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Ministere de l'Habitat

Agence Nationale de Lutte
Contre l'Habitat Insalubre (ANHI)

United States of America
Agency for International
Development
Regional Housing Office
Housing & Urban
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ANHI Low Income Housing Program

Structured Systems Analysis and Integration Plan for l'ANHI

June 1991

Analysis by

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for

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PREFACE

Since the inception of the Moroccan National Agency for the Fight Against Substandard Housing (ANHI) in 1984, the US Agency for International Development Regional Housing Office of the Housing and Urban Development Division (USAID/RHO) has been working to support ANHI in the development of serviced land for low income urban families. The Moroccan National Agency was formed to act as a project manager for the Ministry of Housing and local governments. This MIS analysis is an outgrowth of three (3) USAID/RHO objectives which are summarized in the USAID/RHO Technical Assistance Grant (608-0200, pg.7):

- the development of computerized project planning and monitoring systems that will enable ANHI to effectively plan, coordinate and control all aspects of its projects;
- assistance in establishing computerized accounting and financial management systems;
- assistance in establishing management information systems.

The scope of work for this computer technological needs assessment and procurement plan includes:

- a review of existing MAC and PC equipment utilization
- a review of organizational structure and
- a review of management procedures in the context of planned growth for the medium term.

The resulting MIS recommendations will include proposal for purchase of additional computer equipment and training that support regionalization and the new ANHI operational directives of debt servicing (including administering a $20,000,000 US AID/RHO loan) and money management being carried out under the USAID HG003 program.

This analysis follows the "*Estimation des besoins informatiques de l'ANHI*," prepared in May 1990 for USAID and the Moroccan Housing Ministry by M. Abderrazzak Bouhamid of Techniques Urbaines, Maroc. The results of this study indicate that computer requirements involve greater expenditures than initially anticipated. The supplemental grant doubled the initial $100,000 to be spent on computer hardware. To an initial $800,000 budget in USAID/RHO Project Paper 608-HG-003, an additional $500,000 was proposed in Project Paper 608-0200, including the funding for this report.

The purpose of this study is, therefore, to address the management information systems requirements caused by the rapid growth in ANHI projects and beneficiaries. A detailed list of hardware, peripheral equipment and software, along with an implementation and training schedule, concludes this report.

The author would especially like to thank all the staff of USAID/RHO and of the ANHI for their contributions to the preparation of this study. A special greeting to M. Benyahia and M. Bernoussi of the Project Management Group at ANHI who assisted in an early French draft of this report while on a USAID sponsored Low-Income Housing seminar at Harvard University in Cambridge, Massachusetts.

S. B. Miles
Peabody, MA
August 15, 1991

INTRODUCTION

This on-site review of information systems requirements prior to funding by USAID/RHO of specific equipment, software and training purchases is the direct result of:

- the exceptional growth of the National Agency for the Fight Against Substandard Housing (ANHI) and
- the success in the production/delivery of serviced housing sites for Moroccan urban households earning less than the median income.

The scope of work includes reviewing the most recent computer needs assessment commissioned by USAID/RHO in May 1990, which was performed by a local private consulting firm. Following a walk-through by department of existing equipment and utilization in the current organization, this study will provide ANHI with a structured data flow analysis and the model of a new logical system to build applications in keeping with its organizational objectives.

1.Systems Analysis

This chapter seeks to describe computing systems and their application at ANHI, and the key problems associated with their usage which impair the effective growth of the organization. We will review the prior systems analysis, and walk through each department and watch the flow of data through them, in much the same manner as ANHI employs a variety of technical surveys in launching a subdivision project to install sewage lines, running water and electricity.

We will follow the new organization chart (see 'organigramme' Appendix 1) which was put in place after the last study was done. This chart is organized according to function: Sales, Project Management, Finance and Accounting departments (*Direction Commercial, Direction des Projets and Direction Financiere et Comptable*).

1.1 Information systems at ANHI

The ANHI Information Systems Center, now equipped with five (5) DOS PCs, ranging from XTs to PS2s which were recently purchased by ANHI in an attempt to meet the soaring demand for data processing services, is the direct result of a USAID sponsored study which recommended DBASEIII as a database development medium for the purpose of managing projects. All agency reports are prepared in this department for presentation to the Ministry of Housing on a periodic basis.

With the exception of a stand-alone DOS PC in the accounting area running a single user version of the SAARI General Ledger program, all other computer usage is now occurring on a population of MACs, first introduced by upper management four years ago, and now consisting of ten (10) workstations, ranging from a MAC Plus to MAC IIs. The common applications are word processing and EXCEL spreadsheets which the account representatives use to track their client sales, with graphics presentation software for the Communications Center's slide presentations (photographed from the computer screen with a 35mm camera).

1.2 Review of prior systems analysis

In May of 1990 M. Abderrassak Bouhamid, a systems analyst from Techniques Urbaines- Maroc, wrote an information systems assessment for l'ANHI ("*Estimations des besoins Informatiques de l'ANHI*"). He effectively summarizes the growth of ANHI in five years from acting as a subcontractor for the Ministry of Housing and local governments ("*maitrise d'ouvrage deleguee*")

producing an average of 5000 lots/annum to operations which are now 25% contracted for entirely by ANHI ("*maitrise d'ouvrage directe*") at a run rate of over 10,000 lots/annum. Of the sixty (60) current ANHI employees, approximately twenty five (25) are professionals, a group which is expected to grow to one hundred (100) in the medium term.

The systems analysis by M. Bouhamid reviews the various functions at ANHI. I refer the reader to the excellent summary of the developer's departmental functions: project management, sales, and project accounting. He proposes addressing project accounting so as to include include sales, payroll and purchasing data as they occur. The project management solution proposed includes the notion of working from spreadsheets of lot inventories and attributions ("*consistance et attributaires*"), an idea which we have perpetuated in our data structure spreadsheet at the conclusion of this report. A wish list of a variety of accounting functions was added to the automation of key functional areas in the Techniques Urbaines needs analysis.

In the diagnostic section of the report, it is pointed out that information processing at ANHI occurs centrally, partially because of limited computing resources, while the departments provide the input documents; the center processes and redistributes this information. The drawbacks of such a centralized system are succinctly stated (p9):

- Information services assumes responsibility for information accuracy and data integrity, substituting itself for (the judgement of) the user

- Document preparation is a lengthy business, with data entry personnel unable to understand and make adjustments as would the original end user

- By limiting data processing to a centralized paper based system, 'real time' queries are impossible to obtain due to the processing delay.

The cost to the organization of this delay remains to be fully accounted for, but first and foremost the duplication of effort is shown to be substantial. M. Bouhamid uses the example of invoices (OIR - *Ordre d'Imputation de Recettes*) which are issued by the information center without complete project related information, then reentered upon receipt of funds by Accounting, only to be redistributed manually by photocopies when payment is received at the main office, so as to be reentered into the salesman's EXCEL project spreadsheet. Techniques Urbaine's report does not attempt to account for the many other times the same data will be reentered for periodic agency presentations. Unfortunately it does not identify or address the difficulties associated with generating invoices for representatives who, in the case of subcontracted jobs, work directly for the Ministry of Housing.

Secondly, the author pinpoints the closure and isolation of the SAARI accounting system as a problem, along with the single-user constraints of the DBASE III programming environment (see appendix 2 for more recent commentary). We share both these concerns.

Finally, the lack of systems personnel, the slowness of DOS when it comes to processing end of month reports (the inability to spool documents however can be avoided by installing a print server on a network), and the lack of communications between MAC and DOS platforms are all issues which need to be addressed.

The proposed applications solution by M. Bouhamid grows out of a classical systems analysis approach to the problem: to develop a software program (in COBOL) to automate the way in which ANHI functions.

The two hardware options presented are to add three IBM PCs (a step which ANHI has now taken) and to network them with the MACs (which ANHI has not successfully used), or to purchase a mini computer. In either case, one big series of centralized COBOL or PC/COBOL code would cost an estimated $150,000. It is the contention of this author that that money can be more effectively spent on applications which already exist.

We can extract an extremely useful analysis of the volume of administrative tasks from the budgeting section of M. Bouhamid's report outlining systems memory requirements (p19), :

#Projects	60 existing and 30 new projects = ~100
#Lots	1200 x 90 = 108,000
#Clients	120,000
#Invoices	420,00 (installment sales)
#Bids	25 x 70 = 1750
#Contracts	750
#Vendors	100
#Purchase Orders	2500 (over 2 years)

The installment invoicing function is 140,000/year or close to 600/day, the highest volume batch printing function at ANHI.

In conclusion, we have highlighted the problems of double entry and data maintenance, as well as quantifying the data processing requirements for ANHI's accounting application.

1.3 Structured Systems Analysis

The methodology of this study differs significantly from the classical systems analysis as exemplified in the previous computing needs assessment report A classical systems analysis consists of a feasibility study, followed by an analysis of the existing system, using interviews, narrative descriptions, and flowcharts which provide the basis for designing and coding a new system. Once built, these systems routinely require significant ongoing programming maintenance which consume up to 80% of future computing systems resources, without ever addressing the key business management issues growing organizations are faced with.

Structured systems analysis, such as is used in this study, begins with a data flow analysis. When stripped of physical characteristics, a new logical system can be designed around data dictionaries. By breaking down information usage into modules, specifying the interface between them, and the processes or transformations which occur within modules, we can build a coherent system of applications. The division of duties between people and computers for each application can then be made on a cost/benefit analysis. Structured systems analysis is superior to classical analysis by virtue of the fact that the systems built are easier to maintain and to add to.

Finally, with the maturation of computer applications, systems integration is taking over where programming skills were previously employed. Instead of building applications from the ground up, software application packages are selected and integrated in an open systems environment. The key benefit for the user organization is the ability to benefit from extensive development work in any given application, with the result that applications have a reliability and resilience which would otherwise take years to accomplish. Systems integration often results in totally different data and work flows than had been previously employed.

1.3.1 Sales

The key departmental functions, as identified in the previous analysis, consist of the following:

- Pricing/m2 according to the project makeup
- Identification of prospects and sales of lots
- Centralized invoicing
- Payment tracking for installment sales
- Project cash flow

In the business of developing serviced land sites, the lot number is the key reference point around which all sales data have been calculated to date. In our walk-through analysis, we found that classifications of clientele at ANHI are identified by the lot type they occupy.

In charting the data flow coming into this department, a sales representative begins with a list of lot #s and sizes by the project manager, and a list of clients selected by a committee of housing representatives from the local, state and national government.

As ANHI evolved in its pricing strategy to meet the diversity of client demand, pricing categories were developed around basic lot characteristics: dwelling type (residential or commercial), number of floors, proximity to sidewalk or roadway, etc. A great deal of the pricing decisions rely currently on the judgement of the individual sales representative.

The accompanying EXCEL MAC-based spreadsheet (Appendix 3) is used to track sales and payments of lots. In the case of the Tetouan antenna office, EXCEL has overflowed onto a PC where a visual layout of the construction status for each lot is illustrated.

In discussions with sales representatives of how computers might be used to facilitate the sales and market analysis task, access to revised lot dimensions for accurate sales invoicing was deemed to be most critical.

As becomes apparent when one continues to follow the data at the time of sale, there are two clear paths for invoicing:

- a centralized batch invoicing process (manual at this time) sent to the Housing Ministry Representatives

- bills issued by the account representative(direct or indirect) at the time of the sale.

In no case has there been any attempt to track these items, or account for duplicates issued. The accounting department does not recognize their validity until the invoice (OTR) comes in accompanied with a receipt from the Ministry of Treasury deposit or from WAFA bank, the two places in which ANHI can receive money. In turn, the later installment bills must reflect any changes in dimension during the work to avoid unnecessary debits and credits to the client.

As can be seen from the attached invoice (Appendix 4), much work has been done to include the requisite information on the form itself -- identifying project, lot number, type, surface, price/m2, total, name, CIN (social security number), number and amount of installment, plus the addition of fields for whether client appeared, expiration date and project manager. The data dictionaries of two departments are mixed together here. The first problem we find in defining our data dictionary for the sales department is that people have not been tracked separately from plots. Secondly, because the lot information is not always correct and available at the time of sale, especially for

Housing Ministry agents, these form are often not filled in completely and require someone in accounting to check back with sales to see what happened, causing a duplication of work.

When it comes to receivables, the most basic of collections tools, a receivables report and regular statements, do not currently exist at ANHI. This need is addressed in any standard accounting software package. Receipts at the project level, just as for invoices, have been the responsibility of the sales department at ANHI. As a result many of the salespeople have developed their own system of getting the clients to return with the receipts from the Ministry of the Treasury office. I propose that what some ANHI account representatives have found to work should be implemented for indirect representatives as well. It is then critical that this information be relayed to the central accounting office, which is currently being done by no one.

If we calculate the cost in lost cash flow to ANHI during the week that it takes from time of deposit to be recorded in ANHI's centralized deposit ledger, it amounts to approximately $250,000.

1.3.2 Project Management

PROJECT STAGES:

- Project feasibility study (site, market, financing)
- Land acquisition
  titles
- Consulting bids (architects, technical studies)
  project book
- Project work bids

This department makes the least use of computers currently, and probably can benefit the most from a variety of computer applications. Even spreadsheets of project budgets are being done by hand. A sample project sheet is attached (Appendix 4). The fact that this information must be updated regularly as each step is completed makes this an ideal application for automation.

An initial project plan is prepared in conjunction with authorities, for which market and real estate surveys are often contracted. Once the project has been approved, each project goes through stages which correspond to the functional groupings on the organization chart. The *Division fonciere,* land search, surveying and acquisition are tracked manually on forms (Appendix 5 & 6) through the complex Moroccan title systems. Some of the title systems go back to the Andalousian reign in the twelfth century, some the religious renaissance in the sixteenth century, and later the French colonial period. As the survey and architectural studies come in, a lot list is prepared by these firms (Appendix 7).

Project managers are responsible for budgeting the project and seeing that expenses do not outrun the ability of the clients to pay for the work. The technical division, upon receiving approval by management, will go out to bid and contract for specific jobs. Progress payments are arranged in different forms (Appendix 8-10), as progress billing or purchase orders.

Project managers are responsible for several projects simultaneously. They are responsible for providing the data on project expenses to data processing for incorporation in a project book which, in turn, is based on the initial project manger's budget.

1.3.3 Finance and Accounting

The accounting office has purchased a single user DOS accounting package from SAARI, where they are running a general ledger. The way the files are currently set up, it took weeks to identify

purchases amalgamated by vendor. The application has not been set up properly and sufficient training has not occurred for ANHI. The department continues to keep a backup manual ledger. The Departmental functions are as follows:

- receipts (register by project, by person; running totals by month)
- invoicing
- redistribution to Sales and Information Systems Center

- expenses: bids approved by Finance Ministry and authorization forms
- orders by month by project to IS
- payables ledger, vs orders & progress of work
- payments/month to IS

As we have discovered earlier, the accounting department keeps exact track of all expenditures, waiting till the work is done and the bills come in, in conjunction with tracking outstanding bids. Sales are recognized only when the money comes in, an area we have already stated needs improvement. These functions are all reasonably straightforward accounting and can be handled by a variety of packaged systems. Currently Information Systems does the presentation of the results in project books for the whole firm.

1.3.4 Information Systems Center

It is evident from the accounting department that IS is responsible for cumulating and presenting financial information on a project by project basis to management. In addition to compiling payables and receivables information, specific applications have been developed in DBASEIII to address specific needs: payroll, or most recently, a new project reporting format (*livre de projet*). As is the case with MIS departments all over the world, there are so many projects and ever shifting priorities that it is impossible to get eveything done under the current system, or lack of systematic communications between departments.

Because the information systems department works in the DOS environment, they have not learned how to input data from EXCEL into their data base, resulting in double entry of all material. Nonetheless, the department has produced a variety of project documents which are critical to the functioning of ANHI, since they are as close as ANHI has to a real time picture.

While the department seems to function well in a stand-alone mode, it has not had the personnel to go out and take care of the other computer users at ANHI, a major MIS charter in any organization. The lack of equipment further compounds the situation, where laser printers are being carried up and down the stairs for shared usage, and no consistency in release levels of operating systems, applications, fonts or device drivers is apparent. This will become an increasingly important problem to resolve when a network is established.

In this context, it is also important to note that DBASEIII does not perform well in a shared network environment. While ANHI runs a variety of word processing packages, perhaps the most popular, and least feature rich of which is Mac Write, it seems to me that Word, along with EXCEL which is currently in use, are logical choices for everyone's desktop.

2. Solutions

The methodology of this study differs significantly from the classical systems analysis, as exemplified in the previous computing needs assessment report A classical systems analysis consists of a feasibility study, followed by an analysis of the existing system, using interviews, narrative descriptions, and flowcharts, which provide the basis for designing and coding a new

system. Once built, these systems routinely require significant on-going programming maintenance which consume up to 80% of future computing systems resources, without ever addressing the key business management issues of growing organizations.

Structured systems analysis, as used in this study, begins with a data flow analysis. When stripped of physical characteristics, a new logical system can be designed around data dictionaries. By breaking down information usage into modules, specifying the interface between them, and the processes or transformations which occur within modules, we can build a coherent system of applications. The division of duties between people and computers for each application can then be made on a cost/benefit analysis. Structured systems analysis is superior to classical analysis by virtue of the fact that the systems built are easier to maintain and to add to.

Finally, with the maturation of computer applications, systems integration is taking over where programming skills were previously employed. Instead of building applications from the ground up, software application packages are selected and integrated in an open systems environment. The key benefit for the user organization is the ability to benefit from extensive development work in any given applicationThe result is applications have a reliability and resilience which would otherwise take years to accomplish. Systems integration often results in totally different data and work flows than had been previously employed.

Furthermore, I should note a bias in the distributed computing platform we will recommend which parallels the long term growth objective of ANHI to regionalize its project management and sales operations. As desktop personal computers come equipped with more computing power, there is an industry wide shift in moving information processing resources to PC platforms through networks to the individual user. The choice of MAC versus PC stations is less significant (in the context that Windows now employs a Graphical User Interface (GUI) and that MACs can now be networked seamlessly to DOS computers) than is the choice of micro versus traditional minicomputers and operating systems.

At the conclusion of my visit I presented the following data structure diagram for ANHI:

Dept. Functions		**Significant Data**	
Accounting	Project Names		
Project Management		Lot (#)	
Sales			People (CINs)

At the end of my two week stay, I presented with this diagram an example of how all of the project information could be understood as a part of one big spreadsheet. The key to being able to distribute applications into cost effective, resilient solutions is in breaking up databases, and in turn networking them together. The result of distributing applications to the desktop is cost effective processing power and applications capability for each individual user, both in terms of initial procurement but also especially in terms of ongoing support costs of both hardware and software. To the extent that a centralized data base is required, as in the case of accounting system modules, the use of an Intel 486 of Motorola 68030 server delivers minicomputer processing capability.

The ability to stay within a MAC or DOS/Windows operating systems environment where users currently are working, and to communicate on Appletalk and/or Novell Netware, will focus the support capabilities required, as compared to the introduction of a multi-user multi-tasking operating system such as UNIX. For the purposes of this project where everyone but information systems uses them, the ease of use and ease of networking made the MAC a logical choice.

It is important to point out that these complex applications and networks will require a higher level of training, technical support and network administration for the user than an old-fashioned data-entry type of rigid system. The technical complexity of such an approach is more than offset by the benefit of users directly involved with the information processing of the agency.

Once Each person understands how their piece fits into the whole picture, that we have found a way to update lot sizes for sales, and cumulated receipts for a project manager's cash flow planning, then we can progress to more sophisticated software. Starting with a database program like Filemaker, we should eventually be able to progress to specialized departmental applications such as project management software (MacProject II) or market tracking systems (GIS?).

2.1 One-time data entry

Both Sales and Project Management data has already been arranged manually at ANHI in spreadsheet format (Appendix 8), where everyone can understand what progress they have made in their own work. ANHI has been less successful in transferring this information to others to whom the same information might be useful. The result of this is a huge amount of duplication. The manner in which we plan to organize people so as to avoid duplication will become apparent in the accounting system application where the greatest processing will occur.

Project management transformations happen when formulas are applied to establish the dollar value of the lot based on lots size and price/m2. While the suggestion that pricing algorithms could be developed for each lot type was met with some skepticism initially, this capability would mean that one would have real time valuation data on any given project. Secondly, as the sales department is notified of the purchase of specific land parcels, they can go ahead and sell the lots on that terrain.

Finally, in terms of future objectives, ANHI has access to census data which provides household data, including job type, income, etc... Tracking this market data fits in with the ANHI objectives of reporting on substandard housing for the country as a whole, and should be incorporated into sales management.

2.2 Accounting system integration

In the context that the focus of this study was to concentrate on finance, it is the contention of this author that ANHI must seize up to date information on what is being sold and what is being spent as the commitments occur. This is something that requires administrative discipline more than computers. Secondly, using the structure of existing distributed accounting packages will help ANHI discipline the transfer of information from one department to the next by translating the transaction (for example a lot size change) into financial terms.

I propose that we evaluate several packages that meet the following criteria:

- modular and distributed
- project accounting capability, separate balance sheets
- written in a fourth generation environment
- compatible with the 1992 French and Moroccan accounting standards
- debt servicing, money management capability

- o import/export capability to EXCEL
- o multiple bank account capacity

A comprehensive listing is enclosed from ACIUS, whose product Fourth Dimension has become very popular (Appendix 9). SAARI is migrating their DOS software to this environment amongst two others which I have enclosed information for (Appendix 10).

2.2.1 Accounts Receivable: Installment Sales and Invoicing

An invoice with a sequential number programmed in, preferably organized in the order of the new data dictionary/spreadsheet, could be generated off any system today, as could a follow-up statement. This function is an integral part of any accounting system. As can be seen in the hardware configuration, a network of six MACs with an imagewriter each will allow the printing of 560 invoices a day, 72 per hour or 12/machine/hour. To the extent that invoices can be generated in batch mode it should be done on the computer, not by hand as it is currently. If on the other hand, If on the other, invoicing is done manually, then the salesman's spreadsheet should be used to update the the accounting system. Because of the special nature of the low income *bidonville* clientele, a longer period between statements than the average thirty days may be desirable.

Secondly, account executives and housing ministry representatives must be encouraged to inform sales management of receipts for entry into the AR system from the client's deposit at the treasury department.

The capability of import/export of the lot# spreadsheet to a billing system will allow for ease of updates. I would even suggest that subcontractors be asked to provide lot lists w/dimensions on an EXCEL document to eliminate data entry entirely.

2.2.2 Accounts Payable: Bids and Purchase Orders

I propose to have the six project managers working off the same spreadsheet/database, with six MACs, one laserwriter and one imagewriter (since the volumes will not be as great). In the same way as bids are currently under tight central control at ANHI, purchase orders should be printed centrally, sequentially, and referred via management to accounting.

For payment , all bills should be sent to Project Management for entry into the AP system prior to getting submitted to Project Managers for verification.

When the accounting package comes on line, it is essential that reports of purchases by vendors be able to be run.

2.2.3 General Ledger; Receipts and Batch Check Processing

How we account for installment sales in the future, and corresponding mortgage debt, is a question to be reviewed with internal and external auditors, as is the actual setup of the P&L and Balance Sheet. In the context of our governmental status, I am unsure whether we want the ability to break out separate balance sheets for each project.

Work in the accounting department should be restricted to verifying deposits against sales receipts, and issuing checks against cleared purchase orders, and to manage cash flow in general.

3. MIS Procurement Plan and Implementation Schedule

All Apple products for North Africa go through:

Micro Conseil International: 011-331-49794501

Apple distributors for Morocco:

Sostar; M. Rachid Assouani
49 Rue Messions RABAT 76-34-54

Solution Informatique; M. Ben Checkou
40 Sal Ould Omeir, RABAT 73-50-16

AMEC; Tour des Habous; Mohammed Houssini
Avenue des Far, CASABLANCA 31-00-25/32

3.1 Hardware and Network Operating System Platform

3.2 Software Applications

3.2.1 Regionalization Communication Requirements

3.2 Software Applications

3.2.2 Distributed Modular Accounting Packages

3.3 Implementation Schedule

Advanced training EXCEL and WORD; appletalk network administration
Review spreadsheet implementation; install appleshare
Review accounting applications
Install accounting application
Install Filemaker Pro

CONCLUSION

APPENDICES

3.1 Hardware & Networking Operating System Platform:

PLAN I **Basic Equipment Procurement**

Item#	Qty.	Name	Description	Unt.Price $	Total $
1.	28	1MB SIMMS	RAM memory 80ns	50.00	1400.00
2.	4	2MB SIMMS	RAM memory 80ns	130.00	520.00
3.	2	MAC II fx	Computer	6,000.00	12,000.00
4.	2	Color Monitors	Color Monitor	700.00	1,400.00
5.	2	Color Board	8 bit color board	350.00	700.00
6.	3	MAC SE 30	4 RAM/40 MB Drive	2,900.00	8,700.00
7.	12	Imagewriter II	Tractor feed printer	500.00	6,000.00
8.	14	MacClassic	2 RAM/40 MB Drive	1,500.00	21,000.00
9.	6	StyleWriters	Personal Laser Quality Printer	500.00	3,000.00
10.	16	Keyboards	Standard (includes 2 spares)	100.00	1,600.00
11.	5	Keyboards	Extended (with function keys)	160.00	800.00
12	2	Hard Drive	Internal 80 meg for spares	450.00	900.00
13.	1	Floppy Drive	3.5 internal spare	200.00	200.00
14.	1	Data Storage	90 MB Bernoulli Removable, with interface kit	950.00	950.00
15.	1	3 pack tapes	90 MB tri-pack	450.00	450.00
16	25	Connectors	Phone net connectors	50.00	1250.00
17.	1	Appleshare	Network Software	600.00	600.00
				Total	**$61,470.00**
1.		Wiring	10 BaseT Std Twisted Pair	N/A	Customer to Supply

3.1 Basic Equipment Procurement *Continued*

PLAN II Ethernet for the Macintosh Network

Item#	Qty.	Name	Description	Unt.Price $	Total $
1.	4	Ethernet Card	For SE/30	400.00	1,600.00
2.	4	Ethernet Card	For MAC II	360.00	1,440.00
3.	5	Ethernet Card	For SE	360.00	1,800.00
4.	15	Ethernet Box	For Classics	400.00	6,000.00
5.	3	Concentrator	Star Controller 12 port	2,000.00	6,000.00
6.	3	Connectors	10 pack	950.00	2,850.
				Total	19,690.00

PLAN III PC/Macintosh Network

Item#	Qty.	Name	Description	Unt.Price $	Total $
1.	1	Novelle 2.2	Network Software 50 User	3,500.00	3,500.00
2.	1	386 Server	Dedicated Computer	On Hand	On Hand
3.	1	Phone Net	Farrallon PC Local Talk	250.00	250.00
4.	1	Ethernet Card	For 386	500.00	500.00
				Total	4,250.00

3.2 Software Applications

Function	Product Name	Manufacturer	Unit Price$
Word Processing	Word 4.0	Microsoft	400.00
Spread Sheet	EXCEL 3.0	Microsoft	500.00
Desktop Publishing	Pagemaker 4.0	Aldus	600.00
Antivirus	SAM	Norton	80.00
Back Up Utility Plus	DiskFit 2.0	SuperMac	85.00
Disk Mngt. Utility	Norton Utilities	Norton	100.00
Project Management	MacProject II	Claris	400.00
Data Base	FileMaker Pro	Claris	300.00
E-Mail	CC Mail	Lotus $100.00 * 30 nodes	3,000.00
		Total	5,465.00

3.2.2 Distributed Modular Accounting Packages

Function	Product Name	Manufacturer	Unit Price F
Accounting:	Comptablite BOOK	INFO-CONCEPT SA	
	Fourth Power	Honeybee	
	SAARI-Macintosh	SAARI	5 800 F
	COMPTA CARTALOG V.3	Perriot Gerard	2 500 F
	SIRIOS COMPTABILITE	ARD Informatique	8 500 F multi post

PLAN IV 3.2.1 Regionalization Communication

Item#	Qty.	Name	Description	Unt.Price $	Total $
1.	7	Portable Computers	Macintosh Laptops	3,000.00	21,000.00
2.	7	Modems	2400 Baud	200.00	1,400.00
3.	7	Imagewriter II	Tractor Feed Printers	500.00	3,500.00
4.	3	Network Software	Farallon Portable	350.00	350.00
5.	1	Ntework Software	Timbuktu 10 pack	700.00	700.00
				Total	26,950.00

PLAN IV 3.2.1 Regionalization Communication

Item#	Qty.	Name	Description	Unt.Price $	Total $
1.	7	Portable Computers	Macintosh Laptops	3,000.00	21,000.00
2.	7	Modems	2400 Baud	200.00	1,400.00
3.	7	Imagewriter II	Tractor Feed Printers	500.00	3,500.00
4.	3	Network Software	Farallon Portable	350.00	350.00
5.	1	Ntework Software	Timbuktu 10 pack	700.00	700.00
				Total	26,950.00

3.3 Implementation Schedule

	1991				1992						
Months	**Sept**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**April**	**May**	**June**	**July**
Phase I											
Central PO & Invoicing	**ANHI**										
Project Spreadsheets	**ANHI**										
Phase II											
Purchase hardware, network, and System Software and Apps..		**USAID**									
Wiring		**ANHI**									
Network Install			**ICMA**								
Evaluate Actg. Apps			**ICMA**								
Phase III											
EXCEL advanced train.	**ANHI**										
Word advanced train.	**ANHI**										
Appletalk adv train.		**ANHI**									
Phase IV											
Install Accounting Apl					**ICMA**						
Install Data Base					**ICMA**						
Phase V											
Macproject II train.				**ANHI**							
ArcInfo-GIS train.				**ANHI**							

Conclusion

Information systems can contribute to the growth of ANHI and help overcome unsanitary housing in Morocco. First and foremost, if we can use computers to store and forward information from one department to the next, we will have brought ourselves up to date for all project information . Secondly, by operating within the structure of an accounting applications package, all communications with respect to cash management will be channelled effectively.

With the addition of some workstations, printers, a network and E-MAIL, ANHI will come to look less like a "sneaker-net" and be able to regionalize their operations. Centralized invoicing and purchase ordering should go on line immediately, even just as a word processing document, with the information passed back up through management in the form of the spreadsheet already being used by the account representatives.

I have recommended that the information systems department hire a MAC specialist, and that they receive WORD, EXCEL, Appletalk and Novell network administration training, in adition to department specific applications such as MAC Project II and GIS packages.

Once the accounting department is ready to evaluate accounting packages with respect to the new regulations, we will look forward to working with them on any customized features and training in both the application and fourth generation environment.

Comptabilité

COMPTABILITE, CABINET D'EXPERT-COMPTABLE

COMPTABILITE

Analyse financière : ANALYSE FINANCIERE
Permet aux responsables financiers, par un paramétrage simple et rapide de definir des tableaux financiers, en récupérant les montants de la comptabilité COMPTA SIMIL tels que situations financières mettant en évidence les recettes ou les dépenses, ou budget prévisionnel comparant les montants prévus et réalisés.
LGDE LE KREMLIN-BICETRE tél. 45 21 07 09 FAX : 49 60 96 79
Version compilée, version de démonstration Nombre d'installation : 30 Prix : 6 500 F

Budgets régionaux (administration)
Affectation du Budget par région, par poste budgétaire et sous-postes. Suivi des dépenses par région, par délégataire, par poste. Edition des autorisations de dépenses, des cumuls par région et par poste. Comparatifs par période des dépenses constatées avec celles budgétées.
INFO ADAPT'SERVICES MONTROUGE tél. 40 84 05 05 FAX 47 46 19 16

Chèques : BUSINESS CHECK MANAGER
Edite les chèques et lettres sur papier listing. Format paramétrable en fonction du formulaire des banques. Liaison avec les logiciels de comptabilité fonctionnant sur macintosh. Reprise des comptes auxiliaires et export des écritures.
REFLEXIONS ! PARIS tél. 40 50 06 30 FAX : 40 50 06 32
Version compilée Nombre d'installation : 5 Prix : 1 800 F

Comptabilité générale et auxiliaire : AGADES
Multi-sociétés, multi-exercices.Validation directe ou reportée (brouillard) des écritures. Ajout de comptes en saisie (sur pièce ou en ligne). Traitement des échéances (balance Prév., échéancier, relances,...). Documents comptables (journaux, grand-livre, balances). Documents de synthèse (bilan, compte de résultat...) entièrement paramétrables.Contrôle de cohérence.
DEL BOCA INFORMATIQUE VILLENEUVE SUR LOT tél. 53 40 38 21
Version compilée, version de démonstration Nombre d'installation : 20 Prix : 4 500 F

Comptabilité générale : APPLI-COMPTA
Intégre de nombreuses fonctionnalités, comptes auxiliaires, relance d'impayés, édition de LCR magnétiques...
APPLIGOS STRASBOURG tél. 88 26 06 54 FAX : 88 26 06 58
Version compilée Nombre d'installation : 6 Prix : 4 500 F

Comptabilité : Compt-III
Nombre de journaux illimité. Grand livre. Balance. Balance agée. Echéancier. Relevé de compte. Lettrage des comptes. Bilan et compte de résultat.
OPTION INFORMATIQUE PAPEETE - TAHITI tél. 42 18 38 FAX : 41 90 17

Comptabilité et caisse : COMPTA-CAISSE PLUS
Pour commerçant et artisan. Version personnalisée pour chaque profession. Version spéciale restaurant.
OPTIMAG AUBERVILLIERS tél. 48 34 30 70

Comptabilité générale et auxiliaire : COMPTABILITE SAARI MACINTOSH
Nombre de journaux illimité. Saisie en pièces et en brouillard. Saisie par contreparties automatiques. Lettrage, délettrage, manuel et automatique sur pièces, sur montants ou sur pièces et montants. Editions de tous les états comptables, y compris bilan et compte de résultat.
Options : comptabilité analytique et déclaration de TVA.
SAARI GENNEVILLIERS tél. 46 85 21 21 FAX 46 85 22 01
Version compilée, version de démonstration Nombre d'installation : 500 Prix : 5 800 F

Comptabilité
Multi-société, multi-devises. Balance, grand livre, etc...
CREATIVE PARTNERS LA GAUDE tél. 93 24 76 76 FAX 93 24 7700

Comptabilité générale et auxiliaire : CI-COMPTA
Multi-sociétés. Gestion d'un échéancier, prévision de trésorerie. Lettre de relance, état de rapprochement bancaire. Import et export du plan comptable. Import d'écritures. Evolutive en multi-postes sous A/UX

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Comptabilité multi-associative
Gestion comptable de 15 associations avec banques dissociées et centralisées simplifiant la trésorerie et les mouvements bancaires.
CINTHOMAS PARIS tél. 46 34 65 81

Comptabilité personnelle et/ou libérale : COMPTA CARTALOG V.3
Recettes, dépenses, livre-journal, grand-livre des comptes. Débits, crédits. Pointage relevés. Postes, sous-postes , chéquiers, cartes de crédit. Emprunts, immobilisations, amortissements, cessions. Bordereaux de remise chèques, relevés comptes, prélèvements, virements, retraits à vue, dépots d'espèces. Plan comptable et déclaration 2035.
PERRIOT GERARD MAISONS-ALFORT tél. 43 68 25 48
Version compilée, version de démonstration Nombre d'installation : 127 Prix : 2 500 F

Comptabilité médicale : COMPTAMED
Comptabilité et courrier pour généraliste ou spécialiste: recettes, dépenses,amortissements et plus-values. Bilans et histogrammes (jour, mois et année). Comptes bancaires et trésorerie. Bulletins de salaires. Edition automatique des états comptables (livres de frais et de recettes...). Déclaration d'impôts automatique (2035...).
GHEZ DANIEL MARSEILLE tél. 91 42 46 78
Version de démonstration Nombre d'installation : 30 Prix : 3 500 F

Comptabilité générale, auxiliaire et analytique : SIRIOS COMPTABILITE
En multi-poste pour PME-PMI.
ARD INFORMATIQUE GRENOBLE tél. 76 47 40 40 FAX 76 48 38 72
Version de démonstration Nombre d'installation : 50 Prix : 7 000 F

Comptabilité générale, auxiliaire et analytique : GESTION INTEGREE
Achats, ventes, stocks, comptabilité auxiliaire clients et fournisseurs, trésorerie, budget, immobilisations et amortissements, mouvements de personnel, mailings.
JCV INFORMATIQUE AIX EN PROVENCE tél. 42 96 44 97
Version de démonstration Nombre d'installation : 10 Prix : 10 000 F

Fonds de rénouvellement
Justification fiscale des provisions au titre des fonds de renouvellement. Possibilités de prévisions sur plusieurs exercices. Gestion des biens, mise en service, fin de vie et début de dotation. Renouvellement partiel et total. Calculs automatiques de la prévision à fin d'exercice et en budget. Nombreux états analytiques...
KEROMEN TRAVAUX INFORMATIQUE NOGENT / MARNE tél. 43 94 27 20 FAX 43 94 55 88

Investissements (grand groupe industriel)
Gère les investissements au sol d'Air France. Suivi de la tournée d'investissement, attribution des accordés aux services demandeurs, calcul des budgets prévisionnels, planning de réalisation. Gère l'inventaire (32000 items), mutations, réformes, changement de désignations. Suivi technique des biens. Multi-ostes.
SINCLAIR STEPHANE PARIS tél. 48 87 53 52

Recouvrement des impayés : GEST-IMP
Gère le fichier clients et des impayés. Utilisation d'un mini traitement de texte intégré à 4D permettant de composer vos lettres de relances, (intégration de 4D WRITE debut 1991). Description d'un fichier " scénario de relances " permettant de grouper et d'automatiser ces lettres suivant un plan de relance prédéfini.
Y INFORMATIQUE BREUIL BOIS ROBERT tél. 30 42 64 86 FAX 30 42 30 00

Régie Mac
Regie d'avance et comptabilité publique, Titre III, Titre V.
ANGLADE & CIE EVRY CEDEX tél. 64 97 14 15 64 97 14 16

Remises des LCR sur disquettes
Permet de remettre à la banque des LCR sur disquettes et donc de ne pas payer les taxes d'enregistrements.
MICROGICIEL LA MADELEINE tél. 20 78 10 04

Traitement des effets bancaires sur disquettes : MAC LCR
Gère un portefeuille de traites qui sont remises sur une disquette compatible aux normes bancaires.
Les données peuvent être saisies ou importées des logiciels de gestion du monde Mac, puis re-exportées.
Mac Lcr permet d'économiser sur les frais des remises en banque et s'amortit très vite.
MN DIFFUSION ANGLET tél. 59 52 05 37 59 63 38 34
Version compilée Nombre d'installation : 2 Prix : 5 900 F

Trésorerie
Trésorerie prévisionnelle à partir d'éléments comptables (échéancier, balance agée, solde de trésorerie) et d'é-

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EXPERT-COMPTABLE

Cabinet comptable : CABINET COMPTABLE
Gestion du fichier clients, planning des collaborateurs, facturation automatique, remises en banque. Transfert direct en comptabilité, analyse coût/facturation par client ou collaborateur pour la période souhaitée.
COGI PARIS tél. 42 65 03 42 F. 40 07 10 87
Version de démonstration Nombre d'installation : 18 Prix : 4 900 F

Contrôle de gestion : BUSINESS REPORT II / E.C.
Gère les contrats et la gestion de temps pour Experts Comptables. BR permet de piloter au plus fin un nombre illimité de contrats depuis la phase de négociation jusqu'à la clôture de la mission. Budgets, affectations, planning calcul de marge, facturation automatique, réglements, tableaux de bord, etc...
GB CONCEPT SURESNES tél. 47 28 61 33 F. 47 28 61 34
Version compilée, version de démonstration Nombre d'installation : 35 Prix : 19 600 F

Facturation (cabinet comptable)
Gestion des acomptes clients par année comptable. Gère la facturation des honoraires en fin d'exercice. Facturation des débours et fournitures comptables diverses. Création du journal des ventes.
LARRAIN VICTORIA CAEN tél. 31 47 33 88

Gestion d'heures
Saisie des heures passées chez un client classées par rubrique et par intervenant. Comparaison réelle et prévisionnelle. Etats préparatoires à la facturation.
MACH 3 SALLANCHES tél. 50 93 90 76 F. 50 58 50 14

Gestion de temps (cabinet comptable)
Analyse des temps par dossier, par collaborateur, par type d'activité. Facturation. Gestion des fournitures.
MID AQUITAINE BORDEAUX tél. 56 44 64 88 FAX 56 81 26 13

Gestion de temps et facturation (expert comptable)
Gère les dossiers clients. Centralisation des temps pour une facturation automatique des clients sur période. Aide à la facturation. Calcul du rendement des collaborateurs. Edition du journal et centralisation des ventes. Etats statistiques/ Version multi-postes.
TRACK DEVELOPPEMENT PARIS tél. 45 23 34 92 FAX 47 70 51 60

Gestion de temps (expert comptable) : DAI PLANNING
Décomposition d'une journée de travail en tranches horaires et pour chacune : précision du type d'activité (paye, bilan...), du client sélectionné,de l'heure début et l'heure fin.
Edition de statistiques : nombre d'heures passées par activité, par client...
DAI MONTPELLIER tél. 67 29 60 45 FAX 67 29 62 32
Version compilée, version de démonstration Nombre d'installation : 1 Prix : 2 500 F

Impôt de solidarité sur la fortune (ISF) : MANOSQUE ISF
Calcul de l'ISF en fonction des éléments saisis par l'utilisateur (en incluant le plafonnement). Les diverses annexes sont disponibles et la totalité de la feuille est imprimable. Simulations et statistiques possibles.
MANOSQUE PARIS tél. 47 70 06 96 FAX 42 46 18 24
Version compilée Nombre d'installation : 2 Prix : 50 000 F

Trésorerie : GEST'CASH
Date de valeur, mouvement d'exploitation, virements, crédits, escomptes... Optimisation financière, simulation. Rapprochement bancaire, gestion de portefeuille, placements...
MICRO VIDEO SOFT SAINT-DIE tél. 29 56 19 42 F. 29 55 48 94
Version compilée, version de démonstration Nombre d'installation : 3 Prix : 9 500 F

RT-COMPTABLE

et comptable : CABINET COMPTABLE
n du fichier clients, planning des collaborateurs, facturation automatique, remises en banque. Transfert
en comptabilité, analyse coût/facturation par client ou collaborateur pour la période souhaitée.
PARIS tél. 42 65 03 42 F. 40 07 10 87
n de démonstration Nombre d'installation : 18 Prix : 4 900 F

le de gestion : BUSINESS REPORT II / E.C.
s contrats et la gestion de temps pour Experts Comptables. BR permet de piloter au plus fin un nombre
de contrats depuis la phase de négociation jusqu'à la clôture de la mission. Budgets, affectations, plan-
lcul de marge, facturation automatique, réglements, tableaux de bord, etc...
NCEPT SURESNES tél. 47 28 61 33 F. 47 28 61 34
compilée, version de démonstration Nombre d'installation : 35 Prix : 19 600 F

ation (cabinet comptable)
des acomptes clients par année comptable. Gère la facturation des honoraires en fin d'exercice.
tion des débours et fournitures comptables diverses. Création du journal des ventes.
IN VICTORIA CAEN tél. 31 47 33 88

n d'heures
des heures passées chez un client classées par rubrique et par intervenant. Comparaison réelle et
nnelle. Etats préparatoires à la facturation.
3 SALLANCHES tél. 50 93 90 76 F. 50 58 50 14

n de temps (cabinet comptable)
des temps par dossier, par collaborateur, par type d'activité. Facturation. Gestion des fournitures.
UITAINE BORDEAUX tél. 56 44 64 88 FAX 56 81 26 13

n de temps et facturation (expert comptable)
s dossiers clients. Centralisation des temps pour une facturation automatique des clients sur période.
a facturation. Calcul du rendement des collaborateurs. Edition du journal et centralisation des ventes.
atistiques. Version multi-postes.
DEVELOPPEMENT PARIS tél. 45 23 34 92 FAX 47 70 51 60

n de temps (expert comptable) : DAI PLANNING
position d'une journée de travail en tranches horaires et pour chacune : précision du type d'activité
ilan...), du client sélectionné, de l'heure début et l'heure fin.
de statistiques : nombre d'heures passées par activité, par client...
ONTPELLIER tél. 67 29 60 45 FAX 67 29 62 32
compilée, version de démonstration Nombre d'installation : 1 Prix : 2 500 F

de solidarité sur la fortune (ISF) : MANOSQUE ISF
le l'ISF en fonction des éléments saisis par l'utilisateur (en incluant le plafonnement). Les diverses an-
ont disponibles et la totalité de la feuille est imprimable. Simulations et statistiques possibles.
QUE PARIS tél. 47 70 06 96 FAX 42 46 18 24
compilée Nombre d'installation : 2 Prix : 50 000 F

ie : GEST'CASH
valeur, mouvement d'exploitation, virements, crédits, escomptes... Optimisation financière,
on. Rapprochement bancaire, gestion de portefeuille, placements...
VIDEO SOFT SAINT-DIE tél. 29 56 19 42 F. 29 55 48 94
compilée, version de démonstration Nombre d'installation : 3 Prix : 9 500 F

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DEPARTEMENT	§ PROJET	TYPE	NOM	REGION	§ DOM CENSES	NAT DU PROJET	OUVRAGE	SUPERFICIE	$/M2 ACHAT EST	$/M VENTE ES
Functions		1		PROVINCE		RESTRUCTURE	DIRECT			
FINANCES				VILLE		/URB DEVELP	/INDIRECT			
				BIDONVILLE(S)			/HG-003			
Etudes										
Etudes de realiz										
PROJ MGMT										
Foncier										
P&S: prix de cession arreté										
Montage										
Engagement de travaux										
Marchés										
Bon de commande										
Suivi										
Frais										
EFIA										
TVA										
AGENT COMM										

$PARCELLE	PROPRIETAIRE	TITRE FONCIEI
Surveyor		
Env notaire		
Env cont fin		
Retour cont fin		
Reglement mandatement		
Checque		
	$TOT ACHATEST	$TOT VENT ES

			M2 DESIRE		PRIX ACTUEL			HC 1,2,3	
			% DU PROJET					HR 1,2,3	
								VIL	
								HE	
								ADD FEATURES***	
			M2TOT	$/M2	PRIX EST	BORNES			
				$ LOT	TYPE+++***	superficie	$/M2	prix total	
			TOT PURCHASED	$/LOGEMENT	TYPE	M2 COUVERT	$M2	$ TOT	
$CLIENT	TYPE	NOM	ID	DATE ATTRIB	VERSE1	2	3	TOTAL	TITLE DATE

TYPE PLAN	TYPE ANHI	SUPERFICIE AVANT BORNAGE	SUP. APRES BORNAGE	COTES	Nb. FACADE	TYPE VOIE	PRIX/m2	PRIX VENTE	OBSER
A	H.R	75,00		10,00 x 7,50	2	C.P			
A	H.R	85.00		10.00 x 8.50	2	C.P			
A	H.R	75.00		7.50 x 10.00	1	C.P			
A	H.R	85.00		8.50 x 10.00	1	C.P			
A	H.R	75.00		7.50 x 10.00	1	C.P			
A	H.R	85.00		8.50 x 10.00	1	C.P			
A	H.R	75.00		7.50 x 10.00	1	C.P			
A	H.R	85.00		8.50 x 10.00	1	C.P			
A	H.R	112.50		6.50 x 10.00 x 10;00 x 7.50 x 8.00	1	C.P			
A	H.R	108.75		11.00x6.50x9.00x6.00x 10.00.	2	C.P			
A	H.R	67.50		7.50 x 9.00	1	C.P			
A	H.R	60.00		8.00 x 7.50	2	CAR. + C.P			

.../....

PROVINCE .....
OPERATION.....
NOTAIRE .....

REFERENCES FONCIERES	SUPERFICIE TOTALE	ENVOI DU NOTAIRE	CONTROLEUR FINANCIER		REGLEMENT		OBSERVATIONS
		date	ENVOI	RETOUR	MANDATEMENT	CHEQUE	
			date	date	date		
Plan #	parcel #	superficie totale	superficie désirée	propriété	prix total	prix unitaire	Bon de Commande
2							
3							

WAFAE A LARACHE

UATION DES VERSEMENTS HC2 AU 24/12/90

FICHIER Direction Commerciale — 412 —

Situation Actualisée au 31. 03 91

° OT	TYPE	SAPB	PRIX M2	PRIX TOTAL	BENEFICIAIRES	C.I.N. N°	1° V	2° V	3° V	4° V	5	TOTAL
78	HC2B	70	750	52 500	AL KHATABI JAMILA	K/67934	30 000	22 500				52 50
79	HC2A	70	700	49 000	ACHABDAN BENAISSA	L/17607	30 000	19 000				49 00
80	HC2A	70	700	49 000	KINANI MOHAMED	L/156 419	25 000	20 000	4 000			49 00
81	HC2A	70	700	49 000	BENSLIMAN TAIB	L/76015	30 000	19 000				49 00
82	HC2A	70	700	49 000	JERRADI ELABDALAOUI Abdelkaoui	L/8265	40 000	9 000				49 00
83	HC2A	70	700	49 000	ERRAISSOULY MHAMED	L/111718	30 000	19 000				49 00
84	HC2A	70	700	49 000	EL GADS Mohammed	L/11075	40 000	9 000				49 000
85	HC2B	70	750	52 500	KHAMLICHE AHMED	L/85205	25 000	20 000	7 500			52 50
86	HC2B	69	750	51 750	BEN ABDELHADI AHMED	L/63726	30 000	21 750				51 75
87	HC2A	69	700	48 300	JAMALI TAHAR	B/126462 1	40 000	8 300				48 00
88	HC2A	69	700	48 300	TRIBAK EL AMINE	LA/10521	40 000	8 300				48 30
89	HC2A	69	700	48 300	EL GHADDINI AHMED	S/164627	40 000					40 00
90	HC2A	69	700	48 300	BELGA Mohamed	S/180 0372	40 000					40 00
91	HC2A	69	700	48 300	OHANOK CHATB	K/32175	40 000					
92	HC2A	69	700	48 300	AKHAZZAN Mohamed	LA/28908	40 000					
93	HC2A	69	700	48 300	ATIKI NADIA	LA/22176	40 000					
94	HC2A	69	700	48 300								
95	HC2A	69	700	48 300	HAMAR Mohammed	H/232115	40 000	8 300				48 30
96	HC2A	94	700	65 800	EZZAYTOUNI MOSTAPHA	L/106044	25 000	20 000	10 800	10 000		65 80
97	HC2A	70	700	49 000	EL KATI Abdelkaoui	L/163 208	30 000	19 000				49 00
98	HC2B	70	750	52 500	PHOUT MOHAMMED	B/510764	30 000	22 500				52 50
99	HC2B	70	750	52 500	EL HAJAMI ABDELMAJID		30 000	22 500				52 50
100	HC2A	70	700	49 000	AGHMAR BOUCHAIB	A/77226	30 000	19 000				49 00
101	HC2A	70	700	49 000	ALJAYI MOHAMED	A/35634	30 000	19 000				49 00
102	HC2A	70	700	49 000	FCUZELHAD Abdelkaoui	R/23335	40 000	9 000				49 00
103	HC2A	70	700	49 000	EL ANSARI LAHCEN	L/5475	40 000	19 000	[illegible]			59 00
104	HC2A	70	700	49 000								
105	HC2A	70	700	49 000	MOUAFQI Mohammed	M/173771	30 000	9 000				49 00
106	HC2B	70	750	52 500	EL HARRAK MOHAMED	L/224295	30 000	22 500				52 50
107	HC2B	70	750	52 500	EL HABACHI ABDESLAM	L/130579	30 000	22 500				52 50
108	HC2A	70	700	49 000	EL GHAZOANI MOHAMED	L/11310	40 000	9 000				49 00
109	HC2A	70	700	49 000								
110	HC2A	70	700	49 000								
111	HC2A	70	700	49 000								
112	HC2A	70	700	49 000								
113	HC2A	70	700	49 000								
114	HC2A	70	700	49 000	TANER Salkam	L/19150	40 000	9 000				49 00
115	HC2B	85	750	63 750								
116	HC2B	70	750	52 500	LFRAHALI HADDOU	L/[illegible]	30 000	22 500				52 50

ROYAUME DU MAROC
Ministère de l'Habitat
Agence Nationale de Lutte contre l'Habitat Insalubre
Compte T. G n° 4214

Autorisation de Versement

№ 023265

Maitre d'Ouvrage

Opération :
Tranche :
Localisation :

Projet nouveau 20 Hectares 154 villas
AL WAFAE 1,
Casablanca

Code Operation

~~Projet # 10 ch~~

RECASEMENT	
bifamilial	
monofamilial	

HABITAT ECONOMIQUE	X
bifamilial	
monofamilial	

AUTRES	
bifamilial	
monofamilial	

N° du lot attribué

Actuel 278 #

Ancien

HR	
HCR	
CR	

HE 1	
HE 2	
HE 3	

HC 1	
HC 2	X
HC 3	

VIL	
COL	
COM	

Identité de l'attributaire Personnel Inc. N° d'ordre :

NOM : MILES

Prénom : Claude

ADRESSE USA - Boston

C. I. N. n°

1 2 3 X

Pas venu

ID # 3123

L'attributaire ci-dessus désigné est autorisé à verser **au compte n° 4214** ouvert à la **Trésorerie Générale du Royaume** au nom de **l'Agence Nationale de Lutte contre l'Habitat Insalubre** la somme de (en toutes lettres) :

20.000 DHS

Acompte n°

Montant à Verser (en chiffres)

20.000,-

Date d'émission

1/07/91

Date d'expiration

16/07/91

Visa et Cachet du Maitre d'Ouvrage ou du Maitre d'Ouvrage Délégué

Cadre réservé à la Trésorerie Générale ou à la Recette des Finances

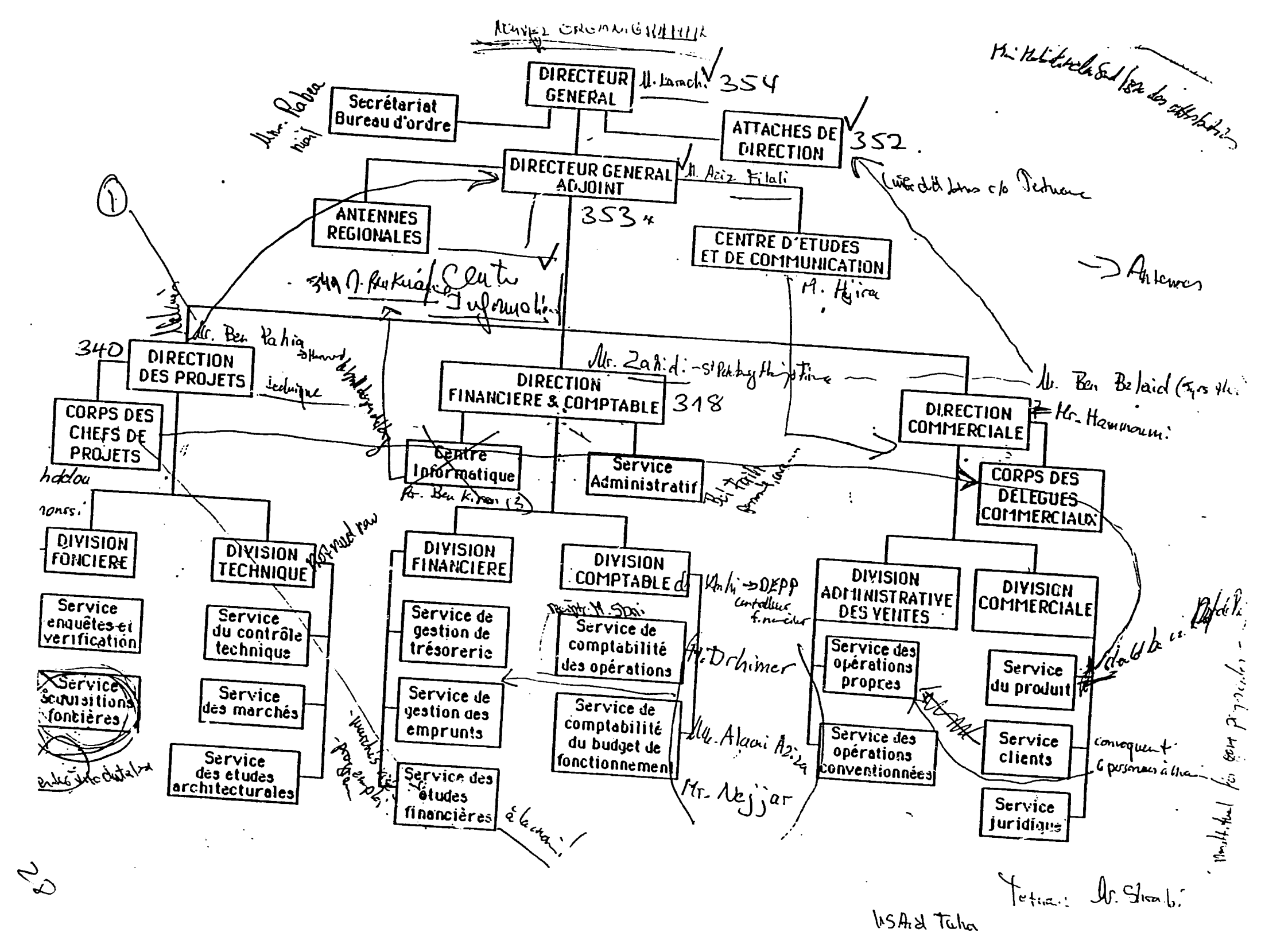
Déclaration de recette

n° :

date :

IMPORTANT : l'attributaire ci-dessus désigné est tenu de s'acquitter du montant dont il est redevable avant la date d'expiration sus-fixée, la présente autorisation devenant caduque au-delà de cette date. Il est également porté à l'attention de l'attributaire que le non-respect du délai de paiement peut entraîner une déchéance automatique.

21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ATTACHES DE DIRECTION
DIRECTEUR GENERAL ADJOINT
ANTENNES REGIONALES
CENTRE D'ETUDES ET DE COMMUNICATION
DIRECTION DES PROJETS
DIRECTION FINANCIERE & COMPTABLE
DIRECTION COMMERCIALE
CORPS DES CHEFS DE PROJETS
Centre Informatique
Service Administratif
CORPS DES DELEGUES COMMERCIAUX
DIVISION FONCIERE
DIVISION TECHNIQUE
DIVISION FINANCIERE
DIVISION COMPTABLE
DIVISION ADMINISTRATIVE DES VENTES
DIVISION COMMERCIALE
Service enquêtes et verification
Service acquisitions foncières
Service du contrôle technique
Service des marchés
Service des etudes architecturales
Service de gestion de trésorerie
Service de gestion des emprunts
Service des études financières
Service de comptabilité des opérations
Service de comptabilité du budget de fonctionnement
Service des opérations propres
Service des opérations conventionnées
Service du produit
Service clients
Service juridique

A.N.H.I

STANDARD: 70-04-86/87 & 70-50-51

DIRECTION GENERALE

NOM ET PRENOM	ETAGE	POSTE
LARAICHI BEDOUI NAJIB	5EME	354
FILALI BELHAJ ABDELAZIZ	5EME	353

SECRETARIAT

TAHARI RABIA	5EME	355
TLEMSANI RAJAE	5EME	355

ATTACHE DE DIRECTION

BENBELAID AZIZ	5EME	352

CENTRE D'ETUDE & COMMUNICATION

HEJIRA AHMED TAOUFIQ	4EME	346
Mme ZERRAD	4EME	348
KHOUADRI Fatima		

CENTRE INFORMATIQUE

BENKIRAN MONCEF	4EME	349
DAALI AMINA	4EME	348
KHOUADRI NADIA	4EME	348

DIRECTION FINANCIERE ET COMPTABLE

TAHIDI MY ABDELOUAHED	1ER	318
AIT AHMED	1ER	316
EL ALAOUI EL AOUFOUSSI AZIZA	1ER	317
ORHIMER AHMED	1ER	312
HEJJAR NOUREDDINE	1ER	314
SBAI MY ABDESSLAM	1ER	311
EL HATTAB BOUCHRA	1ER	311
REJ KHADIJA	1ER	315

(2) MACSE + PS2 50E

SERVICE ADMINISTRATIF

ELLAFQUIH MY. ALI	RC	309
ADDOU DRISS	1ER	319
ENSLIMANE KARIMA	1ER	315
OHACHTOU ABDELKRIM	RC	308
OULAD AMEZIANE MOHAMED	1ER	320

AGENCE COMPTABLE

NOM ET PRENOM	ETAGE	POSTE
IDRISSI CHRIFI IDRISS	4EME	351
BAYDAT SAADIA	4EME	343
BARAA MOUNIM	4EME	344

DIRECTION COMMERCIALE

HAMMOUMI EL BACHIR	2EME	328
ALAOUI MERIEM	2EME	327
BENNANI RACHID	2EME	323
DADSI LAHCEN	2EME	322
ECHRIF KETTANI	2EME	323
EL AOUD MOHAMED	1ER	327
HABIB BRAHIM	2EME	326
KARIMALLAH FATIMA	2EME	3
KETTANI ZINE ELABIDINE	2EME	329
[illegible]	[illegible]	[illegible]
RAHALI ABDERRAHMANE	2EME	324
TAHIRI LALLA AICHA	2EME	327

DIRECTION DES PROJETS

BENYAHIA MED NAJIB	3EME	340
ALAOUI FDILI MALIKA	3EME	333
ASSAD AHMED C.P.	3EME	334
BELKHAYAT FAIZA C.P.	3EME	332
BENHAMMOU JAOUAD	3EME	
BENSABBAH KHADIJA	3EME	339
BERNOUSSI AHMED C.P.	3EME	335
BOUAZZAOUI NAJOUA	3EME	342
BOUHADDOU ABDELKHALEK C.P.	2EME	330
CHIBOUBE AICHA	3EME	339
CHLIEH HOUSSINE C.P.	2EME	325
EL BOUSTANI FATIHA	3EME	339
HALIMI MED NAJIB C.P.	3EME	338
NAJAB MUSTAPHA	3EME	341
OUKMAL MEHAMMED	3EME	337

Shreibi Dos à MACSE

CAFETERIA

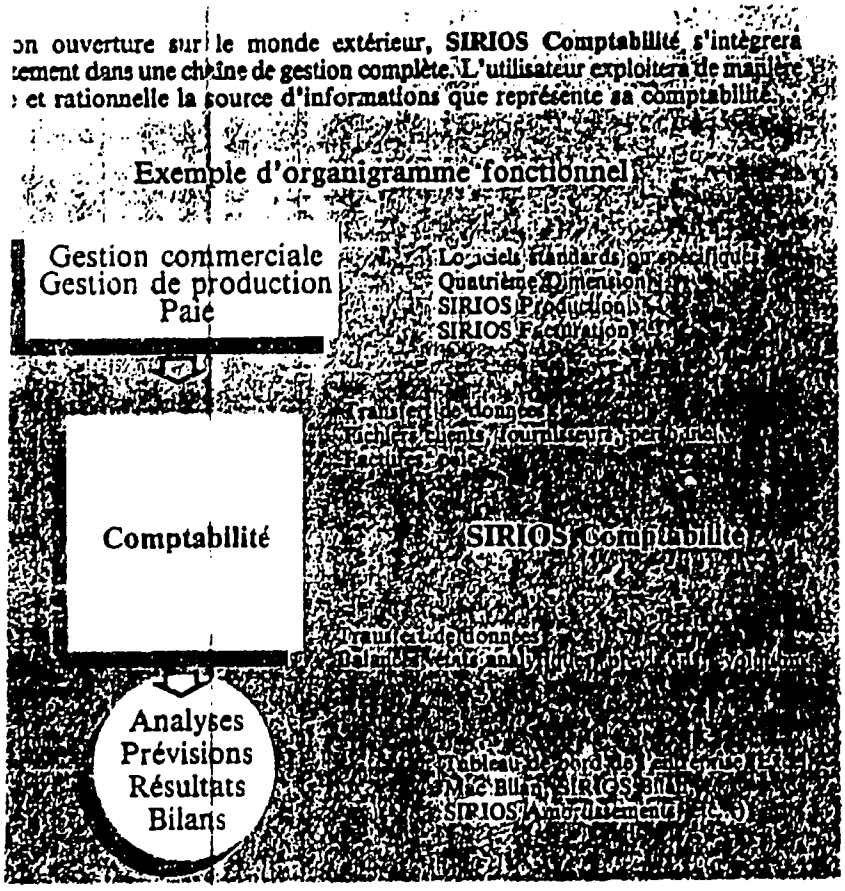
R.C 300

- 7 Cafs Serveurs w/ CDR
- 3 Hallgers LCs

E D I T I O N ♦ A R D ♦

:IOS Comptabilité est un logiciel développé dans l'environnement Quatrième Dimension dont il exploite la puissance et la souplesse. Les performances (temps d'enregistrement, de recherche, etc.) sont quasi-indépendantes des volumes à gérer. Dans la pratique, un Macintosh II muni de deux mégas de RAM supportera de l'ordre de 100 000 écritures par exercice, un million d'écritures avec un Macintosh II porté à 8 Mégas de RAM. ♦

on ouverture sur le monde extérieur, **SIRIOS Comptabilité** s'intégrera tement dans une chaîne de gestion complète. L'utilisateur exploitera de manière et rationnelle la source d'informations que représente sa comptabilité.



IRIOS Comptabilité est livré avec une disquette programme, une disquette exemple, un guide d'utilisation et un runtime Quatrième Dimension. ♦

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30

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QUELQUES ECRANS...

Paramètres de Book

Comptabilité BOOK

Paramètres

Etats

Données

Comptes

Ecritures

Journaux

Boutons de navigation

Plan comptable

Numéro	Intitulé	Dev.	Groupe	Type	nRév
05028	Neubauer - Kerstenc	DM	CED	Actif	
05031	UNDRO	US$	CES	Actif	
05032	MERCEL BIO & Co	US$	CES	Actif	
06100	Dépôts à terme/ordinaire	FS	DDI	Actif	
06900	Dépôts de garantie	FS	DDG	Actif	
07000	Stocks matériels	FS	STC	Actif	
07010	Stocks marchandises div.	FS	STC	Actif	
09000	Actifs transitoires	FS	ATR	Actif	
11600	Mat. et Mob. de Bureau	FS	MOB	Actif	
11690	Amts Mat et Mob bureau	FS	MOB	Actif	
12000	Véhicules Société	FS	MOB	Actif	
12090	Amts Véhicules Société	FS	MOB	Actif	

Charges
Produits
Avoirs
Engagements

Boucler prévis. 'Int Dist (Suisse) SA' (01.01.91-31.12.91)

Saisie d'écritures

Journal OUS_Opérations US $

Période de Janvier 1991 à Décembre 1991

12/203

Copier la ligne précédente

Valider le journal

Montrer les lettrages

Montrer les comptes

Date	Libellé	Piece	Cpt. Débit	Cpt. Crédit	Dev.	Devise	Tx	Montant
19.02.91	Ventes US	6	0	300000	US$	22'200.00	1.82	38'850.00
19.02.91	Facture UNDRO	6	100001	0	US$	12'700.00	1.82	19'050.00
19.02.91	Facture MERCEL BIO & Co	6	100002	0	US$	9'600.00	1.82	14'640.00
25.02.91	Achats matériels US	7	300000	0	US$	13'200.00	1.46	19'510.70
28.02.91	Facture VPC	7	0	200007	US$	4'800.00	1.46	6'960.00
25.02.91	Facture United Distribution SA	7	0	200008	US$	8'700.00	1.46	12'690.00
17.05.91	Facture MERCEL BIO & Co	9	100002	0	US$	15'000.00	1.36	20'400.00
17.05.91	Facture UNDRO	9	100001	0	US$	6'000.00	1.36	8'160.00
17.05.91	Ventes US	9	0	600000	US$	21'000.00	1.36	28'560.00
17.05.91	Achat matériel US	9	300000	0	US$	17'000.00	1.36	23'120.00
17.05.91	Facture United Distribution SA	9	0	200008	US$	9'000.00	1.36	12'240.00
17.05.91	Facture VPC	9	0	200007	US$	8'000.00	1.36	10'880.00

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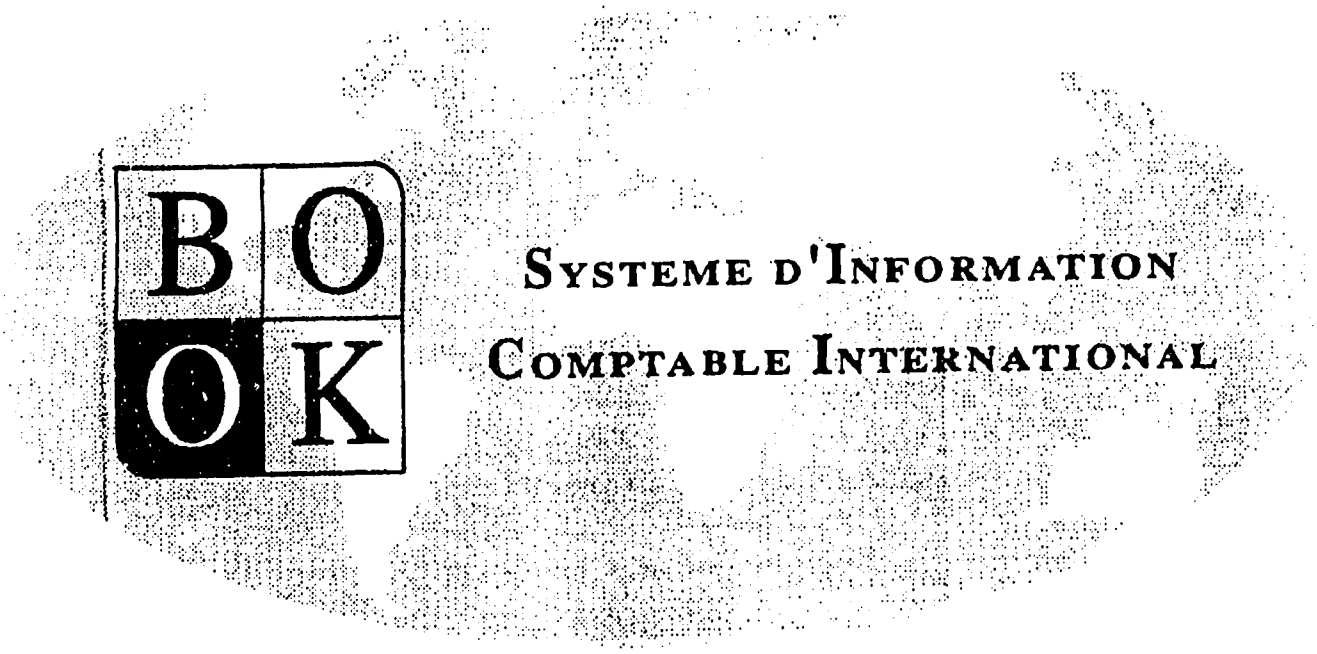

❑ CLASSIQUE

- Comptabilité générale
- Multi-sociétés
- Clients - Débiteurs
- Fournisseurs - Créanciers
- Lettrage
- Réconciliations
- Importation et exportation des écritures, de plans comptables, des comptes et des balances
- Nombre illimité de journaux
- Nombre illimité d'écritures
- Nombre illimité de comptes
- Etats comptables imprimables : journaux, balances, grand-livre, liste des postes ouverts, Bilan et compte de Pertes et Profits

❑ NOUVEAU

- **Multi-langues**
- **Multi-monnaies :**
  - choix de la monnaie de base
  - table des taux de change modifiable
  - détermination des comptes réévaluables
  - réévaluation à la carte
  - possibilité de choisir un taux de change pour une opération
  - passage automatique des écritures de réévaluation et des pertes ou gains de change correspondants
- **Nombre illimité d'exercices en ligne**
- **Plan comptable à la carte** : européen, américain, anglais, français, USAM, etc ...
- **Possibilité d'inclure le hors bilan**
- **Possibilité d'affecter un code de regroupement** aux comptes pour la préparation d'états financiers
- **Clôture** : conservation des écritures de l'exercice clos, permettant de préparer des **états financiers sur des périodes différentes** de celles de l'exercice comptable (par exemple : dernier trimestre d'un exercice et premier trimestre de l'exercice suivant)
- **Centres de gestion** permettant l'analyse des coûts, la création de centres de profits, ou la tenue d'une comptabilité analytique
- **Budget** sur la comptabilité générale et sur les centres de gestion
- **Générateur d'états personnalisés** : états financiers, de gestion, budgétaires, comparatif sur deux années, etc ...
- **Résultat en temps réel**
- **Vérification de l'intégrité des données**

32

5949 (5)

PROJET DE DEVELOPPEMENT URBAIN DE DERSA - SAMSA A TETOUAN

- FICHIER PARCELLAIRE -

PH° 292 a 1/2

D 26

Coordonnées : N° de la parcelle (1) C-8-2 coord. lambert : x..... y..... Adresse : N° (2)..... Rue MOUAQUIA BNO ABI SOUFIAN Quartier SIDI TALHA - JBEL DERSA N° des logement (2) 2 Logements R+2

Statut juridique de la parcelle (3) Domanial ☐ Municipal ☐ Habous ☐ Forestier ☐ Privé ☒ nom (s) et prénom (s) de (s) propriétaire (s) et adresse (s) ARETOUT AHMED - AV MOUAQUIA BNO ABI SOUFIAN N°8 SIDI TALHA.

Propriétaires et occupants

N° (2) logement	Nom et Prénom du propriétaire	Adresse actuelle	N° C. I. N.	Régime de propriété (4)	Justificatif (5)
R+2)	ARETOUT AHMED	AVENUE MOUAQUIA BNO ABI SOUFIAN N°8 SIDI TALHA	Non	Moulkia	Non
)					
)					
)					
)					

	Nom et Prénom de l'occupant	Adresse actuelle (6)	Régime d'occupation (7)	Justificatif (5)	Observation
BOUTIQUE	HILAL SALEH	AVENUE MOUAQUIA BNO ABI SOUFIAN N°8 SIDI TALHA	LOCATAIRE	Non	
"	FEZZAGA MOHAMED		LOCATAIRE	Non	
1e	ARETOUT ABDESLAM		Loge Gratuitement	Non	
2e	ARETOUT AHMED		PROPRIETAIRE	Non	

Equipement et données phisiques (8)

Equipement	Branchement égoût		Reseau électricité	B. Eau	Surface au sol	Surface couverte	USAGE		
	Municipal	communauté					Habitation	Commerces	Mixte
elle	Oui		Oui	Non	95 m²	95 m²			Oui

Logement	Surface couverte	B. égoût	B. eau potable	B. électricité	B. téléphone	Observation
R-D-C	95 m²	Oui	Non	Oui	Non	
1er	95 m²	Oui	Non	Oui	Non	
2ème	95 m²	Oui	Non	Oui	Non	

Fiche projet filliat projeté

Budget par ou in livet

30 AVRIL

ANHI/DFC
Maître d'Ouvrage .....
Ville ...MARRAKECH.....
Responsable .....BENNADDAM.....

OPERATION: AL HAMRA

ENGAGEMENT [ ]

REGLEMENT [X]

POSTES	DESIGNATIONS	CODES	MONTANT
A- TERRAIN	PRIX D'ACQUISITION	A1	
	FRAIS FONCIERS	A2	
B- ETUDES	SOCIO-ECONOMIQUES	B1	
	ENQUETE FONCIERE	B2	X
	TOPOGRAPHIQUES	B3	
	E. AMENAGEMENT	B4	
	ARCHITECTURE	B5	
	E.V.R.D.	B6	32 000,00
	AUTRES ETUDES	B7	
C- TRAVAUX	ASSAINISSEMENT ET VOIRIE	C1	
	EAU POTABLE	C2	
	ELECTRIFICATION	C3	
	AMENAGT DES ABORDS	C4	
	BORNAGE /DTC	C5	
	PILOTAGE BET	C6	
	CONTROLE LPEE	C7	
	TRAVAUX DE CONSTRUCTION	C8	
	AUTRES TRAVAUX	C9	
D- FRAIS ANNEXES	F. COMMERCIAUX	D1	
	PROO.EMPLOI	D2	
E.F.I.A	FIA HORS /TAXES	E1	
	TVA /FIA	E2	
F- TVA XANHI - M.O.	TVA/MO	F1	

ANHI 69% cat

Taxes

Chef de projet

Mr. Hammoun.
Dir. Commercial?!!
Mr. Dahimi

Pour fo. chef de projet
& dépens comptable