

Human Resources Planning and Management System (HRPMS)

User Manual



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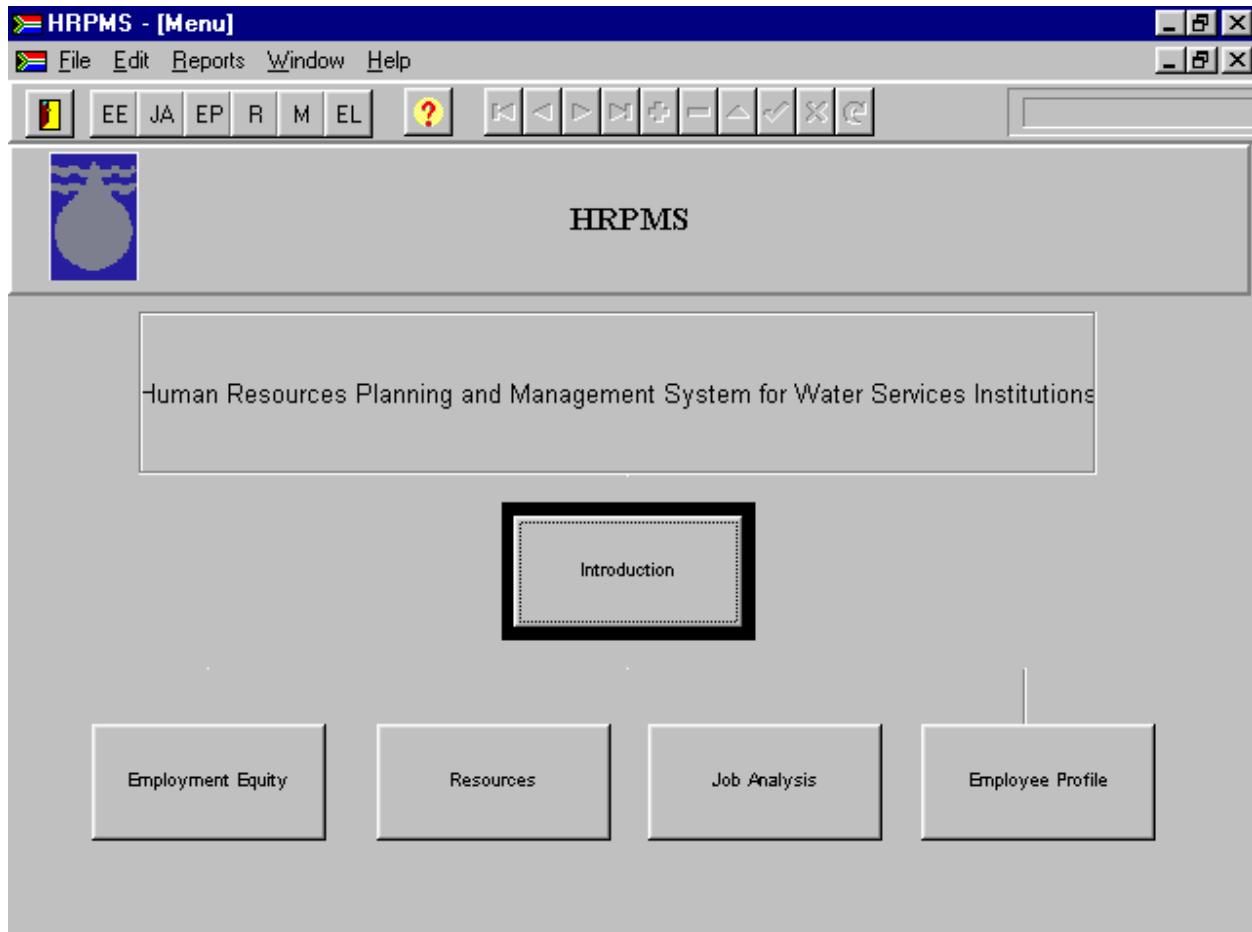
iv) **PREFACE**

This is the user manual for the Human Resources Planning and Management System (HRPMS) computer program. The HRPMS is used as a Decision Support and Information Management System to aid Human Resource departments of water related institutions. The system is used to store, retrieve and manipulate employee, post, demographic and resource information in order to provide a human resource planning and management tool.

The program runs on the IBM PC compatible range of computers, operating under the Windows 95 (and later versions) range of operating systems. No other software is required to use this program.

vi) CREDITS

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3) Introduction

(Contained in the Program's Introduction)

The existing shortage of high-level and middle-level human resources in South Africa could ultimately lead to the sub-optimal delivery of services by water services institutions. Technology and in particular Computerised Management Systems can facilitate the maintenance and improvement of service delivery notwithstanding this shortage of skilled human resources.

The objective of Research Project K5/993 was to develop a management tool to help managers undertake human resource planning and management of water services institutions that focuses on the human resources required to support the infrastructure as well as support organisational structure requirements of various sizes of water services institutions. As these organisations are dynamic institutions due to the fact that there is a growth in the demand for their services as well as a continuous movement of staff into and out of the organisation, a dynamic computerised human resource planning system is required.

The human resource and organisational structure requirements of a water service institution related to the specific water infrastructure, population served, financial resources and the production capacity of the water service institutions. This relation between human resources and other resources is achieved through the establishment of performance indicators. The planning of human resource requirements is then facilitated through the comparison of these performance indicators with benchmarks.

The Computerised Human Resources Planning and Management System will assist with the preparation of the annual business plans required by the Water Services Act with specific reference to those sections dealing with human resources and human resource development.

The reporting requirements of the Employment Equity Act are also addressed by the HRPMS.

The emphasis of this project was to develop a computer program to assist with human resources planning and management within water services institutions. This report, therefore, only provides a brief rationale of the design of the computer program with specific reference to the following:

- A literature survey and other sources of information including the relevance of related legislation and clauses within that legislation
- A brief description of the methodology adopted.
- A brief description of each module/section of the HRPMS

2. METHODOLOGY ADOPTED

The computerised human resource planning and management system was defined, coded and developed at Stewart Scott's Pretoria office. The facilities and expertise used to develop Stewart Scott's other computerised management systems was utilised.

The main components of the system's development was as follows:

- | | |
|--------------------------|------------------------------------|
| * Definition Phase: | System design |
| * Construction Phase: | Programming |
| * Procedure Development: | Writing and testing the procedures |

The computer program was initially defined and screen designs presented at the inaugural meeting. The program was developed in Delphi 3 for use on Windows 95 or 98 (during the construction phase). The database format used is Paradox 7. The program is fully Y2K compliant.

The review of relevant literature was critical in defining the needs, objectives as well as providing guidance for the system design of the computer program. Valuable guidance was also provided by the members of the Steering Committee at the inaugural meeting held in Pretoria on 29 March 1999. A subsequent consultative workshop held on 29 September 1999 provided stakeholders with an opportunity to make inputs into the final research product. These meetings/workshops were also the source of further relevant information provided to the research team by the delegates/members of the respective organisations.

3. LITERATURE SURVEY

3.1 General rationale

The existing shortage of high-level and middle-level manpower in South Africa will become much greater in future, especially in the scientific, engineering and technical fields (Gerber et al, 1994). The critical shortage with regard to technically skilled manpower in South Africa has also been highlighted by the Associated Scientific and Technical Society of South Africa. (SA Water Bulletin, Volume 24, No 1, January/February 1998.)

Productivity is a performance measure including effectiveness and efficiency. Effectiveness is the achievement of the right goals and efficiency is the ratio of effective output to the input required to achieve it (Robbins, 1991).

The HRPMS provides standard outputs that will facilitate both the efficiency and effectiveness of human resource planning and management functions within water services institutions.

One way of improving productivity in the service sector is by improving the knowledge, skills, attitudes and behaviour of staff (Peters & Waterman, 1983).

The shortage of middle and high level manpower mentioned previously leads to reduced levels of productivity resulting in below optimum services which in turn contribute to the high levels of unaccounted for water, for example.

The growth in personal skills and productivity can be augmented by management and decision support systems.

The importance of technology is that it is the primary source of increased productivity and has made the development of ever-increasing marginal resources economically viable (Gerber et al, 1994).

Computerised Management Systems, as an example of this technology, lessen the need to depend on direct supervision. Their effect on organisations is that their structures can become flatter and more organic without loss of control. An organic organisational structure is characterised by having low complexity, low formalisation and decentralisation. Computer-based information systems allow managers to handle more subordinates, leading to wider spans of supervision and reduced staff and, therefore, flatter organisations. Management Systems rapidly appraise managers of the consequences of any decision and allow them to take corrective action. Therefore, there is an appearance of decentralisation without any commensurate loss of control (Robbins, 1991).

Computerised Management Systems can, therefore, facilitate an increase in productivity as well as compensate to a certain degree for the shortage of middle and high-level manpower. The value of the benchmarking process introduced by these computerised management systems is that it provides a substitute for the efficiency-boosting effect of market forces in organisations (or business units) that are not normally exposed to market economics.

The enhancement of knowledge with regard to the eventual application of a computerised human resource planning system specifically for water services institutions in South Africa, will be achieved through the incorporation of human resource modelling techniques that have in the past only been applied to organisations overseas not generally involved with the water industry (Niehaus, 1979).

3.2 Relevant legislation

3.2.1 Water Services Act No. 108 of 1997

The Water Services Act requires water services institutions to prepare a business plan every year. The Department of Water Affairs and Forestry (DWAF) have subsequently prepared a report detailing the various aspects covered in the Act for the provision of the Policy Statements Business Plans and Annual Reports. The content requirements for human resources and human resource development aspects for the business plan are as follows (David Miller & Associates, 1999):

Human Resources: The business plan should explain the human resources strategy, objectives and targets. Brief explanations (three to five lines) and accompanying figures should include the following:

- Development Plan for staffing and skills levels over the next five years, with brief commentary on their adequacy;
- Summary of the Employment Equity Plan for the development of equity targets, in accordance with the requirements of the Department of Labour;

- Staff turnover percentages and targets, preferably by categories, with an explanation of underlying reasons;
- Brief description of the performance management system and its objectives;
- The development of agreements and relationships with organised labour, and of other service agreements;
- The nature and extent of labour's involvement in planning and decision-making;
- Contingency plans to minimise the impact on service delivery of labour unrest, setting targets of work disruption; and
- Safety targets.

Recommended Performance Indicators:

- Compliance with Equity Plan, by category (%)
- Staff turnover, by level, category and designated group (%)
- Percentage of total possible hours lost due to absenteeism, including sick leave;
- Percentage of total possible hours lost due to work stoppages;
- Number of matters referred to arbitration and labour court; and
- Number of disabling accidents times one million divided by the number of employee hours of exposure

Human Resources Development: A summary should be provided of the water service institution's policy on training and development, and an indication of how it is intended to support the achievement of strategic objectives, including training of previously disadvantaged groups (as percentage of total expenditure of training). The brief description (three to five lines each) and accompanying figures of the factors to be taken into account, should include the following:

- Expenditure on training and development;
- Sponsorship of students by means of tertiary level bursaries;
- Adult basic education and training (ABET); and
- Development or technical and any other training

Recommended Performance Indicators:

- Expenditure on training and development as percentage of total people costs (including salaries and benefits);
- Number, categories and costs of students (internal and external) sponsored with tertiary level bursaries, per 100 total employees; and
- Number of person-hours of adult basic education and training, per 100 total employees.

3.2.2 Employment Equity Act No. 55 of 1998

Examination of the Employment Equity Act of 1998 as detailed in the Government Gazette No. 19370 of 19 October 1998 provided an important source of information. Aspects that are relevant to this module of the HRPS include the employment equity plan (Clause 20(3)) and the assessment of compliance (Clause 42(a)) with specific reference to the following:

- 42(a) The extent to which suitably qualified people from amongst the different designated groups are equitably represented within each occupational category and level in that employer's workforce in relation to the:

- (i) demographic profile of the national and regional economical active population;
- (ii) pool of suitably qualified people from designated groups from which the employer may reasonably be expected to promote or appoint employees;
- (iii) economic and financial factors relevant to the sector in which the employer operates;
- (iv) present and anticipated economic and financial circumstances of the employer; and
- (v) the number of present and planned vacancies that exist in the various categories and levels, and the employer's labour turnover

The proposed reporting requirements of the Employment Equity Act were obtained from Information Services Group (Pty) Ltd who have been contracted by USAID to assist the Department of Labour in the implementation of this Act. These initial reporting requirements have been included in the HRPS.

3.3 Human resources planning and associated computer systems

Human resources planning implies a broad spectrum of activities touching many parts of an organisation. The focus of human resources planning is on decision support and policy making. It is concerned with aggregate flows of people into, within, and out of the organisation and with co-ordination of persons and jobs on an individual level. (Niehaus, 1979).

Hercus (1993) summarises human resource planning by stating that it is a management process involving the following elements:

- forecasting human resource requirements for an organisation to execute its business plan;
- forecasting human resources available for meeting these needs and doing a scan of the internal and external environments of the organisation;
- identifying the gaps between what will be needed and what will be available and developing the necessary action plans to bridge the gaps;
- implementing and monitoring these actions plans.

There are three major types of computer-based human resources systems viz. electronic data processing (EDP), management information systems (MIS) and decision support systems (DSS). These three types of systems can be located on a continuum of relative activity by users ranging from the storage of files at the one end to interactive decision systems at the other (Carrel, et al, 1998). The computerised human resources planning system developed for this project includes aspects of both the MIS and DSS.

Currently there are more administrative (i.e. EDP) human resource computer applications than strategic (i.e. DSS) applications in South African companies (Carrel, et al, 1998).

All these computerised HR systems are described by the generic title of Human Resources Information Systems (HRIS). Modern personnel administration has brought with it a profusion of planning requirements and employee benefit and development programs. These computerised HR systems take a major supporting role in ensuring that these activities make a positive and measurable contribution to organisational effectiveness (Beatty et al, 1985).

Some of the general and specific elements/aspects of a computerised human resources planning system identified from literature are as follows:

- as a management tool in the alignment or integration of the human resources department goals with goals of long-term corporate strategic planning (Carrell et al, 1998)
- to collect, record, store, analyse and retrieve data concerning an organisation's human resources (Carrel et al, 1998)
- to produce reports for both accountability and planning purposes (Beatty et al, 1985)
- the application of computer-assisted human resources techniques for equal employment opportunity planning (Niehaus, 1979)
- a truly intelligent design of HRIS mandates a multidisciplinary approach that combines knowledge in job design, MIS, strategic planning and industrial relations (Huo & Kearns, 1992)

3.4 Performance indicators and benchmarking

To assist the planning process, performance indicators that link human resources to the other resources of the water services institution have been adopted for this project. The HRPMS makes provision for the comparison of the particular performance indicator with benchmarks. Although the many references in this regard were examined during our review of literature (Blankenship et al, 1998), (Jordon et al, 1997), (Ministry of Internal Affairs, Indonesia), (Johnson, 1997), (Washnis, 1980), (IMESA, 1999), (David Miller and Associates, 1999), there were few performance indicators and benchmarks related to human resources. A dynamic GIS based strategic planning system developed for water services institutions utilises a Resources Module that links human resource requirements to the various performance indicators and benchmarks (Van der Walt & Johnson, 1999). Some of the performance indicators and benchmarks developed for that strategic planning system have been adopted for this project.

4. BRIEF DESCRIPTION OF THE HRPMS

The HRPMS developed for this project consists of several modules or sections. Some of the main modules/sections are described briefly as follows:

Introduction/Help screen

An introductory overview of the project is provided within the computer program which is based on the electronic version of this report. The User can either access this whole report via the appropriate button on the main screen of the computer program or via the relevant sections of the report linked to a help facility accessed through specific screens. A search facility is also provided that utilises keywords to assist with searching for associated portions of the text.

Employment Equity

This module consists of three screens or folders essentially relating to the previously mentioned Employment Equity Act. This module assists the user to comply with the reporting requirements of the Act as well as allows for the storage of data that will facilitate the analysis of conditions external to the institution as required for planning purposes.

The first screen/folder allows for the input of data describing the distribution of the economically active population as well as financial indicators for the various racial groups on a national and regional basis. The respective data for the organisation is automatically extracted from the database and displayed on this screen.

The second screen/folder allows for the input of data pertaining to distribution of Previously Disadvantaged Individuals (PDI) on a national and regional basis. Similar data for the organisation as well as statistics on vacancies and turnover are displayed on this screen.

The third screen/folder provides statistics on the PDI distribution for every occupational category within the organisation.

Resources

The purpose of this module is to assist with the planning process via performance indicators that link human resources to other resources of the water services institution.

This module consists of seven screens/folders. The first screen/folder is to identify the organisation/business unit together with specific contact details and addresses. An organogram of the water services institution is loaded and displayed on this screen. Two organogram examples are available for adaptation by the user. One example is based on overseas practices (Skeat, 1969) and the other local (Water Research Commission, Palmer Development Group, 1998).

The second screen/folder allows for the input of demographic and infrastructure data such as population served, lengths of pipeline and consumer water meters.

The third screen/folder provides for the display of human resource statistics relevant to the organisation as well as the input of water production/treatment figures.

The fourth screen/folder allows for the input of financial data commonly available from the annual financial reports of water services institutions.

Performance indicators are calculated and displayed on the fifth screen/folder. Benchmarks are entered on this screen.

The human resources required from the previously calculated indicators are displayed on the sixth screen/folder and compared with the current resources. The percentage difference between current and required human resources is displayed on this screen.

A seventh screen provides for the input of forecasted production capacities, kilometres of piping and connections for a particular year from other strategic planning exercises in order to calculate future human resource requirements.

Job analysis

This job analysis module provides details of the criteria for generic positions within the water services institutions.

Job analysis is the process of developing job-related information and can serve as the cornerstone of an integrated human resources program. It is a process by which management systemically investigates the tasks, duties and responsibilities of the jobs within an organisation. Job analysis comprises of both job descriptions and job specifications. The most common element of job descriptions is some form of identification and a brief job summary. Job specification, or minimum qualifications, state the qualifications job applicants must possess to be considered for a job. These qualifications are grouped into three categories: abilities, knowledge and competencies, for each post within the water services institution.

A pro forma or template has been designed for this module so that reference data bases, known as pick lists, can be used and updated as new job analysis information becomes available.

Employee profile

The purpose of the employee profile module is to provide a pro forma or template for the entry and storage of actual employee information. The difference between the job analysis module and this module is that the former holds a database of the ideal criteria for a particular position while this module is a database of an employee's actual attributes. This module could be regarded as a standardised résumé or curriculum vitae. Details such as organisational position, education, employment history and experience are stored.

The outputs of the various modules are combined through a matching process, which facilitates the determination of human resource and training requirements.

Four screens/folders are available which include a summary, the organisational position in relation to the organogram, education and employment history/experience.

Reports

The reporting facilities provided include the generation of the following reports:

- List of Posts
- Job Description
- Vacancies
- List of employees by employee number, surname and so on
- PDI distribution and details
- Comparison between Job analysis and employee profile
- Turnover of staff
- Employee profile
- Human resource requirements
- Graphs – PDI
 - Turnover within organization
 - Age, time employed distribution

5. DISCUSSIONS, RECOMMENDATIONS AND CONCLUSIONS

The computerised Human Resources Planning & Management System (HRPMS) developed for water services institutions can be categorised within a continuum describing aspects of both a management information system as well as a decision support system.

The management component of the HRPMS includes portions of the job analysis and employee profile modules. The planning (decision support system) component includes the employment equity, resources (benchmarking), forecasting human resource requirements and provision of data required for business plans as dictated by the Water Services Act.

The need for the HRPMS has been expressed by several members attending the Project Steering Committee meetings and Stakeholder Workshop.

The HRPMS has considerable potential for expansion as both a management and planning system. However, there is an urgent need for the application of this type of computerised HR system by water services institutions that currently do not have the financial and human resources nor the expertise to implement more sophisticated systems.

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4) Getting Started

What is HRPMS?

HRPMS is a dynamic software package used for planning and management of Human Resources within the Water Institutions of Southern Africa. There are four Modules that are geared to achieving this. One aspect to bare in mind is the fact that a software package is only as good as it's Data. Therefore results are dependent on the accurate entry and manipulation of this data.

HRPMS makes use of Exogenous factors and forecasting tools to make it dynamically unique. Using data input fields and formulas to manipulate this data, HRPMS was designed to conform current legislation within South Africa.

The Employment Equity Module assists the user in managing and keeping track of transformation progress and the Institutions policies are reviewed consistently.

The Job Analysis Module is the module through which the user manages the organisation structure and post details.

The resources module forms part of the integral Planning system by making use of diverse calculations to calculate current and required resources necessary for the effective functioning of the organisation.

The employee Profile bares record of the individual staff members as a digital CV. The employee's history, knowledge, skills and abilities are stipulated here.

System Requirements

Minimum System Requirements:

HRPMS Version 1 is a 32 bit program that will run on a PC with Windows 95/98 or compatible version.
CD ROM drive or 3.5" floppy drive, depending on the distribution media
18MB hard disk space for installing program and initial data files
10MB free hard disk space for temporary files while running HRPMS

Screen design is specific for a Super VGA screen, at 800x600 resolution, although the windows will scale to whatever resolution is used.

RAM required: 32MB recommended, although HRPMS will run on 16Mb.

Installation

Before installing HRPMS, first verify the system requirements.

To install HRPMS:

1. Select Run from the Taskbar Start menu or should it be a cd installation disk there will be an autorun facility and a menu screen will be displayed, click on the setup button.
2. Type the full name of the Setup file (for example, A:\Setup.exe)
3. Press the Enter key, and follow the prompts

After installation, check the configuration data before using HRPMS for any analysis.

Should you experience any problems executing HRPMS, please see the Troubleshooting and Support sections in the Help file. More detail about the installation is available under the Program Technical Information section

Tips

Backup!: Remember to make regular backups of the data. If the database becomes corrupted, EVERYTHING can be lost, and often nothing can be recovered! To backup follow these steps:

1. Obtain a backup disk, directory on your server, CD or Stiffy.
2. Copy or Zip the “HRPMS install directory\Database*.*” directory to the backup disk.
3. Store your backup in a safe place.

File Maintenance: Menu option *File / File Maintenance* should be executed regularly to refresh the table indexes.

Feedback: Users' comments on this program will be highly appreciated. Please let us know about any problems, defects or advice. See the Support section for contact numbers.

Incremental Lookups: The dropdown lookup lists has an incremental search facility. You can type the first few characters of the word you are searching for to narrow down on the options to be selected.

Print Screen: To print a screen dump from Windows is not as simple as just pressing the *Print Screen* key as in DOS. Press *Print Screen* to copy a bitmap image of the entire screen to the clipboard, or press *Alt - Print Screen* to copy a bitmap image of the active window to the clipboard. Then call up any word processor, eg. Word Perfect or WordPad. Position the cursor where the image should be inserted, and press *Ctrl-V* or select menu option *Edit / Paste*, to load the image into the document. The image can then be printed from that application.

Sorting and sizing columns in tables: The columns displayed in tables can be sorted by dragging the column heading to it's new position. Columns can be resized by moving the cursor to the vertical line between two columns until the cursor changes shape, and then drag the line to it's new position. The settings only apply while the table is displayed. When reloaded, the default settings will be restored.

Save!: If the user exits Windows without first saving data changes in HRPMS, the changes will be lost. Shifting focus to another record or another screen automatically saves changes to the previous record or screen.

5) Basic Concepts

File Maintenance

This screen is accessed by selecting *File / File Maintenance* from the menu.

The File Maintenance option checks the integrity of the database structure, and automatically fixes minor errors.

It is recommended to execute File Maintenance at least once a week to once a month, depending on how often data is edited.

Any problems picked up during the file maintenance will be reported in the Activity Log area on the screen. Only the last 100 lines of data is displayed in the Activity Log area. The full log is however stored in the FileMntErrors.txt file in the application directory. If this file already exists, log data is appended to the bottom of this file.

To start HRPMS:

- Start on the Windows NT/95 task bar,
- Select Programs,
- Select HRPMS,

When running for the first time, you may first have to configure HRPMS.

The first screen displayed shows a diagram of the four HRPMS modules. Click the appropriate module's button to call up the module's screens.

Each module consists of a number of tabbed pages. Work through all the pages from left to right, without missing any pages.

The first page displayed for each module is the Project screen. Data for different analysis sessions can be stored as projects. The data can then be retrieved at any later stage.

Should you experience any problems in using HRPMS, please see the Troubleshooting section and Support sections.

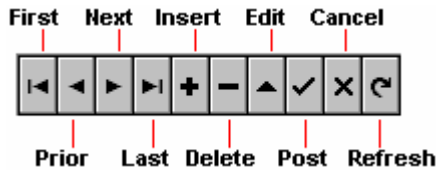
Important Information

A number of protocols must be applied before the system will be effective. For instance the lookup facility will only be effective if all the lookup tables are populated accurately. Secondly all the fields should be populated with the correct data, in the case of the Employee profile, employment status must be kept up to date. With the Job Analysis it is important to complete all the post details properly such as the division and type of post.

Using the database Navigator

The Navigator component (a database navigator) is used to move through the data in a database table, and perform operations on the data, such as inserting a blank record or posting a record. It is used in conjunction with the data controls, such as the data grid, which gives the user access to the data, either for editing the data, or for simply displaying it.

The database navigator consists of multiple buttons.



When the user chooses one of the navigator buttons, the appropriate action occurs on the table the navigator is linked to. For example, if the user clicks the Insert button, a blank record is inserted in the dataset.

This table describes the buttons on the navigator:

Button	Purpose
First	Sets the current record to the first record
Prior	Sets the current record to the previous record
Next	Sets the current record to the next record
Last	Sets the current record to the last record
Insert	Inserts a new record, and sets the dataset into Edit state, and enable the Cancel and Post buttons
Delete	Deletes the current record and makes the next record the current record
Edit	Puts the dataset into Edit state so that the current record can be modified, and enable the Cancel and Post buttons
Post	Writes changes in the current record to the database
Cancel	Cancels edits to the current record, restores the record display to its condition prior to editing, and turns off Insert and Edit states if they are active
Refresh	Redisplays the current record from the dataset, thereby updating the display of the record on the screen

Toolbar



The toolbar is displayed beneath the menu. The items on the toolbar are the same for all the modules.

Hold the mouse pointer above a button for about a second to display a tooltip indication of the function of the button.

The program should be exited from here using the close button: the button with the open door.

The buttons are:

EE: Employment equity - opens the employment equity module.
JA: Job Analysis - opens the job analysis module.
EP: Employee Profile - opens the employee profile module.
R : Resources - opens the resources module.
M : Returns the user to the main menu.
EL: Edit Lookup - enables the user to edit the lookup features.
? : Help - opens the main help screen.
Close : Exit the program. (button with open door)

Configuring HRPMS

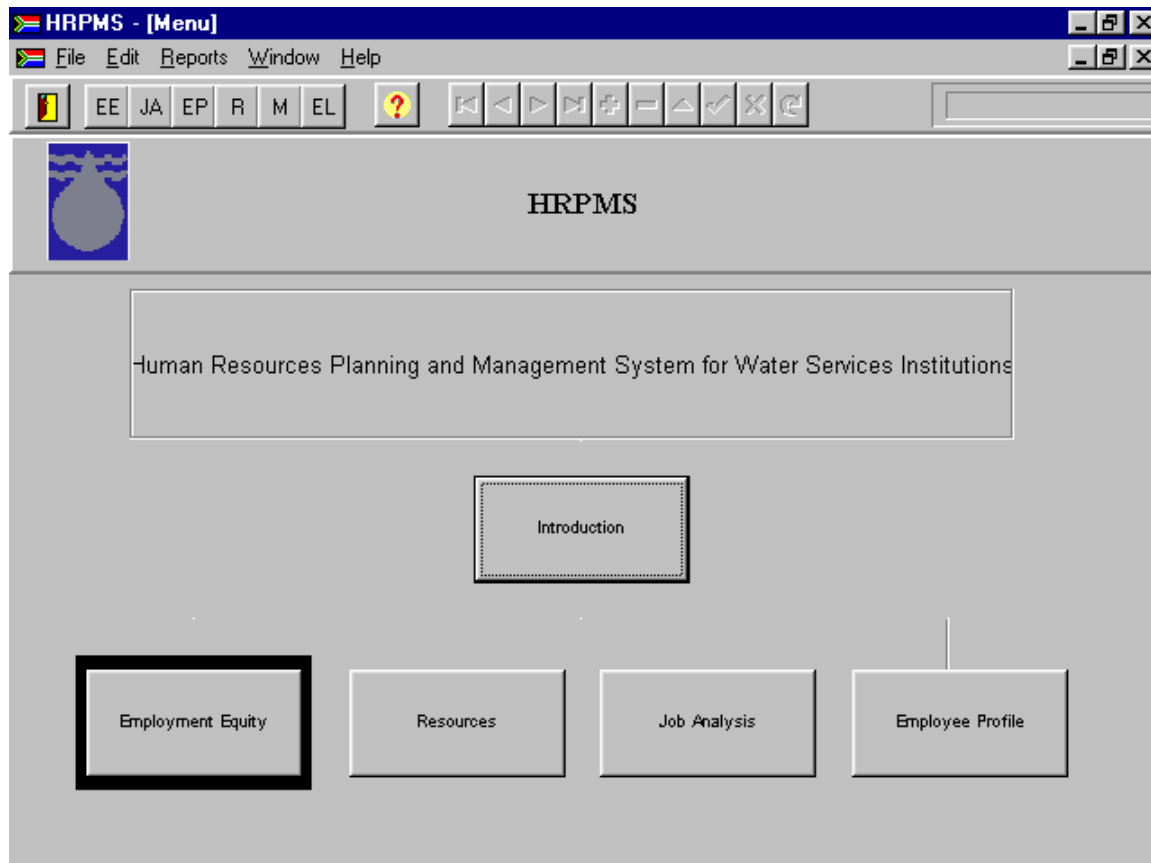
Changes can be made to the following default data, which may affect the result of various modules
It is recommended that the user should read the introduction of the program to get an appreciation of how the program should be applied and the reasons for it's existence.

Editing the lookups will be the first step toward making the program more user friendlier. The more detailed and complete the lookups are completed the less typing the user will have to do in the end. The program is initially provided with data for the lookup tables but this data is not geared towards specific organisations thus these organisations should know what they need and prepare the program accordingly.

Photographs for individuals that are used in the employee profile must be 3 x 3 cm and can only be stored in bitmap format. These pictures can be captured using a digital camera. The resolution of the pictures will depend on the actual system's settings (e.g. 256 color, 16 bit etc).

It is important to follow the protocols set out in each of the modules for the program to be effective.

6) Employment Equity



This module assists the user to comply with the reporting requirements of the Act as well as allows for the storage and reporting of data that will facilitate the analysis of conditions external to the institution as required for planning purposes

This module consists of three screens or folders essentially relating to the previously mentioned Employment Equity Act.

The first screen/folder allows for the input of data describing the distribution of the economically active population as well as financial indicators for the various racial groups on a national and regional basis. The respective data for the organisation is automatically extracted from the database and displayed on this screen.

The second screen/folder allows for the input of data pertaining to distribution of Previously Disadvantaged Individuals (PDI) on a national and regional basis. Similar data for the organisation as well as statistics on vacancies and turnover are displayed on this screen.

The third screen/folder provides statistics on the PDI distribution for every occupational category within the organisation.

To call up this module;

- * Select menu option *Window / Employment Equity*, or
- * Click the *Employment Equity* button on the Startup window, or

- Click the *Employment Equity* button on the toolbar.



Population And Financial Indication

Economically Active Population

	African	Asian	Coloured	White
Regional				
Organisational	0	0	0	0

Financial Indicators

National

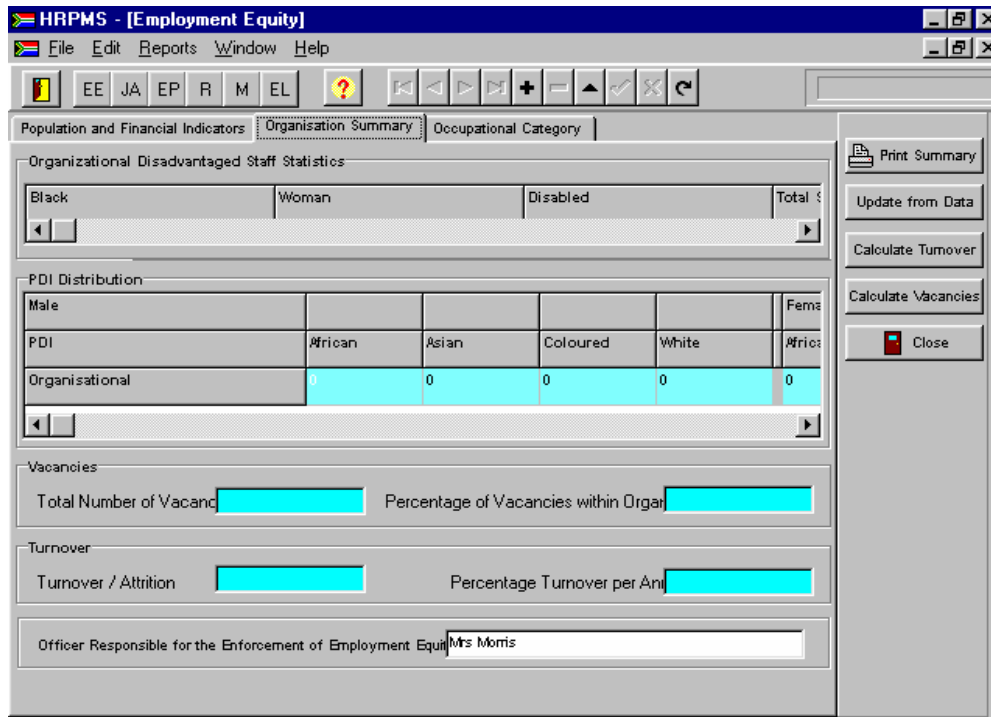
Year	Group	Annual GDP change %	Quarter 1 GDP % Change	Quarter 2
2000	African	16		17
2000	Asian	25		10
2000	Coloured	16		14
2000	White	18		15

Organisational

Return on Assets	2.86
Current Ratio	7.861
Operating Ratio	0.234

This screen/folder forms part of the employment equity module which must comply to certain regulations specified in the Water Services Act, this includes which information must be available to Employment Equity officers so that they can enforce the equity act within the organisation. The act specifies that information regarding the population of the country, province and region must be available, this PDI (previously disadvantaged Individuals) information is also calculated for the organisation and displayed in table that is editable by the user for the Region, province and country

Organisation Summary



The PDI status of the organisation is calculated and displayed here. These individuals include those designated as Black (african,coloured,asians) , woman and disabled people.A further division of these categories within the organisation displays a male to female ratio for each population group within the organisation.

The facility to calculate the Turnover and Vacancies for the organisation is available.

Occupational Category

The screenshot shows the 'Occupational Category' report in the HRPMS - [Employment Equity] application. The 'Organisation Name' is 'Crystal Water'. The 'Occupational Category' is selected as 'Agricultural and Fishery Workers'. The 'Occupational Level' is empty. The 'Occupational Category Disadvantaged Staff Statistics' section shows counts for Black, Woman, and Disabled. The 'PDI Distribution' table shows the distribution of individuals by gender and race. The 'Vacancies' section shows the total number of vacancies and the percentage within the organization. The 'Turnover' section shows the turnover/attrition rate and the percentage turnover per annum.

Occupational Category Disadvantaged Staff Statistics					
Black	Woman	Disabled	Total		
0	0	0	0	0	0

PDI Distribution					
Male					Female
Occupational Category	African	Asian	Coloured	White	African
Agricultural and Fishery Workers	0	0	0	0	0
Clerks	0	0	0	0	0

Vacancies	
Total Number of Vacancies	0
Percentage of Vacancies within Organisation	0%

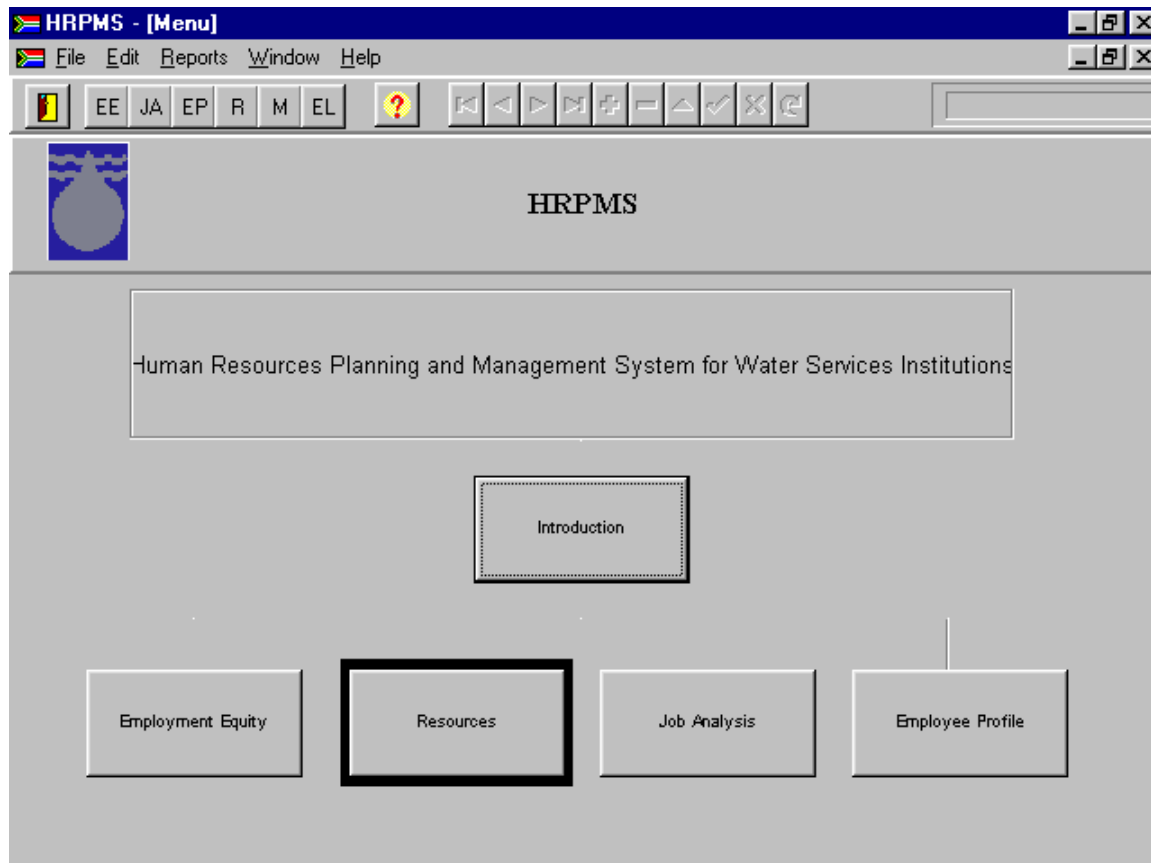
Turnover	
Turnover / Attrition	0%
Percentage Turnover per Annum	0%

The PDI status of the specific category selected by the user is calculated and displayed here. These individuals include those designated as Black (african, coloured, asians), woman and disabled people.

A further division of the population groups within the organisation displays a male to female ratio for each population group within the selected occupational category.

The facility to calculate the Turnover and Vacancies for the selected occupational category is available.

7) Resources



The purpose of this module is to assist with the planning process via performance indicators that link human resources to other resources of the water services institution.

This module consists of seven screens/folders. The first screen/folder is to identify the organisation/business unit together with specific contact details and addresses. An organogram of the water services institution is loaded and displayed on this screen. Two organogram examples are available for adaptation by the user. One example is based on overseas practices (Skeat, 1969) and the other local (Water Research Commission, Palmer Development Group, 1998).

The second screen/folder allows for the input of demographic and infrastructure data such as population served, lengths of pipeline and consumer water meters.

The third screen/folder provides for the display of human resource statistics relevant to the organisation as well as the input of water production/treatment figures.

The fourth screen/folder allows for the input of financial data commonly available from the annual financial reports of water services institutions.

Performance indicators are calculated and displayed on the fifth screen/folder. Benchmarks are entered on this screen.

The human resources required from the previously calculated indicators are displayed on the sixth screen/folder and compared with the current resources. The percentage difference between current and required human resources is displayed on this screen.

A seventh screen provides for the input of forecasted production capacities, kilometres of piping and connections for a particular year from other strategic planning exercises in order to calculate future human resource requirements.

To call up this module;

- * Select menu option *Window / Resources*, or
- * Click the *Resources* button on the Startup window, or
- Click the *Resources* button {BMC R.bmp} on the toolbar



Identification

The Resources module first screen/folder is the identification section which is used for the identification of the organisation and its details, there is also the facility for the user to load an organigram which represents the organisation.

Demographics/Infrastructure

HRPMS - [Resources]

File Edit Reports Window Help

EE JA EP R M EL ?

Resources

Identification Demographics / Infrastructure Labour / Productivity Financial Performance Indicators Human Resources

Total Population Served (No)

Urban	6500000	Rural	1600000
Peri-Urban	2134500	Census Date	01/01/2000

Length of Pipelines (km) Potable Water

Supply	654899	Connections	0
Distribution	654897	Total Pipeline Length	1309796

Length of Pipelines (km) Waste Water (Sanitation)

Interceptors	6584	Connections	326454
Distribution	15469	Total Pipeline Length	348507

Reservoirs

Number	65987	Total Storage	12233
--------	-------	---------------	-------

Pumping Stations

	Potable Water		Waste Water
Diesel	56	Diesel	66
Electrical	15	Electrical	256
Wind	98	Solar	326
Total	169	Total	648

Consumer Watermeters / Connections (No)

Urban	65987	Unmetered	54689
Peri-Urban	321658	Industrial / Commercial	1235
Rural	12233	Potable Water Connections	455802
Domestic Waste	2365	Waste Water Connections	8909
Industrial Waste	6544		

Update Information
 Edit Benchmarks
 Load Organigram
 Load Logo
 Forecast
 Close

Basic demographic information is entered here which effect the organisations production and functioning, details regarding the size of the organisation and it's client base. Each subsection has a calculated total.

Labour/Productivity

HRPMS - [Resources]

File Edit Reports Window Help

EE JA EP R M EL ?

Resources

Identification Demographics / Infrastructure **Labour / Productivity** Financial Performance Indicators Human Resources

Total Number of Employees: 0

No of Employees:

	Potable Water	Waste Water
Treatment Works	0	0
Administration	0	0
Pipeline Inspectors	0	0
Plumbers	0	Plumbers / Drincleaners 0
Pump Station Operators	0	Pump Station Operators 0
with less than 10 years experience	0	
with between 10 and 20 years experience	0	
with more than 20 years experience	0	

% of Employees

with Primary education	0%
with Secondary education	0%
with Tertiary education	0%

Production / Plant

Annual Volume of Potable Water Produced / Sold: 0

Annual Volume of Waste Water Treated: 0

Update Information
Edit Benchmarks
Load Organigram
Load Logo
Forecast
Close

This element concentrates on the human aspect of the organisation and their influence on the production of the organisation, The total staff figures are calculated from the database and figures for sections within the organisation from the database.

Financial

(Balance before Appropriations)		For Year
Net Income	654000.00	01/01/2000
Current Assets	9876654.00	
Gross Revenue Income	546987.00	
Fixed Assets	12364899.00	
Current Liabilities	1256469.00	
Investments	654000.00	
Operating Costs(D and M Changes)	2365481.00	

This section is used to input the financial figures used to calculate the Return on Assets, Current Ratio and Operating Ratio of the organisation.

Performance Indicators

Labour / Productivity / Efficiency		Benchmarks (Range)		
		From	Average	To
Potable Water				
	Km Piping per Employee	100	1050	2000
Daily Water Treated per Treatment works employee	0	100	1050	2000
	Km Piping per Pipeline Inspectors	950	950	950
	Administration Employment at % of total	20	35	50
	No of Employees per 1000 metered Connections	100	1050	2000
	No of Employees per 1000 Connections	100	1050	2000
	No Pumps per Operator	100	1050	2000
	Distribution Pipe KM per plumber	100	1050	2000
Waste Water				
	Km Piping per Employee	100	1050	2000
Daily Water Treated per Treatment works employee	0	100	1050	2000
	Pipeline Inspectors per Km Piping	2000	1050	100
	Administration Employment at % of total	50	50	50
	No of Employees per 1000 Sewer Connections	100	1050	2000
	No of Employees per 1000 Population	100	1050	2000
	No Pumps Per Operator	100	1050	2000
	Plumbers per Distribution Pipe KM	100	1050	2000
Financial				
	Return on Assets	0	250	500
	Current Ratio	0	250	500
	Operation Ratio	0	250	500

All these fields are calculated from the figures entered and the staff information in the organisation. Benchmarks are used to determine the ideal situation and compare actual data to determine the condition of the organisation from the difference which is calculated as a percentage by dividing the actual information by the benchmark and multiplying by 100.

Human Resources

The screenshot displays the 'Human Resources' section of the HRPMS software. It features a table comparing required resources against current resources and the percentage difference. The interface includes a menu bar (File, Edit, Reports, Window, Help), a toolbar with navigation icons, and a sidebar with buttons for 'Update Information', 'Edit Benchmarks', 'Load Organigram', 'Load Logo', 'Forecast', and 'Close'.

Human Resources Required		Current Resources	% Difference
Total Number of Employees:	0	Last Update	
km Piping per Employee	789.668095238	0	100
per 1000 Metered Connections	0	0.00	100
Potable Water			
Number of Treatment Works Employees	0	0	100
Number of Pipeline Inspectors	689.367368421	0	100
Number of Plumbers	623.711428571	0	100
Administrative Staff	0	0	100
Waste Water			
Number of Treatment Works Employees	0	0	100
Number of Pipeline Inspectors	6.27047619047	0	100
Number of Plumbers / Drain Cleaners	14.7323809523	0	100
Administrative Staff	0	0	100
Employee Ratios			
	From	Average	To
Black to White	50	50	50
Male to Female	50	50	50
Formally to Informally Qualified	50	50	50
Skilled to Unskilled	50	50	50

The human resources required from the previously calculated indicators are displayed on the sixth screen/folder and compared with the current resources. The percentage difference between current and required human resources is displayed on this screen.

Forecast

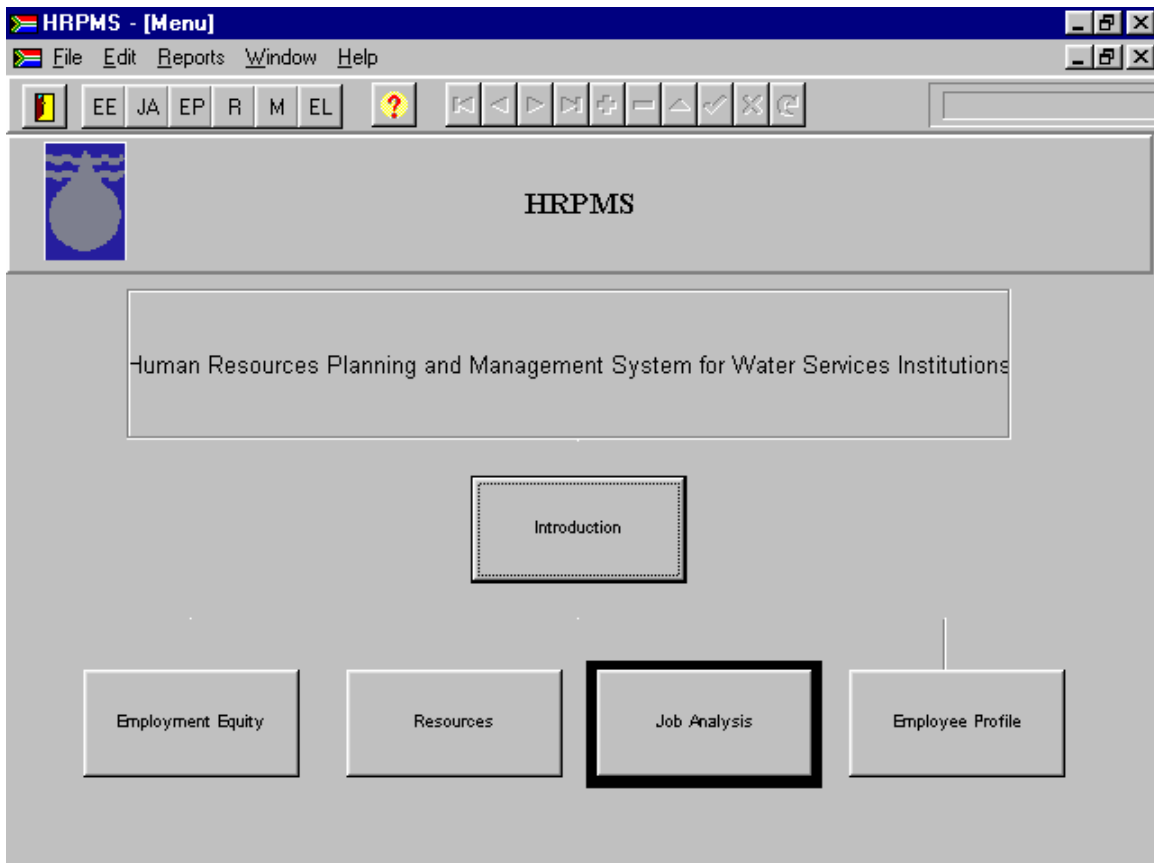
The screenshot shows the 'Forecast' screen in the HRPMS application. The window title is 'HRPMS - [Resources]'. The menu bar includes 'File', 'Edit', 'Reports', 'Window', and 'Help'. The toolbar contains various navigation and action icons. The main content area is titled 'Resources' and has a tabbed interface with 'HR - Forecast' selected. The 'Future Resources Input Values' section includes tabs for 'Production Future Demand', 'Km Piping Future Demand', 'KM Distribution Piping Future Demand', and 'Total Staff'. Below these are radio buttons for 'Increase Demand' (selected) and 'Decrease Demand', a 'Year' dropdown set to '2001', and an 'Annual Increase or Decrease Percentage' input field set to '10'. There are four sub-sections: 'Production', 'KM Piping', 'KM Distribution Piping', and 'Total Staff', each with 'Potable Water' and 'Waste Water' input fields. The 'Future Resources Forecast values' section has two sub-sections: 'Potable Water' and 'Waste Water', each with 'No of Treatmentworks Employees', 'No of Plumbers / Draincleaners', and 'No of Pipeline Inspectors' input fields. A right-hand sidebar contains buttons for 'Update Information', 'Edit Benchmarks', 'Load Organigram', 'Load Logo', 'Forecast', and 'Close'.

The forecast screen/folder is used as a forecasting tool to determine the number of staff the organisation will need over a number of years. The program makes use of the current resource information and manipulate it by using the figures that the user is required to enter for four categories. These categories include the following:

- Production future demand
- Km piping future demand
- Km Distribution piping future demand
- Total Staff future demand

The user should select whether the demand will increase or decrease, then the user must select the year for which he/she would like to forecast and the percentage the demand will increase or decrease at. On completing this click on the forecast button for the forecast figures.

8) Job Analysis



This module provides details of the criteria for generic position with water services institutions relating to the respective abilities, knowledge and competencies for each post. The ideal criteria for a generic position within the water services institution is provided.

This job analysis module provides details of the criteria for generic positions within the water services institutions.

Job analysis is the process of developing job-related information and can serve as the cornerstone of an integrated human resources program. It is a process by which management systemically investigates the tasks, duties and responsibilities of the jobs within an organisation. Job analysis comprises of both job descriptions and job specifications. The most common element of job descriptions is some form of identification and a brief job summary. Job specification, or minimum qualifications, state the qualifications job applicants must possess to be considered for a job. These qualifications are grouped into three categories: abilities, knowledge and competencies, for each post within the water services institution.

A pro forma or template has been designed for this module so that reference data bases, known as pick lists, can be used and updated as new job analysis information becomes available.

To call up this module;

- * Select menu option *Window / Job Analysis*, or
- * Click the Job Analysis button on the Startup window, or
- * Click the Job Analysis button on the toolbar.



This Module comprises of one screen/folder only and is used to enter the ideal Job specification for all the posts available within the organisation. This includes qualification information, Knowledge, Skills, abilities and competencies necessary for the effective execution of the job description for that specific post. Each Post is identified by a unique Post number, this number is not subject to any protocols and alpha characters can be used

Qualifications

The screenshot shows the 'Job Analysis' window in the HRPMS system. The window title is 'HRPMS - [Job Analysis]'. The menu bar includes 'File', 'Edit', 'Reports', 'Window', and 'Help'. The toolbar contains various navigation and editing icons. The main area is divided into several sections: 1. 'Job Analysis' section with fields for 'Post No.', 'Job Title', 'Occupational Category', 'Division Type' (radio buttons for 'Potable Water' and 'Sewage/Waste'), 'Patterson', 'Type of Post', and 'Type of Appointment'. 2. 'Edit Qualification' section with tabs for 'Qualifications', 'Knowledge', 'Competencies', and 'Abilities'. It features a large table with a single row labeled 'Qualification'. 3. 'Post Specifications' section with fields for 'Location', 'Department', 'Section', 'Team', and 'Manager \ Supervisor'. On the right side, there are buttons for 'Print Description', 'Post Search', and 'Close'.

Qualification information that is required for the specific post is entered and viewed here. There are pick lists from which to choose data. This is the ideal qualification information required and is not necessarily always obtainable but completing this in full will make identifying training requirements easier. Once changes have been made it is important to save the information entered by using the navigator bar

Knowledge

The screenshot displays the 'HRPMS - [Job Analysis]' application window. The interface includes a menu bar (File, Edit, Reports, Window, Help) and a toolbar with various navigation and editing icons. The main area is divided into several sections:

- Job Analysis:** Contains input fields for Post No., Job Title, Occupational Category, Patterson, Type of Post, and Type of Appointment. It also features radio buttons for Division Type: Potable Water and Sewage/Waste.
- Edit Knowledge:** A sub-window with tabs for Qualifications, Knowledge, Competencies, and Abilities. It contains a table with two columns: Technical Knowledge and Scientific Knowledge. The table is currently empty.
- Post Specifications:** Includes input fields for Location (Department, Section), Team, and Manager \ Supervisor.

On the right side of the interface, there are buttons for Print Description, Post Search, and Close.

The knowledge folder allows the user to specify the type of knowledge that the specific post requires to perform the job description effectively. Once changes have been made it is important to save the information entered by using the navigator bar

Skills

HRPMS - [Job Analysis]

File Edit Reports Window Help

EE JA EP R M EL ?

Job Description

Job Analysis

Post No:

Job Title

Occupational Category

Division Type

Potable Water Sewage/Waste

Patterson

Type of Post

Type of Appointment

Print Description

Post Search

Close

Edit Competency

Qualifications Knowledge Competencies Abilities

Admin	Communication	Planning	Policies	Data_Systems	HR_Development	Strategic_Plans	Project_management

Post Specifications

Location:

Department

Section

Team

Manager \ Supervisor

These skill fields are memo fields that can be populated by double clicking on the field and typing any amount of text that describes the skills or competencies required for the post. Once changes have been made it is important to save the information entered by using the navigator bar

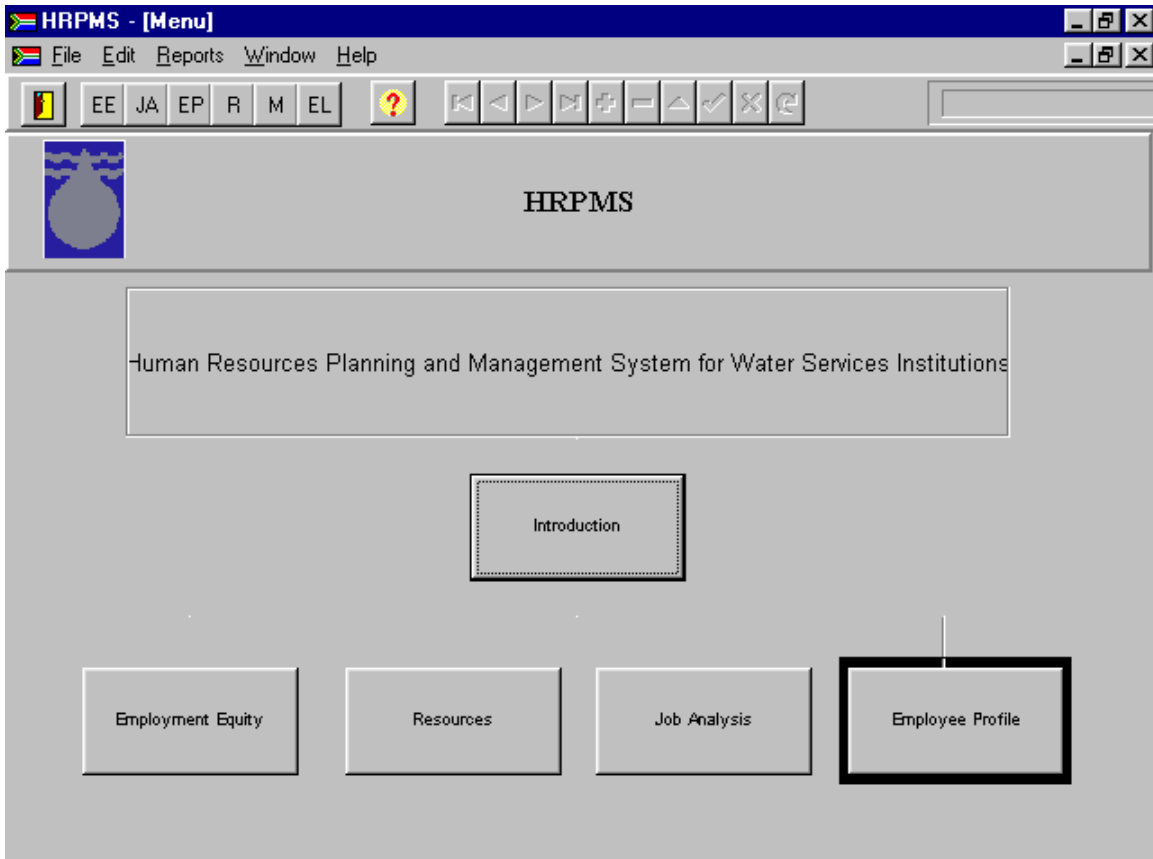
Abilities

The screenshot displays the 'Job Analysis' window in the HRPMS system. The interface includes a menu bar (File, Edit, Reports, Window, Help) and a toolbar with various navigation and editing icons. The main area is divided into several sections:

- Form Fields:** Post No., Job Title, Occupational Category, Division Type (Potable Water, Sewage/Waste), Patterson, Type of Post, and Type of Appointment.
- Edit Abilities Section:** Contains tabs for Qualifications, Knowledge, Competencies, and Abilities. Below the tabs is a table with a header 'Abilities' and a single empty row. A vertical scrollbar is visible on the right side of the table.
- Post Specifications Section:** Includes fields for Location (Department, Section), Team, and Manager \ Supervisor.
- Right Panel:** Contains buttons for 'Print Description', 'Post Search', and 'Close'.

The abilities table can also be populated using the pick list, once changes have been made it is important to save the information entered by using the navigator bar

9) Employee profile



This module provides a pro forma or template for the entry and storage of actual employee information. Details of each employee's position within the organisation, their education, employment history and experience is available through this module

The purpose of the employee profile module is to provide a pro forma or template for the entry and storage of actual employee information. The difference between the job analysis module and this module is that the former holds a database of the ideal criteria for a particular position while this module is a database of an **employee's actual attributes**. This module could be regarded as a standardised résumé or curriculum vitae. Details such as organisational position, education, employment history and experience are stored.

The outputs of the various modules are combined through a matching process, which facilitates the determination of human resource and training requirements. Four screens/folders are available which include a summary, the organisational position in relation to the organogram, education and employment history/experience.

To call up this module;

- * Select menu option *Window / Employee Profile*, or
- * Click the *Employee Profile* button on the Startup window, or
- * Click the *Employee Profile* button on the toolbar.



Main Summary

HRPMS - [Employee Profile]

File Edit Reports Window Help

EE JA EP R M EL ?

Employee Profile

Employee First Name Employee Surname

Employee Number Post number Job Title

Main Summary | Organizational Position | Education | Employment History and Experience

Personal Detail

ID Number Date of Birth

Marital Status Nationality

PDI Status Disabled

Gender
 Male Female

Lingual Ability

Employee Language	Speaking ability	Reading ability	Writing ability

Current Job Identification : Post number **Job Title**

Employment Status
 Employed Unemployed

Date Started

Type of Turnover

JE Manager

Employee Search
Advanced Search
Load Organigram
Adjust Position
Reset Position
Print CV
Close

This is the Main information entry screen/folder. Basic detail for the individual is entered. Employment details are kept up to date here by using the employment status data fields. This information is to enable the user to determine which posts are available and turnover stats for the organisation.

Organizational Position

The screenshot displays the HRPMS - [Employee Profile] application window. The interface includes a menu bar (File, Edit, Reports, Window, Help) and a toolbar with various icons. The main content area is divided into several sections: Employee First Name, Employee Surname, Employee Number, Post number, and Job Title. Below these are tabs for Main Summary, Organizational Position, Education, and Employment History and Experience. The Organizational Position tab is active, showing a hierarchical organizational chart for a 'City or Town Council Water Authority'. The chart is divided into 'Administrative and Clerical' and 'Technical' branches. The 'Administrative and Clerical' branch includes 'Accountancy', 'Water Charges', 'Distribution', and 'Depots'. The 'Depots' branch includes 'Meter Reading', 'Meter Fixing and Repairs', 'Plumbing', 'Mains and Waste Inspection' (highlighted with a green box), 'Extensions and Maintenance of Mains', 'Transport', and 'Street Repairs'. The 'Technical' branch includes 'Supply Works' and 'Treatment'. The 'Supply Works' branch includes 'Operation and Maintenance of Works'. The 'Treatment' branch includes 'Coagulation and Flocculation'. On the right side of the window, there is a vertical toolbar with buttons for Employee Search, Advanced Search, Load Organigram, Adjust Indicator, Reset Position, Print CV, and Close.

This is a display feature that must be setup before it can be utilized effectively. When entering employee data ensure that there is an organigram loaded for the individual and then adjust the position by clicking on the “Adjust Position“ Button, move the green shape by clicking and dragging the shape to where the individual is positioned on the organigram and size it accordingly.

Education

The screenshot shows the 'HRPMS - [Employee Profile]' window with the 'Education' tab selected. The window has a menu bar (File, Edit, Reports, Window, Help) and a toolbar with various navigation and editing icons. Below the toolbar, there are input fields for 'Employee First Name', 'Employee Surname', 'Employee Number', 'Post number', and 'Job Title'. The 'Education' tab is active, showing three checked checkboxes: 'Primary Education', 'Secondary Education', and 'Tertiary Education'. Below these is a table with two columns: 'Qualification' and 'Institution'. The table is currently empty. On the right side of the window, there is a vertical toolbar with buttons for 'Employee Search', 'Advanced Search', 'Load Organigram', 'Adjust Position', 'Reset Position', 'Print CV', and 'Close'.

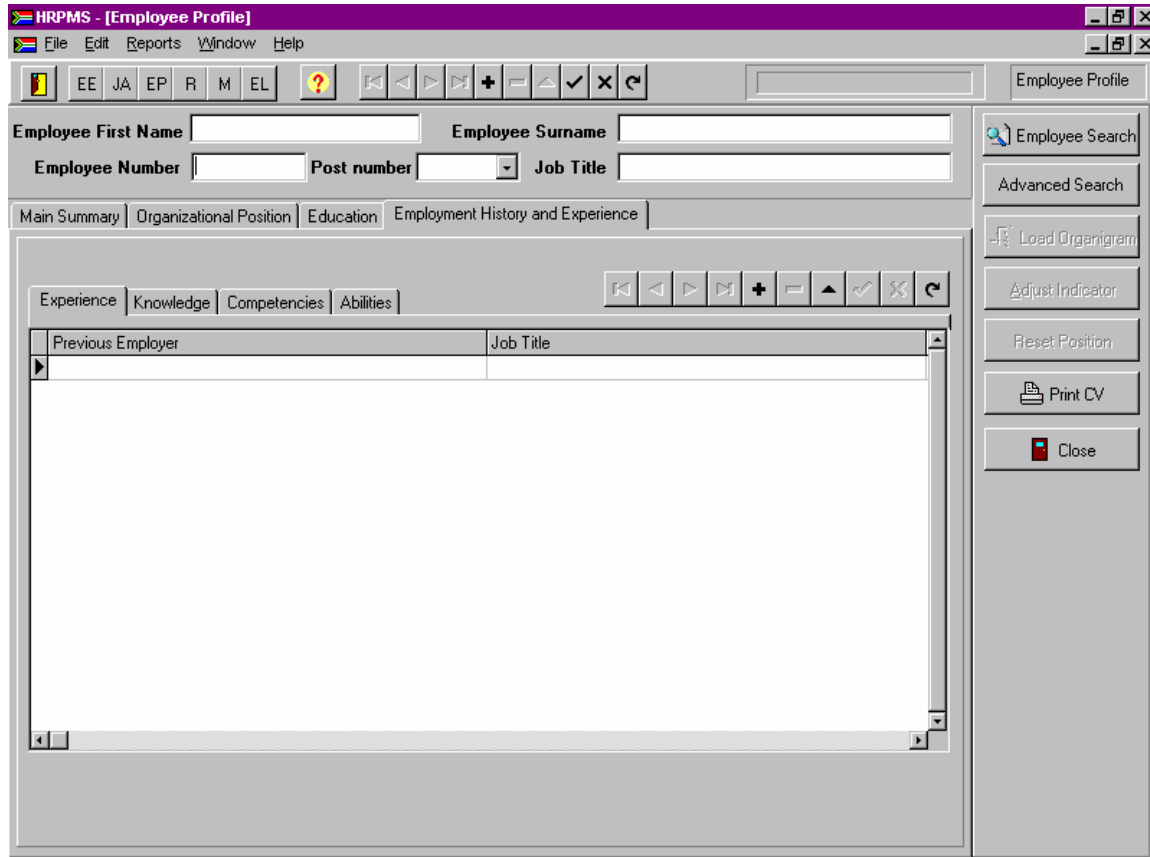
Qualification	Institution
---------------	-------------

This includes an editable list of the employee's particular education, This section can be filled in according to the user's requirement, facilities include the actual qualification obtained, when, where and any registration particulars for the qualification.

Employment History And Experience

This screen/folder displays the employees' previous employment history which can be edited, this includes for whom they worked, for how long and what their experience was and a total experience time period of years is calculated by subtracting the "from" date from the "to" date that the employee worked at the particular previous employer. The employee's Knowledge, Competencies (Skills) and Abilities are also entered and viewed here. Screen dumps of these elements follow:

Employee History



The table that occurs on this folder is easily populated by using the lookup facility, if you click on the field within the table a drop down list will appear for you to select information to populate the table with, this table contains the name of the previous employer, the previous job title, the principle and secondary experience as well as the date started and ended. The total experience is calculated in years by subtracting the started date from the ended date automatically on saving the record.

Employee Knowledge

The screenshot displays the 'Employee Knowledge' section within the 'HRPMS - [Employee Profile]' application. The window features a menu bar (File, Edit, Reports, Window, Help) and a toolbar with various navigation and editing icons. The main area is divided into several sections:

- Employee Information:** Fields for Employee First Name, Employee Surname, Employee Number, Post number (dropdown), and Job Title.
- Navigation Tabs:** Main Summary, Organizational Position, Education, and Employment History and Experience.
- Knowledge Section:** Includes sub-tabs for Experience, Knowledge, Competencies, and Abilities. Below these is a table with two columns: Scientific Knowledge and Technical Knowledge.
- Right-hand Panel:** Contains buttons for Employee Search, Advanced Search, Load Organigram, Adjust Indicator, Reset Position, Print CV, and Close.

Scientific Knowledge	Technical Knowledge

The user can enter and edit employee knowledge details on this folder. The knowledge table also makes use of the lookup facility and the user can use the drop down list to populate the database with the employee's Technical and Scientific knowledge details.

Employee Skills

The screenshot shows the HRPMS - [Employee Profile] application window. The title bar includes the application name and standard window controls. The menu bar contains File, Edit, Reports, Window, and Help. The toolbar includes icons for navigation and editing. The main area is divided into several sections:

- Employee Information:** Fields for Employee First Name, Employee Surname, Employee Number, Post number (dropdown), and Job Title.
- Navigation:** Tabs for Main Summary, Organizational Position, Education, and Employment History and Experience.
- Employee Skills Section:** A sub-section with tabs for Experience, Knowledge, Competencies, and Abilities. Below these tabs is a table with columns: Admin, Communication, Planning, Policies, Data Systems, HR Development, Strategic Plans, and Project Management. The table is currently empty.
- Right Sidebar:** A vertical panel containing buttons for Employee Search, Advanced Search, Load Organigram, Adjust Indicator, Reset Position, Print CV, and Close.

The employee skills folder has a table of memo fields, which are large text fields that any data can be stored in. There are primarily eight fields that can be entered. It is specifically geared toward allowing the user to specify competencies and skills the user can enter for the employee. To enter data, double click on the field and a memo edit screen is displayed in which the user can type data.

Abilities

The screenshot displays the 'HRPMS - [Employee Profile]' application window. The interface includes a menu bar (File, Edit, Reports, Window, Help) and a toolbar with various navigation and action icons. The main content area is divided into several sections:

- Employee Information:** Fields for Employee First Name, Employee Surname, Employee Number, Post number (dropdown), and Job Title.
- Navigation Tabs:** Main Summary, Organizational Position, Education, and Employment History and Experience.
- Abilities Section:** A sub-tabbed area with 'Abilities' selected. It contains a table with columns for 'Abilities && competencies', 'From', and 'To'. The table is currently empty.
- Right-hand Panel:** A vertical stack of buttons including Employee Search, Advanced Search, Load Organigram, Adjust Indicator, Reset Position, Print CV, and Close.

The abilities folder allows the user to edit and display data regarding the employee's abilities in a table. The lookup facility is also available here.

10) Support

Should you experience any problems in using HRPMS, please see the Troubleshooting section.

For support in using HRPMS, or for reporting any problems or comments, please contact:

Water Research Commission
PO Box 824
Pretoria
0001

Attention Dr NP Mjoli
Tel: 012 330 0340
Fax: 012 331 2565
Email: nozi@wrc.org.za

11) Trouble Shooting

Screen scaling.

HRPMS is designed to run in full-screen mode. As a result the Windows Task Bar and other quick start tool bars may overlay the HRPMS screens. To solve this problem with the Task Bar, select start and then select settings, task bar and start menu, click on the auto hide property.

HRPMS windows will automatically scale to fill the screen, based on the screen resolution. Occasionally the screen resolution is not detected correctly from the display drivers.

If large fonts or custom fonts are used, HRPMS will not scale properly. This means that the windows will not be completely visible and you will have to scroll up and down pages to fill in the data. A screen width of about 20% less than the actual size can improve on the display quality.

Data corruption

Should any data corruption occur, run File Maintenance.

Key Violation

Should you receive an error message that says a key violation has occurred, it means that you have tried to create a record that already exists. A related error occurs when you try to enter data before a primary key has been created, this is a unique identifier. HRPMS has two prominent primary keys, namely the post number and the employee number. Therefore it is essential that the correct identifier is selected or entered when editing or entering data.

Other Error Messages

There a large number of calculations that take place within the resources module and it is critical that all the data be entered, should all the data not be entered you will be prompted to by an error warning, should the program require a field to be populated you will receive an error message notifying you which field to populate. Calculation errors may occur resulting in a warning being displayed, please ensure that the data is correctly entered in the division specified by the warning.

Should you receive an error that a specific number is not a valid integer number then round the figure up and re-enter it.

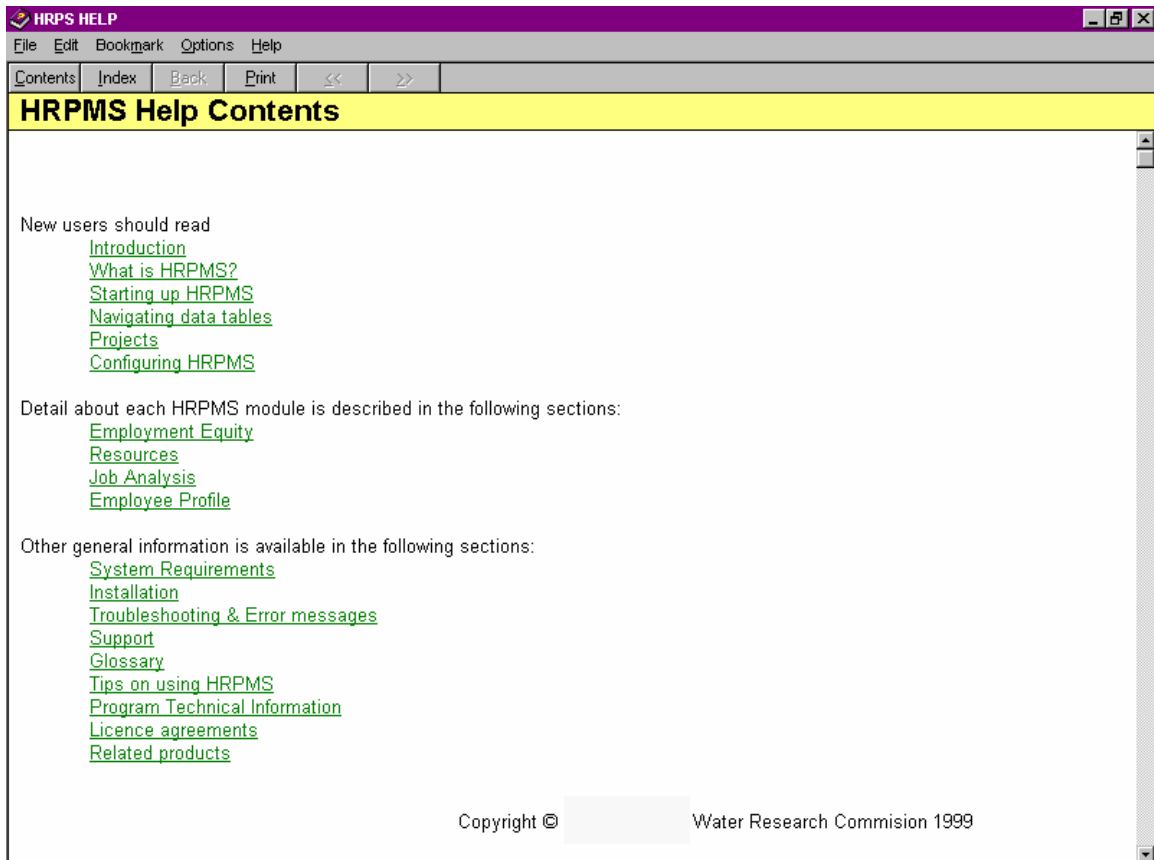
An error message may also be displayed that notifies you of images that have not been loaded, Locate the image that is not loaded in the employee profile module or the resources module and follow the procedures to populate the image. Organigrams can be created in Microsoft Power Point and save the slide as a bitmap.

12) The Help Facility

HRPMS makes use of the windows help file system. This means that there are jumps and hyperlinks between topics allowing the user to navigate through the help easily. These jumps are green in colour

The help can be accessed by pressing F1 or clicking on the menu help or toolbar help button. (With the question mark)

There is a contents screen that contains all the topics in the help with links to them.



13) Annexure A – Report examples

Examples of the system's reports follow. Some reports will not display as there is no data in the initial release of the program but will populate as the database is updated. These will give a general idea of what the reports will look like.