF SUBRECORD DIRECTORY [1]]
VALUE OF SUFFIX ... []] TYPE OF INPUT FILE (A/E)[A]
TYPE OF OUTPUT FILE (A/E) [A]] DISPLACEMENT RELATIVE TO ...[V]
LENGTH OF RECORD SEPARATOR [1]] BEGINNING OF RECORD (V/B)
LENGTH OF FIELD SEPARATOR [1]] UNBLOCKED TAPE (Y/N) [Y]
LENGTH OF BLOCK LENGTH FIELD ... [0]
ISO TAG OF RANGE CHECK FIELD ... [1]]
DISPLACEMENT WITHIN RANGE CHECK [1]]
MAXIMUM LENGTH OF RANGE CHECK .. [1]]
FIELD
FIELD RANGE CHECK FIELD TYPE (C/B/P) ... [1]]